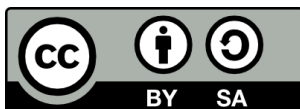


STUDY AND CONCEPTUALIZATION OF
BUSINESS: A MODEL FOR THE CREATION AND
MANAGEMENT OF COMPANIES BASED ON
VALUES

Albert Costa Marcé

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DOCTORAL THESIS

**Study and conceptualization of Vusiness:
A model for the creation and management of
companies based on values**



**Albert Costa Marcé
2019**



DOCTORAL THESIS

**Study and conceptualization of Vusiness:
A model for the creation and management of
companies based on values**

**The thesis includes 18 scientific articles
and 5 documents as annexes**

**Albert Costa Marcé
2019**

**JOINT DOCTORAL PROGRAMME
IN LAW, ECONOMIC AND BUSINESS**

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- Echazarreta, C., & Costa, A. (2017a). Inclusive Companies, Reinventing Quality Of Life: A Theoretical Review. *Eurasian Journal of Business and Management*, 5(4), 12-21.
- Echazarreta, C., & Costa, A. (2017b). Smart Companies, Inspiring the Future: A Theoretical Review. *Journal of Business and Economic Policy*, 4(1), 138-144.
- Echazarreta, C., & Costa, A. (2018a). Amplifying Citizens' Voices in the Face of Media Globalization. *International Business Research*, 11(5), 135-142.
- Echazarreta, C., & Costa, A. (2018b). Empresas Inclusivas, Reinventando la Calidad de Vida. Una Revisión Teórica. *Global Journal of Human Social Science*, 18(3), 1-8.
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List of abbreviations

2°C 2 Degrees Celsius	GABV The Global Alliance for Banking on Values
3D Three-dimensional	GDP Gross Domestic Product
5G Fifth-generation wireless	GDPR General Data Protection Regulation
AoH Art of Hosting conversations that matter	GHG Greenhouse Gas Emissions
AR Augmented Reality	GHG Greenhouse Gases
ARPA Research Group Analysis group for reception and playback quality of Audio-visual Screens	GPS Global Positioning System
C2B Consumer-to-business	ICT Information and Communication Technology
CEO Chief Executive Officer	IoT Internet of Things
CFC Chlorofluorocarbons	ISO International Organization for Standardization
CH₄ Methane	LED Light-Emitting Diode
CITCEA Center for Innovation and Technology	LISMI Law for social integration of disabled people
CO Carbon Monoxide	MIT Massachusetts Institute of Technology
CO₂ Carbon Dioxide	MOOC Massive Online Open Courses
COO Chief Operating Officer	MR Mixed reality
CRM Customer Relationship Management	NET Internet
CSR Corporate Social Responsibility	NO_x Nitrogen oxides
E.G. <i>Exempli gratia</i> ; For example	ONCE National Organization of the Blind in Spain
EMAS Eco-Management and Audit Scheme	OP-ED Opposite the Editorial page
ETC. <i>Et cetera</i> ; Other similar things	PhD Philosophy Doctor
G20 Group of Twenty	

PIMEC Small and
Medium Enterprises of Catalonia

PPM Parts per million

PwC PricewaterhouseCoopers

ROIC Return on Invested Capital

SDG Sustainable Development
Goals

SME Small and medium-sized
enterprise

TED Technology, Entertainment
and Design

THREE RS

Reduce, Reuse and Recycle

UK United Kingdom

UN United Nations

UPC Polytechnic University of
Catalonia

US United States

VR Virtual Reality

WAI Web Accessibility Initiative

WHO World Health Organization

Index of figures

FIGURE 1. SECTIONS OF THE VALOMETER	152
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FIGURE 2. VUSINESS: A MODEL FOR THE CREATION AND MANAGEMENT OF COMPANIES BASED ON VALUES. TRANSFERRING KNOWLEDGE.	182
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Index of tables

TABLE 1. STUDY DATA	44
TABLE 2. INTERVENTION TECHNOLOGIES IN LARGE GROUPS	53
TABLE 3. VISION OF ECONOMY FOR THE COMMON GOOD	54
TABLE 4. ACTIONS OF SUSTAINABLE COMPANIES REGARDING VARIOUS CONCEPTS LINKED TO THE ENVIRONMENT	64
TABLE 5. ACTIONS OF SUSTAINABLE COMPANIES REGARDING VARIOUS CONCEPTS LINKED TO MOBILITY	66
TABLE 6. ACTIONS AIMED AT DEVELOPING SUSTAINABILITY IN COMPANIES	67
TABLE 7. CONCEPTS RELATED TO SMART COMPANIES (SEISDEDOS ET AL., 2015A)	73

TABLE 8. 15 ETHICAL GUIDELINES FOR SOCIAL MEDIA USE	85
TABLE 9. SECTION A: IDENTITY	153
TABLE 10. SECTION B: ADMINISTRATION AND MANAGEMENT	154
TABLE 11. SECTION C: PEOPLE	156
TABLE 12. SECTION D: SUSTAINABILITY	159
TABLE 13. SECTION E: TECHNOLOGY	161



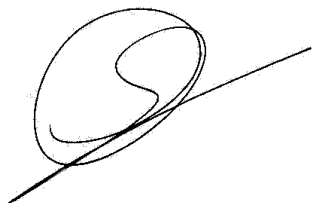
PhD. Carmen Echazarreta Soler, of Universitat de Girona,

I DECLARE:

That the thesis titles “**Study and conceptualization of Vusiness: A model for the creation and management of companies based on values**”, presented by Albert Costa Marcé to obtain a doctoral degree, has been completed under my supervision.

For all intents and purposes, I hereby sign this document.

Signature



Girona, 23 April 2019

A dedication

**Elna and Maribel, the treasures of my life!
I love you so much!**

**Father, mother, Montse, Anna, Xavi and Aniol,
thank you so much for helping me grow and believing in me
Carme, a great friend, teacher and guardian angel**

Why is the red fox the symbol of Vusiness?

When I was thirteen or fourteen I used to spend many evenings with my grandparents tending to their vegetable patch and the garden next to my house. We made scarecrows, we planted lettuce and onions, dug up potatoes, grafted cherry trees... I'm sure that my love for nature and the earth was born of that. One day I bought a T-shirt from Adda, the first national NGO created in the defence of animal welfare. On it there was a defenceless puppy fox in the middle of a forest with the phrase "Does your mother have a fur coat? They took my mother's off her". This was the inspiration for the work I commissioned from illustrator Marta Colomer (TuttiConfetti). The fox has grown up, and wants her children to live in a better world.



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Table of contents

<u>1. GENERAL INTRODUCTION</u>	28	4.3.3. COMMUNICATION	74
1.1. GLOBALIZATION. ECONOMIC AND FINANCIAL CRISES	28	4.4. SOCIAL NETWORKS	76
1.2. CLIMATE CHANGE	29	4.4.1. REVIEW WEBSITES	78
1.3. TECHNOLOGICAL TRANSFORMATION	31	4.4.2. CITIZEN JOURNALISM	80
1.4. MEDIA GLOBALIZATION	31	4.4.3. COLLABORATIVE ECONOMY	82
1.5. RESEARCH ON ALTERNATIVE ECONOMIC AND BUSINESS MANAGEMENT	32	4.4.4. ETHICAL PRINCIPLES	83
<u>2. OBJECTIVE OF THE WORK AS A WHOLE</u>	38	4.5. FORUM FOR REFLECTION AND DEBATE: PEOPLE, THE HEART OF COMPANIES	86
<u>3. METHODS</u>	42	4.5.1. THE DEBATE	89
3.1. METHODOLOGICAL STRATEGIES	42	4.5.2. WHAT CHARACTERISTICS IDENTIFY AN INCLUSIVE COMPANY?	90
3.2. POPULATION AND SAMPLE	44	4.5.3. WHAT ROLE DO WORK TEAMS HAVE?	97
3.3. DATA-GATHERING INSTRUMENTS	45	4.5.4. HOW SHOULD SOCIAL RESPONSIBILITY BE APPLIED TO MAKE IT MORE THAN JUST A STRATEGY?	100
3.4. PROCEDURE	46	4.5.5. WHICH DISPLAY FEATURES OF RESPONSIBLE MARKETING?	102
<u>4. RESULTS</u>	48	4.6. FORUM FOR REFLECTION AND DEBATE: SUSTAINABLE COMPANIES, TACKLING CLIMATE CHANGE	104
4.1. INCLUSIVE COMPANIES	48	4.6.1. THE DEBATE	107
4.1.1. VALUES	49	4.6.2. WHAT CHARACTERISTICS IDENTIFY A SUSTAINABLE COMPANY?	108
4.1.2. TEAM MANAGEMENT	50	4.6.3. HOW CAN COMPANIES HELP MITIGATE THE CONSEQUENCES OF THIS CHANGE?	111
4.1.3. CORPORATE SOCIAL RESPONSIBILITY	53	4.6.4. WHAT FACTORS DO YOU CONSIDER KEY IN A COMPANY TO PRESERVE THE ENVIRONMENT?	114
4.1.4. RESPONSIBLE MARKETING	56	4.6.5. THINKING IN TERMS OF ACTIONS AIMED AT PROMOTING MOBILITY, WHICH WOULD GENERATE THE MOST IMPACT?	117
4.2. SUSTAINABLE COMPANIES	57		
4.2.1. ENVIRONMENT	58		
4.2.2. MOBILITY	64		
4.2.3 ACTIONS AIMED AT DEVELOPING SUSTAINABILITY IN COMPANIES	66		
4.3. SMART COMPANIES	68		
4.3.1. LEADERSHIP	68		
4.3.2. INFORMATION TECHNOLOGY	71		

4.6.6. HOW SHOULD SOCIAL RESPONSIBILITY FOR THE ENVIRONMENT BE APPLIED TO MAKE IT SOMETHING MORE THAN A STRATEGY?	121	INDICATORS FOR VALUE-BASED MANAGEMENT IN SEVEN STEPS	148
4.7. FORUM FOR REFLECTION AND DEBATE: SMART BUSINESSES, CREATING THE FUTURE	123	STEP 1: AWARENESS RAISING	148
4.7.1. THE DISCUSSION	126	STEP 2: DEFINING THE SCOPE OF INTERVENTION	148
4.7.2. HOW CAN TECHNOLOGY CONTRIBUTE TO A BETTER QUALITY OF LIFE FOR PEOPLE?	127	STEP 3: SETTING UP THE STEERING GROUP	148
4.7.3. WHAT CHANGES CAN NEW AND EMERGING MEANS OF COMMUNICATION GENERATE, IN THE BUSINESS SPHERE?	132	STEP 4: FUNCTIONS, RESPONSIBILITIES AND PLANNING	149
4.7.5. WHAT DO WE MEAN BY "SMARTNESS" IN RELATION TO BUSINESS?	138	STEP 5: DATA COLLECTION	149
4.8. STUDY AND CONCEPTUALIZATION OF THE VALOMETER: A SYSTEM OF BUSINESS INDICATORS FOR VALUES-BASED MANAGEMENT	141	STEP 6: RESULTS AND ANALYSIS	150
4.8.1. COMPANIES WITH VALUES	143	STEP 7: INNOVATION AND CONTINUOUS IMPROVEMENT	150
4.8.2. WHAT IS THE EUROPEAN SYSTEM OF BUSINESS INDICATORS FOR VALUE-BASED MANAGEMENT?	145	4.8.9. BASIC INDICATORS	151
4.8.3. WHY MEASURE AND MONITOR INDICATORS ON THE BASIS OF VALUES?	145	4.8.10. SECTIONS OF THE VALOMETER	152
4.8.4. WHICH COMPANIES CAN APPLY IT?	146	<u>5. GENERAL CONCLUSIONS</u>	<u>166</u>
4.8.5. WHY APPLY THE EUROPEAN SYSTEM OF BUSINESS INDICATORS FOR VALUE-BASED MANAGEMENT?	146	5.1. INCLUSIVE COMPANIES, REINVENTING QUALITY OF LIFE	166
4.8.6. WHAT ARE THE MAIN ADVANTAGES OF APPLYING THE VALOMETER?	147	5.2. SUSTAINABLE COMPANIES, ADDRESSING CLIMATE CHANGE	170
4.8.7. HOW DOES THE EUROPEAN SYSTEM OF BUSINESS INDICATORS FOR VALUE-BASED MANAGEMENT WORK?	147	5.3. SMART COMPANIES, INSPIRING THE FUTURE	173
4.8.8. GUIDE TO THE APPLICATION OF THE EUROPEAN SYSTEM OF BUSINESS		<u>6. DISCUSSION</u>	<u>178</u>
		6.1 NEXT STEPS	178
		6.2. RELATIONS WITH INTERNATIONAL UNIVERSITIES	180
		6.3. TRANSFERRING KNOWLEDGE IN EDUCATION	183
		6.4. TRANSFERRING KNOWLEDGE IN ENTREPRENEURSHIP	184
		6.5. TRANSFERRING KNOWLEDGE IN THE COMPANY	185
		6.6. TRANSFERRING KNOWLEDGE IN GOVERNANCE	185
		6.7. TRANSFERRING KNOWLEDGE TO SOCIETY IN GENERAL	187

7. BIBLIOGRAPHY 190

7.1. VIDEO LINKS 201

8. ANNEXES 204

8.1. SCIENTIFIC ARTICLE. AMPLIFICANDO LA VOZ DE LOS CIUDADANOS ANTE LA GLOBALIZACIÓN MEDIÁTICA 208

8.2. SCIENTIFIC ARTICLE. INCLUSIVE COMPANIES, REINVENTING QUALITY OF LIFE: A THEORETICAL REVIEW 220

8.3. SCIENTIFIC ARTICLE. SMART COMPANIES, INSPIRING THE FUTURE: A THEORETICAL REVIEW 230

8.4. SCIENTIFIC ARTICLE. AMPLIFYING CITIZENS' VOICES IN THE FACE OF MEDIA GLOBALIZATION 237

8.5. SCIENTIFIC ARTICLE. EMPRESAS INCLUSIVAS, REINVENTANDO LA CALIDAD DE VIDA. UNA REVISIÓN TEÓRICA 245

8.6. SCIENTIFIC ARTICLE. EMPRESAS INTELIGENTES, INSPIRANDO EL FUTURO. UNA REVISIÓN TEÓRICA 254

8.7. SCIENTIFIC ARTICLE. EMPRESAS SOSTENIBLES, AFRONTANDO EL CAMBIO CLIMÁTICO: UNA REVISIÓN TEÓRICA 260

8.8. SCIENTIFIC ARTICLE. FORO DE REFLEXIÓN Y DEBATE: EMPRESAS INTELIGENTES, GENERANDO FUTURO 270

8.9. SCIENTIFIC ARTICLE. FORO DE REFLEXIÓN Y DEBATE: EMPRESAS SOSTENIBLES, AFRONTANDO EL CAMBIO CLIMÁTICO. 280

8.10. SCIENTIFIC ARTICLE. FORO DE REFLEXIÓN Y DEBATE: LAS PERSONAS, EL CENTRO DE LAS EMPRESAS 289

8.11. SCIENTIFIC ARTICLE. FORUM FOR REFLECTION AND DEBATE: PEOPLE, THE HEART OF COMPANIES. 298

8.12. SCIENTIFIC ARTICLE. FORUM FOR REFLECTION AND DEBATE: SMART BUSINESSES, CREATING THE FUTURE. 307

8.13. SCIENTIFIC ARTICLE. FORUM FOR REFLECTION AND DEBATE: SUSTAINABLE COMPANIES, TACKLING CLIMATE CHANGE 316

8.14. SCIENTIFIC ARTICLE. SUSTAINABLE COMPANIES, ADDRESSING THE CLIMATE CHANGE: A THEORETICAL REVIEW 325

8.15. SCIENTIFIC ARTICLE. ESTUDIO Y CONCEPTUALIZACIÓN DEL "VALÓMETRO": UN SISTEMA DE INDICADORES EMPRESARIALES PARA LA GESTIÓN BASADA EN VALORES. 333

8.16. SCIENTIFIC ARTICLE. STUDY AND CONCEPTUALIZATION OF THE VALOMETER: A SYSTEM OF BUSINESS INDICATORS FOR VALUES-BASED MANAGEMENT. 354

8.17. SCIENTIFIC ARTICLE. WORKSHOP: EMPRESAS CON VALORES. 374

8.18. SCIENTIFIC ARTICLE. WORKSHOP: VUSINESS [BUSINESS & VALUES] 380

8.19. DOCUMENT. VALOMETER. EUROPEAN SYSTEM OF BUSINESS INDICATORS FOR VALUE-BASED MANAGEMENT 386

8.20. DOCUMENT. VALÓMETRO. SISTEMA EUROPEO DE INDICADORES EMPRESARIALES PARA LA GESTIÓN BASADA EN VALORES 406

8.21. DOCUMENT. VALÒMETRE. SISTEMA EUROPEU D'INDICADORS EMPRESARIALS PER A LA GESTIÓ BASADA EN VALORS 426

8.22. DOCUMENT. TEMPLATE. VUSINESS PLAN. PLA D'EMPRESA BASADA AMB VALORS 446

8.23. DOCUMENT. VUSINESS PLAN. PLA D'EMPRESA BASADA AMB VALORS 447

Abstract

The global economy has suffered a serious **crisis** and rapid slowdown that has led to unemployment and a shortage of decent work, fundamentally affecting the most vulnerable sectors of society. In the current economic context, **globalization** significantly increases the unbalanced use of finite, non-renewable sources of energy, aggravating **climate change** as an unavoidable threat with potentially irreversible effects. With regard to **child labour**, children are currently subjected to the worst forms of it around the world, including sexual exploitation, domestic chores, work in mines, pyrotechnic fireworks factories and armed conflicts. At the same time, **technological advances** and their application to industry 4.0 and services entail a large negative impact on the job market, causing significant job destruction. In light of these economic and social threats and challenges, this thesis presents a **study and conceptualization of Vusiness [Business & Values]: A model for the creation and management of companies based on values.**

Methodologically it focuses on the use of three complementary techniques. The first phase comprised the exhaustive diagnosis of four **bibliographic reviews** focused on inclusiveness, sustainability, technology and communication. In the second phase, theoretical intentional sampling was used to select 50 professionals-experts (scientists and professors from different academic disciplines, businesspeople, entrepreneurs, managers and advisors from different business sectors) to participate in **three semi-structured discussion groups** combined with **qualitative in-depth interviews** to jointly conceptualize the Vusiness model and the **Valometer**, its main tool. The resulting tool consists of 50 criteria and indicators constructed scientifically and divided into the following 5 spheres: **a) Identity**, being committed to creating a more balanced society; **b) Administration and management**, aiming to promote more horizontal and collaborative management models in which the involvement and loyalty of suppliers, workers and customers is essential and decisive for companies; **c) People**, showing a commitment to awarding value to workers, promoting values such as joint leadership, teamwork, knowledge and training, equality, inclusion and conciliation; **d) Sustainability**, aimed at addressing and responding to climate change, and **e) Technology**, designed to facilitate the transition to processes of digitization and artificial intelligence development to improve citizens' quality of life.

One of the basic initial challenges emerging from the Vusiness project is the **transfer of knowledge** on the five axes of **education, entrepreneurship, business, governance and society in general**. As a conclusion, the initial data obtained from these different axes suggest that Vusiness may constitute a useful model for facilitating business management with values and **promoting sustainable, intelligent, open, democratic and inclusive companies, which must inspire the future.**

Keywords: globalization; economic crises; child labour; climate change; technological transformation; Vusiness; Valometer; values-management; inclusive companies; sustainable companies; smart companies.

Resumen

La economía global ha provocado graves **crisis** así como una rápida desaceleración que ha llevado consigo un incremento del paro laboral y la escasez del trabajo digno. Un contexto que perjudica sensiblemente a las clases más desfavorecidas. Frente a los argumentos optimistas sobre la globalización, lo cierto es que los datos demuestran todo lo contrario, pues ha incrementado significativamente el uso indiscriminado y abusivo de las fuentes de energía no renovables y finitas, agravando el **cambio climático** como una amenaza inevitable con efectos potencialmente irreversibles. Respecto al **trabajo infantil**, millones de niños se encuentran actualmente trabajando en todo el mundo sometidos a las peores formas de abuso, como lo son la explotación sexual, las tareas domésticas, el trabajo en minas, en fábricas de fuegos pirotécnicos y en los conflictos armados. Al mismo tiempo, los **avances tecnológicos** y su aplicación en la industria 4.0 y en los servicios suponen un gran impacto negativo en el mercado de trabajo, causando la destrucción sistemática de empleo. Ante las amenazas y retos económicos y sociales esta tesis presenta un **estudio y conceptualización de Vusiness [Business & Values]: Un modelo para la creación y gestión de empresas basadas en valores.**

Metodológicamente se centra en el uso de tres técnicas complementarias. La primera fase de diagnóstico exhaustiva consta de cuatro **revisiones bibliográficas** focalizadas en la inclusividad, la sostenibilidad, la tecnología y la comunicación. En la segunda fase, a través de un muestreo intencional teórico se seleccionan 50 profesionales-expertos (científicos y profesores de distintas disciplinas académicas y empresarios, emprendedores, técnicos y asesores de distintos sectores empresariales) que participan en tres **grupos de discusión** semiestructurados combinados con **entrevistas cualitativas en profundidad** para conceptualizar conjuntamente el modelo Vusiness y el **Valómetro**, su herramienta principal. La herramienta resultante consta de 50 criterios e indicadores construidos científicamente y divididos en 5 ámbitos: **a) Identidad** comprometida para crear una sociedad más equilibrada; **b) Administración y gestión** pretende impulsar modelos de gestión más horizontales y colaborativos, en los que la implicación y fidelización de los proveedores, trabajadores y clientes sea indispensable y determinante para la empresa; **c) Personas** se apuesta por poner en valor las personas, promoviendo valores como el liderazgo compartido, el trabajo en equipo, la especialización y formación, la igualdad, la inclusión y la conciliación; **d) Sostenibilidad** se articula para afrontar y dar respuesta al cambio climático y **e) Tecnología** está diseñado para facilitar la transición ante los procesos de digitalización y desarrollo de la inteligencia artificial para mejorar la calidad de vida de los ciudadanos.

Uno de los retos iniciales básicos que emergen del proyecto Vusiness es la transferencia de conocimiento sobre cinco ejes como son la **educación, el emprendimiento, la empresa, la gobernanza y la sociedad en general**. Como conclusión, los datos iniciales obtenidos de distintas fuentes sugieren que Vusiness puede ser un modelo útil para facilitar la gestión empresarial basada en valores y **promover las empresas sostenibles, inteligentes, abiertas, democráticas e inclusivas, que tienen que inspirar el futuro.**

Palabras clave: globalización; crisis económicas; trabajo infantil; cambio climático; transformación tecnológica; Vusiness; Valómetro; gestión basada en valores; empresas inclusivas; empresas sostenibles; empresas inteligentes.

Resum

L'economia global ha patit greus **crisis** i una ràpida desacceleració, i això ha provocat atur i manca de treball decent, cosa que ha afectat fonamentalment els sectors més vulnerables de la societat. En el context econòmic actual, la **globalització** augmenta de manera significativa l'ús desequilibrat de fonts d'energia no renovables i finites, fet que agreuja el **canvi climàtic** i el converteix en una amenaça inevitable amb efectes potencialment irreversibles. Respecte al **treball infantil**, milions de nens i nenes de tot el món actualment es troben treballant, i ho fan sotmesos a les pitjors formes de treball infantil, com són l'explotació sexual, les tasques domèstiques i el treball en mines, en fàbriques de focs pirotècnics i en conflictes armats. Al mateix temps, els **avenços tecnològics** i la seva aplicació a la indústria 4.0 i als serveis suposen un gran impacte negatiu en el mercat de treball, ja que causen la destrucció significativa d'ocupació. Davant les amenaces i els reptes econòmics i socials, aquesta tesi presenta un **estudi i una conceptualització de Vusiness [Business & Values]: un model per a la creació i la gestió d'empreses basades en valors**.

Metodològicament se centra en l'ús de tres tècniques complementàries. La primera fase de diagnosi exhaustiva consta de quatre **revisions bibliogràfiques** focalitzades en la inclusivitat, la sostenibilitat, la tecnologia i la comunicació. En la segona fase, a través d'un mostreig intencional teòric se seleccionen 50 professionals-experts (científics i professors de diferents disciplines acadèmiques, empresaris, emprenedors, tècnics i assessors de diferents sectors empresarials) que participen en tres **grups de discussió** semiestructurats combinats amb entrevistes qualitatives en profunditat per conceptualitzar conjuntament el model Vusiness i el Valòmetre, la seva eina principal. L'eina resultant consta de 50 criteris i indicadors construïts científicament i dividits en cinc àmbits: *a) Identitat* compromesa vol crear una societat més equilibrada; *b) Administració i gestió* pretén impulsar models de gestió més horitzontals i col·laboratius, en els quals la implicació i la fidelització dels proveïdors, treballadors i clients sigui indispensable i determinant per a l'empresa; *c) Persones* aposta per valorar els treballadors i treballadores promovent valors com el lideratge compartit, el treball en equip, l'especialització i la formació, la igualtat, la inclusió i la conciliació; *d) Sostenibilitat* s'articula per afrontar i donar resposta al canvi climàtic, i *e) Tecnologia* està dissenyada per facilitar la transició davant dels processos de digitalització i desenvolupament de la intel·ligència artificial per millorar la qualitat de vida de la ciutadania.

Un dels reptes inicials bàsics que emergeixen del projecte Vusiness és la transferència de coneixement sobre cinc eixos, com **són l'educació, l'emprenedoria, l'empresa, la governança i la societat en general**. Com a conclusió, les dades inicials obtingudes de diferents fonts suggereixen que Vusiness pot ser un model útil per facilitar la gestió empresarial basada en valors i **promoure les empreses sostenibles, intel·ligents, obertes, democràtiques i inclusives que han d'inspirar el futur**.

Paraules clau: globalització; crisis econòmiques; treball infantil; canvi climàtic; transformació tecnològica; Vusiness; Valòmetre; gestió basada en valors; empreses inclusives; empreses sostenibles; empreses intel·ligents.

01

General Introduction

1. General introduction

1.1. Globalization. Economic and financial crises

The world economy has suffered a serious and rapid slowdown. The effects of the economic crisis and the recession are mainly felt in the social sectors. The destruction of thousands of jobs, a precarious labor market, and the lack of work are all factors of risk in social exclusion and marginalization. Resources, systems of protection and welfare state benefits have all shrunk. At the same time, access to the labor market has become more complicated for those with educational, social, economic and professional qualification shortcomings. This has resulted in a notable increase in repossessions and evictions, which have had a profound impact on the more disadvantaged groups of society (Hadad Hadad & Valdés Llanes, 2010). According to the (International-Labour-Office, 2012), p. 9): “The world is facing a serious jobs challenge and widespread decent work deficits. There is a backlog of global unemployment of 200 million – an increase of 27 million since the start of the crisis. Hence, to generate sustainable growth while maintaining social cohesion, the world must rise to the urgent challenge of creating 600 million productive jobs over the next decade, which would still leave 900 million workers living with their families below the US\$2 a day poverty line, largely in developing countries”.

At the same time, youth unemployment has risen, with rates three times higher than in the population in general, thus making them one of the groups most at risk and affected by the crisis (United-Nations, 2015b).

While the world economy has seen a drastic fall in its ability to create new jobs, new technology enables companies to optimize the efficiency and effectiveness of their production processes and the provision of those services that improve the quality of their customers’ lives (Seisedos et al., 2015a).

In order to overcome the inequality and exclusion inherent in the current economic system, the main aim of inclusive companies is to reinvent themselves and evolve towards a concept of business in which collaboration, participation and employee involvement is both indispensable and decisive.

Sustainable companies could offer new forms of social inclusion, choosing to “respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity” (United-Nations, 2015a).

Strategic activities in smart business contexts are generally deemed to be healthcare, health, the environment, and education. Emphasis is also placed on participation and transparency in customer service and communication (Seisdedos et al., 2015a). We should bear in mind that, on a general level, agriculture is still the greatest employer globally, and that recent years have seen the creation of over 2.3 million green jobs in the renewable energy sector (United-Nations, 2015b).

1.2. Climate Change

According to the Paris Agreement pursuant to the Framework Convention on Climate Change organized by the United Nations, “climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries, and their participation in an effective and appropriate international response, with a view to accelerating the reduction of global greenhouse gas emissions”. The UN therefore proposes “holding the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change” (United Nations, 2015).

In this respect, according to Kramers, Höjer, Lövehagen, and Wangel (2013), variability in rainfall can put the supply of fresh water at risk, affecting more than 40% of the world population. In addition, the increase in carbon dioxide emissions has harmful effects on all of the planet’s ecosystems. According to Eguiguren (2011), to combat the effects of climate change through the sustainable development of companies: “A sustainable human system or behaviour is required, committed to the

harmonious development of the planet and of humanity which, acting out of a full sense of responsibility, contributes to the wealth and the common good and does not consume more resources than it generates”.

The growing threat implicit in a new economic market, marked by the emergence of countries with low production costs, has led companies to adopt ever more competitive strategies. Companies adopt delocalization processes as a means to reduce production costs; however, transport costs and the use of less efficient technology (B. F. García, Mora, & Alés, 2009) result in increased energy consumption. To counteract this form of growth, large reductions in worldwide emissions are needed to urgently confront climate change.

Economic and financial crises are ever more frequent, profound and global, and their effects are felt mainly in social sectors (Hadad Hadad & Valdés Llanes, 2010). Furthermore, climate change is a common concern of humanity; both cases call for measures that respect, promote and take into account obligations on “human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity” (United-Nations, 2015a).

In this context, the private sector must adopt measures to combat climate change (Laszlo, 2003). The management of companies requires corporate policies and values that stem from a business culture that is environmentally sustainable. Companies whose mission is based on ideas and values that are committed to the planet contribute to the common good and, at the same time, may produce profits that are similar to other companies (Eguiguren, 2011).

Noting the importance of guaranteeing the integrity of all ecosystems and the protection of biodiversity, business models emerge that are alternatives to capitalist models, such as People, Planet and Profit (3P), developed by Fisk (2010), which suggests that the deficiencies of the current model can be overcome by establishing links between the social, environmental, corporate and economic spheres.

According to Klionsky et al. (2012), sustainable companies act in the market through a sense of responsibility, transparency, democracy, participation and ethics.

Additionally, they are created in environments that recognize the need to promote sustainable energies.

1.3. Technological transformation

Over the last forty years, the two most determining factors in the emergence of globalization are considered to be technology, which has transformed most industrial productive processes, and changes in political systems (de Urdanivia, 2018).

In today's economic environment, companies are increasingly adopting competitive strategies to counter the growing threat of a new economic market based on emerging countries with low production costs. To this end, they are developing complex relocation and internationalization processes to combat effects on traditional local production (B. F. García et al., 2009).

A study by Frey and Osborne (2017), which consisted of a comprehensive analysis of occupations in the US labor market, concluded that 47% of jobs present a high risk of disappearance as a result of digital transformation over the next twenty years. In a similar sense, Arntz, Gregory, and Zierahn (2016) estimate an impact on jobs of between 25% and 45%.

In contrast to the above, Seghezzi (2016) stated that the robotization of industry and the digitization of the services sector may lead to opportunities to generate employment. Also, Todolí-Signes (2017) reflected on the collaborative economy and its disruptive capacity in the virtual market thanks to transformation of the network.

1.4. Media Globalization

In the current environment, the economic crisis has fundamentally affected the most vulnerable social sectors. In addition, there have been losses of freedom, inequality and exclusion at all levels. With regard to the media, although historically they had represented a resource for citizens against the abuse of powers, most media are now controlled by a relatively small group of global companies with a significant weight in the world's economy. These companies control media groups and often

act as the ideological arm of globalization, diminishing popular demands, preventing changes to the social hierarchy and maintaining inequality in the distribution of wealth (Ramonet, 2016).

According to Herman and Chomsky (2010), one of the indicators for evaluating democracy in a State is the freedom of its media. In respect of this, the United Nations states: "Freedom of information is a fundamental right and [...] the cornerstone of all freedoms".

Therefore, in the current era of vulnerability, in which part of society is at the risk of exclusion, the media should make an effort to reconcile social profitability with economic efficiency and: a) Promote values such as freedom, equality, justice and ideological pluralism; b) Foster full respect for minorities through democratic debate, free, pluralistic, and objective information and freedom of expression; c) Implement actions to promote the rights of minors, equality between the sexes and non-discrimination; d) Offer content which is of high quality, innovative, diverse and ethically rigorous; and e) Ensure consumer rights are protected (Manfredi, 2004).

The globalization of the economy has undermined the power exercised by the media to defend people's fundamental right to be informed and the need for pluralistic and rigorous journalism. In this setting, organizations such as the IMF and the World Bank influence large economic events, protect governments and dictate the trends of the economy. In contrast to this, and acting as a vehicle that amplifies the voices of citizens, this article analyzes social networks, review websites, citizen journalism, the collaborative economy and ethical principles of self-regulation, opportunities which have been generated to guarantee individuals' right to inform and be informed.

1.5. Research on alternative economic and business management

According to Echazarreta and Costa (2018b), today's society presents a series of economic and social problems and challenges, including globalization, economic crises, child labor, climate change and technological transformation, which must be

addressed if we are to achieve a sustainable globalization that will eradicate inequalities and poverty, protect the environment and guarantee prosperity in society.

According to B. F. García et al. (2009), the loss of competitiveness suffered by local production in the global marketplace due to high wage costs, together with the appearance of countries with low production costs, has accelerated companies' relocation and internationalization. This phenomenon has profound effects, including very high social costs, widening the gap between the rich and poor. Regarding globalization, Bauman (1999): "It greatly benefits very few, while excluding or marginalizing two thirds of the population".

Secondly, economic and financial crises are becoming more frequent, profound and global and their impact is mainly in the social sphere. In this context, the economic slowdown has significantly increased the number of people in situations of poverty and exclusion, who have fewer resources available to them as they receive less social protection and fewer welfare benefits. The crisis has led to the destruction of thousands of jobs, a more precarious labour market and a significant increase in foreclosures and evictions: a social impact that directly affects the living conditions of the most disadvantaged (Hadad Hadad & Valdés Llanes, 2010).

According to Rocha and Aragon (2012), 7.2 million jobs were destroyed and 2.4 million created in Europe during the period 2008 to 2012, which represents a negative balance of almost 4.8 million jobs. In Spain, the exponential growth of employment in the construction sector followed by the subsequent real estate bubble, added to the policy of cuts in the face of the crisis, aggravated the situation of social groups left without employment. In the first quarter of 2013, the number of unemployed reached a record high of 6.2 million and the unemployment rate 27.16% (Gómez-Ruiz, 2018).

With regard to child labor, Briceño and Pinzón (2004) stated the following, "More than 246 million children between the ages of 5 and 17 are currently working around the world and 180 million are subjected to the worst forms of child labor, such as sexual exploitation, domestic chores, work in mines, pyrotechnic fireworks factories and armed conflicts". According to these authors, there are three main causes of

child labor: poverty, the belief that it is positive, and a lack of socio-economic policies to counter child labor. The minimum working age is a key concept in achieving the effective abolition of child labor.

Fourth, regarding climate change, Carballosa (2017) states that “The world’s leading climate scholars consider human activity the most likely principal cause for the increase in temperatures since the mid-twentieth century”, and “These changes in the climate are already having a considerable impact on ecosystems, countries’ economies, human health, the well-being of the population and economic forecasts; and they are not expected to reverse in the medium term”.

In order to turn this situation around, bearing in mind the Kyoto Protocol on climate change, which limits emissions and commits the signatory countries to establish measures to reduce emissions and promote renewable energies, Echazarreta and Costa (2018c) conclude that “Sustainable companies are based on two fundamental principles: the environment (renewable energy resources, sustainable development, preservation of the environment, responsible energy consumption, minimizing emissions, eco-efficiency, circular economy) and mobility (collective public transport, electric vehicles, clean and non-motorized mobility systems)”.

Finally, a fifth key aspect that leads to significant changes in the labor market and the global economy is technological transformation. In relation to the 4.0 industry, Ceballos (2016) stated: that “The confluence of technologies allows the industry unimaginable opportunities, thus defining a new industrial model based on digitalization”. According to this author’s study, the new production model will involve the progressive disappearance of current mass production practices.

Recio (2018) states that “Some experts who have carried out empirical studies in highly industrialized countries such as Germany have found that unemployment is not the only problem and that other phenomena can be detected, such as inequalities among those who form part of the world of work due to differences in remuneration, which also represent important structural changes in the labor market”.

Eguiguren (2011), who is executive director of The Global Alliance for Banking on Values (GABV), concluded that management of the problems and challenges identified accelerates research on alternative economic and business management models capable of offering a better alternative to the shortcomings inherent in the current model based fundamentally on capitalism. According to said author, companies should be led by corporate values based on sustainability, ethics, responsibility, transparency, democracy and participation.

In respect of this, the alternative model developed by Fisk (2010) - People, Planet and Profit (3P) - addresses the need to establish links between the social, environmental, corporate and economic spheres to overcome the shortcomings of the current model.

02

**Objective
of the work
as a whole**

2. Objective of the work as a whole

Today's society presents a series of economic and social problems and challenges, including globalization, economic crises, child labor, climate change and technological transformation, which must be addressed if we are to achieve a sustainable globalization that will eradicate inequalities and poverty, protect the environment and guarantee prosperity in society.

Taking into account the economic and social threats and challenges the main aim of this study is to conceptualize a business value management scientific model to promote sustainable, intelligent, open, democratic and inclusive companies, which must inspire the future.

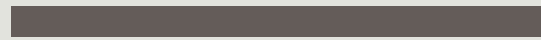
In particular:

- Describe the main characteristics of inclusive companies based on four fundamental principles: values, team management, corporate social responsibility, and responsible marketing.
- Report the main characteristics of sustainable companies, based on ideals and values that are committed to the development of the planet, consuming fewer resources than those that they create.
- Describe the main characteristics of smart companies capable of overcoming the shortcomings of the current economic system.
- Define the main features of the new forms of citizen expression, communication and cooperation, such as social networks, review sites, citizen journalism and the collaborative economy.
- Discuss and define relevant and significant indicators that facilitate the identification, differentiation and promotion of inclusive companies.
- Debate and describe relevant and significant indicators that facilitate the identification, differentiation and promotion of sustainable companies.
- Discuss and report relevant and significant indicators that enable us to identify, differentiate and promote smart businesses – those that promote

the use of communication and information technologies as a means of improving citizens' quality of life.

- Study and conceptualization of the Valometer, a system of business indicators designed to facilitate management with values.

03



Methods

3. Methods

3.1. Methodological strategies

Faced with a research problem that has been the object of very few studies, we proposed to carry out an exploratory investigation with the objective of designing indicators for business management by values from a new perspective. Different studies have coincided in pointing out that the most influential variables for defining indicators to measure, evaluate and make decisions in a given sector are obtained from the target public (Nieto-Galan, 2011). For this reason, our exploratory research is based on previous theoretical studies, consisting of four bibliographic reviews aimed at describing the current state of knowledge regarding how inclusiveness, sustainability, technology and communication are applied in today's business environment.

Based on the results of the documentary reviews, our exploratory research continued with the adoption of a qualitative approach that combined discussion forums with interviews using open questions, so as to compile the indicators in a participatory manner.

The 1st Forum "People, the heart of companies", was held on October 18, 2016 in Meeting Room SD2 at the University of Girona's Faculty of Tourism. Dr. Ramon Moreno, vice-rector of Planning, Innovation and Business, took charge of the inauguration. Reflection revolved around the unique aspects that shape inclusive companies, which promote values such as equality, transparency, co-responsibility and accessibility, and ultimately improving people's quality of life.

Participants included Dr. Carles Serra, Assistant Rector of Social Commitment; Mr. Agustín Matía, Owner of Down España; Mr. Cayetano Alemán, former machinist at Aconda Papel; Mr. Javier Blázquez, Technical Coordinator of International Projects for the ONCE Foundation; Mr. Mohamed El Amrani, project coordinator at Suara Cooperativa and 2014 Princess Social Foundation Award; Ms. Esther Carreras, External relations manager for the "La Fageda" cooperative, and Ms. Khaoula Echaouech, an unemployed geographer.

The session was organized and run by Dr. Carmen Echazarreta, director of the Arpa Research Group, expert on gender issues and Professor of audiovisual communication and advertising, and Albert Costa, PhD student at the University of Girona.

The 2nd Forum “Smart businesses, creating the future” was held on 22 November, 2016 in Meeting Room SD2 of the Tourism Faculty. The reflection of the forum centered on the singular aspects that configure smart businesses, championed by leaders who promote the use of communication and information technology as a means to improve citizens’ quality of life.

Participating in the forum are: Antoni Sudrià, emeritus professor at the Polytechnic University of Catalonia and former director of the CITCEA Center for Innovation and Technology; Carlos Grau, talent developer, and technology and innovation associate at Konsac group; Gema Guzmán, responsible for professional development projects at the Princess of Girona Foundation; Isabel Godoy, responsible for inclusive tourism at the Costa Brava Pirineu de Girona tourist board; Ioanna Alasua Pastrana, COO at SIMBIM Solutions; Joan Batlle Grabulosa, former director of the University of Girona from 2002 to 2005 and professor in the Computer Architecture and Technology Department; Joan Duran, strategy at the Ministry of Telecommunications, Cyber Security and Digital Society of the Generalitat de Catalunya; Marc Teixidor, PIMEC Young Businesspeople of Girona; Mariona Serra, co-founder and CEO of GoodGut, y Meius Ferrés, responsible for digital strategy tracking and protocol at the University of Girona. Dr Carmen Echazarreta, director of ARPA Research Group, expert in gender issues and associate professor of audio-visual communication and advertising, and Albert Costa, Doctoral candidate at the University of Girona, organize and drive the session. The 3rd Forum “Sustainable companies, tackling climate change” was held on January 24, 2017 in the SD2 Meeting Room of the UdG’s Faculty of Tourism. Reflection revolved around the unique aspects that make up sustainable companies, which promote values such as equality, transparency, joint responsibility and accessibility, and ultimately improve quality of life.

The following people participated in the forum: Pere Macias, President of the Circle of Infrastructures Foundation and Professor at the Polytechnic University of Catalonia; Imma Pérez, Director of Nottopic - CSR, communication and networks; Sara Pizzinato, responsible for energy and climate change companies at Greenpeace Spain; Joan Barfull, Technical Manager at the Girona SME branch and in charge of sustainability; Marc Casadellà, Director Par 3 Pitch & Putt Gualta and President of the Catalan Pitch and Putt Association, and Josep Serra, viticulturist and entrepreneur at La Vinyeta winery.

The session was organized and run by Dr. Carmen Echazarreta, Assistant Professor of Audiovisual communication and advertising, Director of the Arpa Research Group and expert on gender and publicity issues, and Albert Costa, PhD student at the University of Girona.

3.2. Population and sample

Fifty professional-experts (scientists and professors from different academic disciplines, businesspeople, entrepreneurs, managers and advisors from different business sectors) were selected by means of theoretical intentional sampling. The appeal of the forums lay in the fact that different complementary approaches on the same topic were included to obtain a more representative overall viewpoint. Table 1 contains the technical data for the study.

Table 1. Study data

Sample size	50 professionals-experts (scientists and professors from different academic disciplines, businesspeople, entrepreneurs, managers and advisors from different business sectors)
Data-gathering methods	4 Bibliographic reviews 3 Participatory discussion forums 21 In-depth interviews with open-ended questions
Sampling procedure	Intentional theoretical sampling
Dates	January 2016 to December 2018

3.3. Data-gathering instruments

The complex current situation and its wide spectrum of needs requires knowledge from different disciplines. Thus, it was clear from the outset that designing a tool of indicators for business management with values had to count on the participation of different points of view. For this reason, a methodology was proposed to conceptualize the Valometer, divided into the three tools listed below.

The first phase entailed conducting a comprehensive diagnosis to analyze the four key axes for developing values-based companies, namely technology, inclusiveness, sustainability and communication.

- Inclusive companies, reinventing quality of life: A theoretical review (Echazarreta & Costa, 2018a)
- Sustainable companies, tackling climate change: A theoretical review (Echazarreta & Costa, 2018c)
- Smart companies, inspiring the future: A theoretical review (Echazarreta & Costa, 2017b)
- Amplifying citizens' voices in the face of media globalization (Echazarreta & Costa, 2016).

As a result of the above, we obtained an image of the object of study that allowed us to focus on subsequent processes. Following this descriptive phase, the qualitative exploration phase entailed three forums with experts and opinion leaders. The focus group discussions were structured in three areas, in accordance with the results obtained from the diagnosis and bibliographic review phase: inclusiveness, sustainability and technology.

In order to design the criteria and indicators that define the Valometer (European system of business indicators for facilitating management with values), without previously conditioning the participants, the forums were complemented by in-depth interviews using open questions.

3.4. Procedure

The focus groups were structured in three areas, in accordance with the results obtained from the diagnosis and bibliographic review phase: on inclusiveness, “People, the heart of companies”, held on 18 October, 2016 with 9 participants; on technology, “Smart companies, generating the future” held on 22 November, 2016 with 12 participants; and on sustainability “Sustainable companies, tackling climate change” held on 24 January, 2017 with 8 participants. In total, the forums comprised 29 professionals in multidisciplinary groups.

In parallel, 21 interviews with open questions were conducted from January 2016 to October 2018.

The initial draft of the Valometer indicators was formulated between June and October 2018 on the basis of the data obtained from the four bibliographical reviews, previous working documents such as Smart Cities: The digital transformation of cities by PwC’s and IE Business School’s Public Sector Innovation Center (Seisedos et al., 2015b) and the article Industry 4.0, the great opportunity (Ceballos, 2016), the three discussion forums and the in-depth interviews.

Using the initial proposal, the professionals-experts revised and reformulated the criteria and indicators according to their knowledge and specialization in each of the five areas through meetings with the steering group and virtual interviews.

The first Valometer model was tested in pilot mode with a reduced sample of eight companies during the period June to August 2018 in order to assess its initial usefulness and viability.

The tool forms part of the Vusiness model [from business, but with a “V” for values], which aims to promote sustainable, intelligent, open, democratic and inclusive companies to inspire the future. The project is led by the Arpa Research Group (Analysis group for reception and playback quality of Audio-visual Screens), which belongs to the University of Girona’s Philology and Communication Department, and has been presented at different North American universities: Harvard, MIT-Massachusetts Institute of Technology, Emerson College, Boston College and Suffolk University in Boston.

04

Results

4. Results

This theoretical review aims to show the result of a systematic selection of relevant research into concepts linked with inclusive, sustainable and smart companies and to lay the scientific foundations for the definition of an alternative model of creating, leading and managing companies.

4.1. Inclusive companies

As Fisac Garcia et al. (2011), research into inclusive business models aimed at promoting the generation of opportunities for development and improving the quality of life of people suffering from social exclusion is currently experiencing an upsurge in interest. There is great scope for social companies, meaning those organizations seeking to create social value through an economic activity, to become a reference model for the design of future sustainable organizations.

The digital revolution is a further fundamental factor in the current economic context. This facilitates the creation of the collaborative society, in which the productive system is developed through knowledge instead of physical strength. Training plays a vital role in this context, and needs to incorporate technology (connectivity, devices, multi-tactile solutions, adaptation for disabled people etc.) and facilitate and share access to information. As well as contributing to productivity, the collaborative society foments the appearance of business models that question traditional ones, thus forcing their transformation. According to Guttentag (2015) on a collaborative level, in December 2015, the Airbnb had 60 million guests, while over a million journeys a day are made using Uber. These experiences in the service sector are an example of the organizational and structural change that the business world is currently undergoing. Márquez, Reficco, and Berger (2010) state that inclusive companies are founded on four fundamental principles; values, team management, corporate social responsibility, and responsible marketing.

4.1.1. Values

Like collaborative societies, inclusive companies base their mission on covering the needs of society as included in the United Nations Development Programme, “to eradicate extreme poverty and hunger; achieve universal education; promote gender equality and empower women; reduce child mortality; improve health; and combat disease; ensure environmental sustainability; and develop a global partnership for development”. Not only is the mission of inclusive companies focused on the long-term future, but also furthers it. The mission should be worded simply, directly and clearly; and if, possible, should be ambitious, answering a social need and distinct to that of other companies (Foladori, 2014).

According to Pin, Espinosa, and López (2005), the start of the 20th century saw business introduce values that were linked to productivity and efficiency, seeing the worker as part of the productive mechanism. This changed in the mid-20th century, as business culture became more democratic, and an emphasis was placed on more psycho-social ideas of organizations. Greater importance was placed on a new set of values, such as team spirit, intrinsic motivation, and professional and organizational development.

García Sánchez and Dolan (2003) conclude that over the past three decades, the appearance of the new paradigm of management through values has made the concept of the individual integral. This focus places importance on all facets of the individual, not merely the professional. The value of the person as an individual is emphasized, while economic and psycho-social dimensions are also taken into account. The organization is seen as a group of people, each important themselves, and individually important as parts of the company. At the forefront of this new concept is the resulting balance between the individual and the organization, and between work, family and personal life.

In accordance with the concurrence of a complex series of factors, a company's values are formed and strengthened (Pin et al., 2005) in aspects such as: a) The beliefs and values of the founder. All companies have their origin in ideas and principles established by their founders; b) The beliefs and values of management

that directors or managers aim to extend, confirm or modify, particularly at a time of generational change; c) The beliefs and values of employees. The employees contribute to the reshaping of the company's values. This is a system of constant feedback, management systems influence the values of employee, and, finally; d) The economic, legal-labor, and social habit framework. These are formed and developed at a specific historical moment, greatly influencing and conditioning the shaping and transmission of company values.

4.1.2. Team management

Pedraja-Rejas and Rodríguez-Ponce (2008) state that one of the most significant advances in the area of strategic management is the establishment of a relation between top level management when formulating the strategy and general efficiency of the company.

On the individual level, leadership is based on the influence a person has on their team or reference group. On the relational level, and thanks to the link established with their team, the leader affects others to carry out tasks that aim to develop collective efficiency and effectiveness. The main criterion by which the efficiency of leadership style can be measured is the success of the organization. The success of a work team will be measured on the basis of the organization's successes (satisfying clients' demands, giving a good impression to staff and suppliers, and ensuring profits for company owners).

Leaders have to overcome the problems that arise in the organization. They develop, initiate and assess potential solutions, and plan and implement future decisions that aim to solve these problems. It should be taken into account that the cognitive base and values of any leader limit selective perception, the interpretation of problems, definition and assessment of possible solutions and the choice and implementation of the strategy.

Leadership style is clearly a variable that has direct consequences on an organization's processes and results.

According to Dolan and Garcia (2002), relevant studies have proved that leadership style influences the conduct of individuals in the company. According to the same authors, recent studies confirm that leadership style has a direct influence on teamwork processes, the work climate and company results. Other research concludes that leadership is the ability to exercise control optimally in order to meet the company's strategic goals, as well as to maximize profits and strengthen those groups that make this possible, fomenting the development of the right work climate (Elkington, 1994).

On the other hand, the leader acts as an inspiring and stimulating motor for the group to complete its work. The leader should generate consensus through forming a strong link of relation and trust, acting through values such as honesty, commitment, ethics, empathy, proximity, effectiveness, efficiency, leadership capacity and responsibility (Pin et al., 2005).

Consistent with García Sánchez and Dolan (2003), in order to achieve high quality professional performance in contexts that are changing as now, it is important to foment and nurture qualitative factors and intangible values such as imagination, trust, creativity, freedom, authenticity and beauty.

These poetic and creative values are as important, or more so, than traditional quantitative economic concepts related to pragmatism, such as optimization, client orientation or productivity.

Work teams need emotional values such as happiness, solidarity and freedom to power creativity, talent and innovation, as well as to affect an improvement in the work climate, which, in turn, is directly linked to worker performance.

Directors who manage work teams tend to rationalize processes and teams; they often fail to appreciate the company's values or take them seriously, neither do they tend to view the values as a real asset, one that, as such, should be correctly managed. What normally happens in these cases is that directors spend most of their time dealing with what they see as the truly important aspects of the company, such as accounts, profit and loss, budgets or taxes.

Time will show the necessary cultural change that the current modern, globalized economic context demands. Various studies conclude that the formulation of the

mission, vision and values through a participative process that can involve all a company's workforce improves performance, commitment and the work climate. This highlights the need for shared values in work teams and organizations (S. García & Dolan, 1997).

According to Seisdedos et al. (2015a), the distribution of competences and responsibilities in organizations is vital in order for their management to receive the necessary dedication and focus; however, this in itself makes carrying this out complicated.

As an alternative to these problems, and in order to form teams with shared values, capable of working productively and maximizing their abilities, it is necessary to open up in surroundings that are traditionally limited. There is evidence that current techniques of social intervention are no longer useful in a globalized society that is undergoing permanent change. It is often over a coffee when people interact independently from the organization, the independence implicit in such an interaction making it more fruitful. Simpler and more productive ways of organizing meetings and events are clearly needed.

This is confirmed by ethnographic research. Observation of the simple but effective methods that some ethnic groups with little contact with the outside world, such as indigenous peoples of Africa and North America, use to reach agreements and initiate work that benefits all, produces a range of intervention techniques that facilitate the involvement of all members of large groups, or simply the discussion of highly complex subjects.

Numerous authors have studied and experimented with a range of methodologies that are particularly useful in complex, urgent situations, with diverse, multi-disciplinary groups that need to deal with a situation productively and innovatively (See Table 2):

Table 2. Intervention technologies in large groups

Open Space Technology: a way to facilitate productive meetings of between five and 2000-plus participants. The meeting is given a clear subject, the facilitator gives a brief introduction about the methodology, and participants create the agenda together, which is then discussed at different times and in different sub-spaces (Owen, 2008).

Future Search Conference: this lasts two and a half days, and permits the involvement of all key actors in planning the future of an organization. During the session, various activities are developed for participants to discover and recognize the past and define the present. Finally, they collectively construct an image of the future, producing common aims and a group action plan (Weisbord & Janoff, 1995).

Appreciative inquiry summit: a new intervention technique capable of initiating a process of profound change in complex systems, or when conflict arises. It is designed to make groups evolve, becoming more efficient and bringing out the best in people, organizations and the relevant context (Cooperrider & Whitney, 2011).

Circle or council: an ancestral form of meeting that facilitates conversation between key actors. Circles tend to transform arguments into respectful conversation and deep listening (MacDougall, 2005).

World Café: this takes its name from a typical café discussion. Participants number from 10 to 1,000; they meet in small groups (4-5 people) around tables and calmly discuss a subject or subjects that concern them all. Conversation produces ideas, and each circle has a host who serves to seed ideas and never changes tables (Brown & Isaacs, 2005).

Appreciative inquiry: is a technique of organizational development that aims to help groups renew themselves and focus. It is based on the principle that organizations change depending on the questions that are raised (Cooperrider & Whitney, 2011).

Source: (Friedmann & Llorens, 2002)

According to Cooperrider and Whitney (2011), there are further techniques that also produce significant results. These are: Generative dialogues; action learning; collective mind-mapping; collective story harvest; graphic facilitation; U theory; and dialogue.

4.1.3. Corporate social responsibility

It is now widely accepted that companies do not only fulfil their economic, ethical, social and legal obligations towards their shareholders, but also towards the planet, the environment, staff, suppliers and distributors (Lafuente, Viñuales, Pueyo, & Llaría, 2003). Corporate social responsibility can be defined as the recognition and

integration by companies of social and environmental concerns (Cuesta González, Valor Matínez, & Kreisler Merino, 2003).

According to Parra Valcarce (2008), studies conclude that the public has a more positive perception of the image and reputation of a company when they see corporate social responsibility. To this end, consumers expect companies to act in coherence with social values. A study by Ernst and White (2000) on CSR showed that 70% of European consumers said that the commitment of companies to social responsibility was an important factor when buying a product or service.

Corporate social responsibility represents those companies that have sustainable values as their *raison d'être* on their founding. According to Felber (2012) a number of factors are necessary for this to occur (See Table 3):

Table 3. Vision of Economy for the Common Good

Economic sphere: an ever-larger number of consumers, clients and suppliers value those companies that direct their efforts towards the community and not towards financial success. Effort is also made to reduce the environmental footprint, thus making the world more sustainable and fairer.

Political sphere: legal changes are needed to encourage sustainable companies. New regulations are called for that aim to provide a better life for all life and the planet. The legal framework should promote a radical shift, favoring co-operation and sustainability instead of profits and GDP.

Social sphere: movements are needed that continue to raise awareness of the need for a transformation of the system. It calls for new companies, which co-operate with each other and practice solidarity, promoting fair trade. People with greater empathy, sensitivity, responsibility and social competence serve as an example.

Source: (Felber, 2012)

Following Eguiguren (2011), two distinct types of company or organization are established; those that carry out corporate social responsibility actions, and those that are founded with the guiding principle of becoming the axis of business sustainability and values. Companies can, therefore, have aims that go beyond making strictly financial profits. Regarding the differences in the activity to be carried out, corporate social responsibility selects criteria that are not necessarily linked to the company mission, while the activities of sustainable companies are based solely on the company mission (Miotto, 2010).

The structure and staff of corporate social responsibility companies fall outside the organigram and become external, voluntary, anecdotal or inexistent. On the other hand, part of the daily task of the sustainable company is an activity that makes a social contribution. On the economic level, companies that carry out corporate social responsibility tend to dedicate a part of their profits to such activities. According to the Fundación Seres, *Sociedad y Empresa Responsable* (2016), notable Spanish companies are Ilunion, Adecco and the Fundación Adecco, Vodafone, Meliá Hotels International, Orange, BBVA, Konecta, DKV Seguros, Indra, CaixaBank, ESADE, Fundación Repsol, and Ferrovial.

Furthermore, inclusive companies tend to dedicate part of their work, research and capital to set up initiatives that, over time, will become sustainable. In 2012, the G20 organized a “Challenge on Inclusive Business Innovation”, a global competition managed by the International Finance Corporation that rewarded businesses with innovative, scalable, and commercially viable methods that provide economic opportunities for the poor, while improving access to drinking water, electricity, healthcare, education, housing, telecommunications and financial services. Among the winners were such business initiatives as: Apollo Hospitals Group of India, offering specialized medical services in rural areas; Ecofiltro of Guatemala, manufacturing very low cost water filters; Engro Foods Limited of Pakistan, helping small milk producers in rural areas; Jain Irrigation Systems Ltd. of India, providing irrigation systems to farmers; Manila Water Company of the Philippines, providing accessible drinking water; Reybanpac Unidad de Lácteos of Ecuador, helping fight malnutrition through providing milk product drinks; Sustainable Harvest Coffee Importers of the USA, helping small coffee growers in Central and South America, and East Africa, and; Vinte Viviendas Integrales of México, offering accessible, ecological housing to families with limited resources (Manchón, 2012).

Furthermore, while the aims of corporate social responsibility include improving the company’s image and making tax savings, that of responsible and sustainable companies is to comply with their mission and aid the worse-off through paying the taxes due in each country, and not using certain countries to gain tax advantages. Finally, corporate social responsibility companies carry out little assessment and

monitoring, while sustainable businesses measure social profitability and investment as well as quality, effectiveness of resources and efficiency.

The theoretical base of inclusive companies is an economic project that is open to companies and promotes a sustainable economy that is an alternative to the financial markets created by Felber (2012). His starting point is the concept of the Economy for the Common Good, the ideological components of which are far removed from those of capitalism and communism, and promote a new way of creating a business based on values such as human dignity, solidarity, co-operation, environmental responsibility, and empathy.

4.1.4. Responsible marketing

In this context, responsible marketing aims to satisfy the rational, pondered and proportional needs of consumers through the manufacture and sale of products and services at a reasonable and fair price. Profits are sufficient to ensure the continuation of a contribution to social development, as well as for those who risk their capital and dedicate their efforts to receive fair compensation (Eguiguren, 2011).

In the terms of Palacios Alvarado (2015), responsible marketing is connected to strategic decisions that businesses take regarding their customers, and is linked to key factors such as the creation of a product or service, setting prices, distribution channels and fair communication strategies. Intelligent companies design responsible marketing strategies, showing their solidarity and fairness to the planet, the environment, and people. Competition with other companies is surmounted through the search for cooperation that ensures that the companies, suppliers and consumers with whom they work are also strong, competent and sustainable.

Unlike advertising practices based on subliminal perception, stereotypes or the target's prejudices or double standards, responsible marketing advocates the use of creativity based on ethical principles such as democracy, transparency, the verification of information, and truth. Eguiguren (2011) provides a series of principles for responsible marketing: a) Products answer a rational need in the

society in which they are sold; b) They are designed so that their production causes minimal or no environmental impact; c) The services or products are coherent with the company's mission and values; d) All the company's products and services are sustainable; e) The use of those new products sold generates value for society; f) Innovation is focused on satisfying the already existing needs of the consumer; g) The products sold provide social value and sustainability, and; h) No products are sold that, while profitable, do not conform to the ethical principles of responsible marketing.

Regarding ecological marketing, intelligent companies have the responsibility to transmit the culture of permanence practically to consumers and society in general. Authorities are also obliged to favor actions that lead to sustainable development, with positive and coercive regulations and laws designed to meet environmental goals.

As noted by Schlottchauer (2014), greater internet connectivity and a mistrust of conventional advertising gives rise to a new kind of consumer. This consumer is active, and consults a range of sources of information when deciding whether or not to buy a product or acquire a service. The need of consumers to obtain real and not institutional information on brands has led to review-sites, websites that let consumers publish their opinions on their experience with specific products and services.

Schlottchauer (2014) analyzes TripAdvisor, the world's largest travel comment website, which houses user-generated content, experiences, growth, monetization, competition and risk factors. The study concludes that TripAdvisor is a space for companies to construct and manage their reputation; since it has been created by peers, the content generates trust in travelers around the world. The positive reputation the site has gained in the sector is its greatest intangible asset. Another company value is the constant innovation that allows the company to anticipate the changes and preferences of its users.

4.2. Sustainable Companies

In 2012 the United Nations carried out a survey to ascertain the opinions held by citizens regarding the challenges facing humanity. This led to world leaders agreeing Sustainable Development Goals (SDG), a set of 17 goals and 169 targets to be met by 2030. On the environmental level, the following stand out: a) Clean water and sanitation; b) Accessible, non-polluting energy; c) Sustainable cities and communities; d) responsible production and consumption; e) Action on climate; f) Underwater life, and; g) The life of terrestrial ecosystems.

In line with such goals, Kramers, Höjer, Lövehagen, and Wangel (2013) proposed that sustainable companies are based on two fundamental principles. The first of these is the environment, defined as the control of the carbon footprint and greenhouse gas emissions (GHG); the monitoring and control of contamination and improvement of air quality; the generation of waste and pollution; environmental sustainability; the efficiency, reuse and recycling of resources; the promotion of renewable energies and improvement of conventional energy; the reduction of water consumption; improvements in air-conditioning and heating; and promotion of green areas. The second is mobility, in the sense of reducing emissions of polluting gases; and efficient, clean and multi-modal transport.

4.2.1. Environment

The first signs of environmental degradation appeared in Europe towards the end of the 1960s, and this spurred the international community to question an economic model in which industry appropriates the natural world, over-exploiting non-renewable natural resources, and leading to the current environmental situation (Kramers et al., 2013).

Globalization significantly increases the imbalanced use of finite, non-renewable energy sources (fossil fuels such as oil, coal and natural gas; and radioactive isotopes such as uranium and plutonium). Various studies have concluded that, should consumption continue at current rates, finite energy sources will run out in 2050. As a response to this situation, environmental sustainability as the axis of counter-

globalization is at the heart of the World Social Forum, held annually by a range of social movements; it celebrates diversity, discusses relevant subjects and seeks solutions to social problems that arise from neo-liberalism and economic globalization (Kuklinski, 2007).

Secondly, as argued Quesada (2009), the sustainability of the planet is further put at risk by climate change. He analyses the main effects of climate change, among which are rising sea-levels, heat waves, violent storms, drought, the extinction of species, disease, and the melting of glaciers. He also highlights government-led measures that favour sustainable development such as the Kyoto Protocol on Climate Change and even make them more ambitious before 2020; the Spanish Government's National Plan on Emission Allocation; and, most specifically, the Paris Agreement of 11th December 2015 in the Framework Convention on Climate Change.

A third subject that, according to Arroyave Rojas and Garcés Giraldo (2012), should be approached is waste generation, in particular greenhouse gas emissions, highlighting increases in nitrogen oxides, carbon dioxide and methane, along with aspects that cause further problems, such as deforestation. Waste adds an extra cost to the production process, as it implies poor use of raw materials; furthermore, treatment costs and deterioration in the quality of life also result in significant economic, environmental and social impact. The main techniques to minimize waste and prevent pollution can be divided into four groups. These are, the most accurate inventory possible of products; modification of production processes; reduction of volume of waste, and; waste recovery.

Fourthly, the WHO states that atmospheric pollution is the main environmental risk factor in avoidable death. The air we breathe should be as clean as possible; this involves an effort to control the maximum limits of sulphur dioxide, nitrogen dioxide, particles, lead, benzene and carbon monoxide.

Governments first proposed zero growth measures, under which pollution and recycling levels would be the same, contributing to an ecological balance. Numerous policies were introduced creating recycling systems that would be funded by those who polluted. The general public were made aware of the problem by contributing to the cost of recycling, funding this ecological balance.

Such a proposal is, however, technically utopian, as many existing resources can neither be renewed nor recycled; it would thus also result in harm to the environment, albeit slower. The idea of placing a value on natural resources and maintaining sustainable development was consequently discarded (Calomarde José, 2000).

The World Commission on Environment and Development produced the concept of sustainable development, by which economic progress should meet current energy needs without compromising those of the future. It is, thus, about making management of natural resources, the positive impact on the environment and the promotion and care of nature all compatible with economic development.

In stabilised, balanced natural surroundings, business development should be compatible with the environment and protection of the planet through sustainable development.

According to the guidelines of Eguiguren (2011), sustainable companies should seriously confront a wide range of subjects, that go from the optimisation of natural resources to the handling of waste, to training and raising awareness of staff, clients and suppliers. While this is regulated in most countries, every organisation should constantly assess the environmental impact of their actions.

An organisation can only be considered sustainable if it commits itself to the balanced development of the planet, producing neutral activity; by this we mean that it respects ecosystems and that its activity consumes only those resources strictly necessary and, in no case more than those it generates. The use of the 'three Rs' is recommended: reduction of emissions of CO₂ and other greenhouse gases; recycling of waste for later use in other activities or production processes; and recovery of other resources, fomenting the use of renewable energies (Roseland, 2012).

Actions aimed at preserving the environment will also be important in two areas, such as water consumption and food. There should be research into and promotion of techniques that aid in growing crops that need less water, fewer chemical composts and pesticides. Agriculture could then develop in parts of the planet where there is little water and fertilizer. At the same time, dietary habits need to be

changed, away from high-calorie, animal fat and protein based diets to others balanced with vegetable proteins, since these use fewer natural resources and are generally more accessible (Engel, Pagiola, & Wunder, 2008).

In this context, according to Wackernagel and Rees (1998) the ecological footprint is the indicator of the environmental impact of human demand of the resources available in the Earth's different ecosystems. Companies increasingly manufacture products with a large number of parts that can be reused, thus consuming fewer non-renewable materials and energies. There is a growth in the use of renewable vegetal material that requires less fossil fuel in its production.

The corporate ecological footprint is an indicator that can be applied to companies and organizations that can result in a framework for the analysis of bio-productive demand. Data is collected for analysis in variables such as a) energy consumption and intensity, b) natural productivity; c) energy production capacity; d) equivalence factor; e) electricity consumption; f) fuel consumption; g) material consumption (general, in construction and depreciable); h) service consumption, waste emissions and discharges; i) solid waste; j) emissions into the atmosphere and discharges; k) consumption of agricultural resources; l) food; m) consumption of timber resources; n) land use; o) CO₂ emissions and carbon footprint; p) eco-efficiency; q) social and cultural footprint (Barrett & Scott, 2001).

Alongside this, there are a large number of industries who aim to minimise emissions. Symbiotic industries are established where the waste produced by other companies and towns is used as the raw material in other production processes. Water in particular is one of the resources most affected over recent decades; vast resources have been required to mitigate the devastating impact of indiscriminate over-exploitation and gradual pollution.

As a result of the United Nations Framework Convention on Climate Change of Paris, 114 multinationals, among them Enel, Sony, Procter & Gamble, Thalys, Ikea, Carrefour, Kellogg and Wal-Mart have jointly agreed goals to reduce their emission of greenhouse gases in two years, thus keeping global warming at 2°C.

Sustainable companies increase the use of renewable or alternative natural energy. Such energy is endless or can be naturally regenerated, and includes hydraulic, thermal solar, biomass, solar, wind, geothermal and marine energies.

This context has also seen the emergence of eco-efficiency in the use of fuels such as biomass (timber, agricultural waste, and manure) that can provide energy that substitutes fossil fuels. As fossil fuel use in transport and logistics is highly polluting, policies are called for that realign rural areas and cities. Their transformation into ecologically better balanced systems is vital in order to reduce CO₂ emissions, (Kramers et al., 2013).

Biomass can include liquid agro-fuels such as biodiesel or bio ethanol; gases, such as methane; and solids, like timber. Reaching a balance evidently does not involve using more biomass than that produced by the ecosystem exploited. Developed technologies and recyclable materials should help avoid desertification and contamination of the planet.

A further aspect that should be highlighted is the consumption of eco-efficient materials. An example can be found in construction, where there is an increasing use of materials such as decontaminant cement, natural hydraulic lime, transparent cement, etc. in building and restoration work. Eco-efficient materials normally withstand the weather better, they are logistically cheaper and respect the natural surroundings. On buying such material, the ecological label should be identified and assessed, and the material used in the manufacture of vehicles and computers should taken into account on purchasing them.

When companies provide a service, they should emphasize eco-efficiency in aspects such as waste reduction, land use, the consumption of agricultural, marine, timber and water resources, the analysis of possible water loss and leaks as well as promoting the use of rain water in irrigation (Passetti & Tenucci, 2016).

A notable variable is natural capital. According to Fisk (2010) this refers to those natural resources of the planet and biosphere such as plants, air, oil, animals or minerals that, by producing oxygen, naturally purifying water and preventing erosion and pollination, act as natural ways of producing eco-system goods as they. Examples of natural capital that a company can invest in are a) woodland capital

(the natural reduction of CO₂ by forests); b) agricultural capital (sustainable farms, ecological agriculture and energy crops, or; c) marine and fishing capital. The recommendation of the United-Nations (2015a) is for the use of “positive incentives for reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks; as well as alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests”.

The sea is also taken to be natural capital, the decline of the fishing industry can be combated through measures for marine development and sustainable fishing.

In the current context, the linear economic model of “take, make, dispose” requires large amounts of energy and other cheap, easily accessible resources; it is, however, reaching the limit of its capacity. In contrast, the circular economy, a model developed by MacArthur (2013), is an alternative based on the principles of “repair and regeneration”; its goal is for products, parts and resources in general to maintain their usefulness and value at all times.

For example, in the linear economy, companies purchase machinery that is amortized over a useful life of four to five years, producing waste that is difficult to reuse and recycle. Under the circular economy, companies purchase the use of machinery. This paradigm shift means that the company supplying the service is responsible for and has the greatest interest in lengthening the useful life of its machinery, through repairs and using longer lasting parts that offer better performance.

The circular economy proposes a continuous cycle of positive development that preserves and improves natural capital, optimizing the use of resources and minimizing the risks of the system through managing a finite quantity of resources and non-renewable flow.

According to Ghisellini, Cialani, and Ulgiati (2016), the circular economy is based on three key principles: to preserve and improve natural capital; optimize resource use; and promote the efficiency of the system. Products are designed so that they can later be taken apart and readapted. As the materials used are non-toxic, they can be easily composted. Artificial materials, polymers or alloys, are designed to be reused

with minimum energy and maximum quality. The restorative circular economy means a significant reduction in the energy needed for it to work, in turn permitting the exclusive use of renewable energies. Among the companies that are researching and implementing circular economy systems are Cisco, Google, H&M, King Fisher, Philips, Renault and Unilever. Below are a series of measures linked with key environmental concepts that are developed and applied in sustainable companies (Kramers et al., 2013). (See table 4):

Table 4. Actions of sustainable companies regarding various concepts linked to the environment

Joint responsibility: The responsible consumption of goods and services (fair trade, local produce, ecological products, etc.).

Green energy: The saving in natural resources and achievement of maximum efficiency in their production, distribution and use, particularly of water and energy.

Climate change mitigation: The evolution towards a low-emission economy, prioritising the reduction of energy consumption and promoting the use of renewable, lower impact energies.

Emission reduction: The prevention and minimization of greenhouse effect emissions, reducing them to zero or, should this be impossible, a trend towards energy compensation and self-sufficiency.

Waste reduction: The improvement of waste management, prioritizing in order reduction, reuse and recycling. The increase of compost production.

Noise reduction: The improvement in acoustic comfort. Reduction of noise levels, particularly in the case of motor vehicles.

Sustainable tourism: The advance towards sustainable tourism in balance with the area, and with a positive impact on the local community.

Efficient water use: The saving in natural resources and achievement of maximum efficiency in its production, distribution and use.

Urban green: The increase in urban green areas in industrial estates and other zones.

Adapted from Barcelona-City-Council (2012)

4.2.2. Mobility

In order to progress towards an effective logistical and transport system that is safe, sustainable, interlinked, integrated and of low environmental impact, companies will have to gradually renounce those vehicles in their fleet that contaminate, thus contributing to the reduction of industrial pollution (Seisdedos et al., 2015a).

On a global level, the strategic implementation of low-emission industrial zones is needed, as are environmental taxation laws and a range of toll fees that depend on the contamination produced by different vehicles. Such measures promote the introduction into fleets of electric vehicles, or those whose level of emissions is very low; they also contribute to the more widespread use of alternatives to vehicles, such as travelling to and from work by bicycle or public transport (Kramers et al., 2013). Improving the air that we breathe is an opportunity to reindustrialize the country using the best available technologies, to reduce dependence on oil, foment the electrification of road transport and take the definitive step towards high quality, competitive public transport (Ke et al., 2016).

Kim, Kabir, and Kabir (2015) concludes that road transport is the main source of pollution, both of nitrogen oxides and suspended particles. The increasing amount of traffic and dieselization are the prime causes. An example that was widely reported in the media is that of the accusation made by the Environmental Protection Agency of the USA against Volkswagen of having violated the Clean Air Act. The German car maker was accused of having installed a software system in its four-cylinder diesel vehicles that circumvented regulations on the emissions of certain air-polluting elements, such as carbon dioxide. A number of studies have shown that these vehicles emit pollution up to 40 times above the legal limit.

According to Mollinedo (2014), industrial zones should promote the improvement in conditions of urban mobility and favour rational mobility. Collective public transport (metro, bus, rail, tram, etc.) should be convenient, interconnected with the urban network, frequent and economically competitive. The introduction of special fares is also recommended in order to increase the use of transport and reduce pollution. Users must receive useful, real-time information so that they can save time, change transport easily and contribute to reducing the carbon footprint. Users should also be enabled to give feedback on public transport systems which should then lead to improvements.

Air quality can be improved through a reduction in the number of vehicles on the road and a move towards a low emission mobility model, prioritising electric vehicles as these are currently the only vehicles that produce zero emissions.

Measures include rebates in local parking fees, the exemption from paying increased tolls and a rebate in the atmospheric contamination tax, among others.

Buehler and Pucher (2012), say that what is needed is a return to clean, non-motorised systems of mobility for the journeys to and from work, such as by bicycle and on foot. The authors suggest that companies support industrial estates with interconnected infrastructures for daily pedestrian and bicycle traffic.

Ports and airports are fundamental logistical infrastructures, fulfilling commercial, passenger, logistic and energy functions. In such places, the use of Liquefied Natural Gas (LNG) should be fomented along with other fuels as alternatives to the use of hydrocarbons in boats, heavy goods vehicles and machinery (Dameri & Garelli, 2014).

An example of good practice is Saba, one of Europe's largest operators of car parks. CSR is a central part of its management and promotes a) sustainable mobility (the use of automatic electronic payment), and a mobility management model in urban areas; b) energy efficiency and carbon footprint, c) an integrated waste management and reduced consumption system; d) fleets of electric vehicles, and; e) the integration of disabled people in the workforce.

Below is a series of key mobility-related concepts that are developed and applied in sustainable companies (Kramers et al., 2013). (See table 5):

Table 5. Actions of sustainable companies regarding various concepts linked to mobility

Cleaner air: To improve air quality, particularly regarding nitrogen oxides, suspended particles and allergens. Reduction of motorized traffic, promoting less contaminating fuel and electric vehicles. Promoting the safe use of bicycles. Access to a larger fleet of public transport. Introduction of electric vehicles, prioritising sources of renewable energy.

Equitable mobility: To improve universal access to public transport, buildings and spaces, **eliminating** unnecessary barriers and organising parking. Promotion of non-motorised journeys. Improvement of pedestrian areas.

Sustainable mobility: The promotion of strategies that discourage the use of private motorised vehicles. Promotion of efficient driving.

Adapted from Barcelona-City-Council (2012)

4.2.3 Actions Aimed at Developing Sustainability in Companies

According to Passetti and Tenucci (2016) present and future support for sustainable development opens the way to a new political and business ethics. In this context, a shortage of resources can be combated through **eco-efficiency**, which is the production of more consumer goods and services using fewer resources and creating less waste and pollution. Eco-efficiency can be applied in the use of conventional energy, such as electricity, or in alternative, renewable or green, energies; it can even apply to all energy that does not involve the burning of fossil fuels such as coal, gas and oil. This wide definition also includes nuclear and hydro-electric energy.

Below is a proposal for improvement actions related to a sustainable business management (Seisdedos et al., 2015b). (See Table 6):

Table 6. Actions aimed at developing sustainability in companies

- **Smart environmental sensor networks** (automatic detection of noise levels and noise pollution)
- **Energy efficiency** (use of high energy efficiency equipment - cogeneration, high efficiency boilers, home automation - and solutions that promote energy consumption management in air conditioning, lighting and elevators...)
- **Management of the entire water cycle** (use of technology to make water a closed cycle: collection, transportation, distribution, sewerage, consumption reading, billing, payment collection, treatment and purification...)
- **Efficient lighting** (use of LED technology, smart, on-demand or presence sensing lighting systems)
- **Smart metering** (telemetering of water, gas and electricity consumption, providing better information that favours savings and efficiency in consumption)
- **Smart irrigation** (automation of irrigation and sensor networks to measure when and how much irrigation is required)
- **Environmental protection** (detection of and reaction to environmental emergencies: leaks, fires, etc...)
- **Smart waste management** (real-time information on fullness levels of garbage containers; dynamic programming according to garbage truck routes, etc...)
- **Smart public transport** (priority for public transport at traffic lights, integrated management of fares between bus, subway, and suburban rail network, real-time information on incidents and frequencies, digital advisory services for travellers, etc.)
- **Monitoring of tolls / access to restricted areas** (automatic identification of authorized vehicles, automated charge for using toll roads,...)

- **Traffic management** (traffic prediction, smart traffic lights, real-time information for drivers, notices about incidents, digital advice services to drivers, etc.)
- **Fleet management** (ecological propulsion vehicles, real-time GPS localization, digital management and tracking of consumption, performance reports, maintenance management, etc.)
- **Smart parking** (real-time information on availability of parking spaces, reservation of spaces online, variable parking rates, etc.)
- **Electric vehicle** (vehicle charging networks, information systems for location and availability, public rental systems for electric vehicles, etc.)

Adapted from Barcelona-City-Council (2012); Seisdedos et al. (2015b)

4.3. Smart companies

According to Angel, Parent, Civco, Blei, and Potere (2011), 54% of the world population lives in industrialized urban areas, compared to 49% in 2005 and 33% in 1960. This is expected to grow to approximately 60% by 2030 and 75% by 2050, when it is estimated that cities and industries will be responsible for between 60% and 80% of global energy consumption and greenhouse gas emissions. Industrial environments need to address problems such as pollution, safety, transportation, waste management, employment, energy, urban planning and the supply of household amenities in general.

Smart companies are characterized by offering more efficient services to improve the quality of life and wellbeing of citizens. Their founding missions include such aims as overcoming the economic crisis, combating social inequality, eradicating climate change, counteracting population aging and slowing the rapid spread of urbanization. We live in an era of great technological innovations, which have the potential to resolve most of the problems facing companies (Dameri & Garelli, 2014). Kramers et al. (2013) define a smart company as one that takes advantage of ICT - information and communication technology - to provide products and services that meet their customers' needs and manage their own infrastructure. Within this environment, they highlight concepts such as leadership and information technology and communication as being key in quantifying and evaluating the degree of companies' intelligence or smartness.

4.3.1. Leadership

Castells and Pasola (2004) state that in an environment of crisis business leaders have discovered, in the concept of intelligent or smart business, a way of obtaining more with fewer resources thanks to information technology and communication. According to Seisdedos et al. (2015a), transforming a vision into reality in any organization requires strong leadership, inspiring change in people and mobilizing the right resources to carry out the project. Entrepreneurs have the ability to set the agenda and allocate resources, and are also responsible for driving organizations that implement and facilitate synergies among all departments through the use of information technology.

Each individual company must define its vision and the pace of its transformation towards smart management and leadership. In addition to leaders with willpower and vision, there is also a need for employee consensus and involvement to achieve effective progress and ensure long-term survival (Hollands, 2008).

The current economic environment means leadership is essential in achieving effectiveness in work teams and the organizations of which they form a part. According to Seisdedos et al. (2015a), technology is the means required to move towards the smart management of companies and improve citizens' quality of life. With this in mind, it is necessary to explore new forms of leadership which result in effective responses to new requirements in the workplace, such as design for change and innovation, cultural diversity, complexity, knowledge-based work and virtual organizations. Response to these demands has led to the development of new approaches, such as new leadership and authentic, cross-cultural, complex, shared and remote leadership (Review, 2011).

Within this context, it is worth highlighting the concept of "leadership by values" posited by García Sánchez and Dolan (2003), according to which management by values is a new way of understanding business management. It is management that relies on striking a balance between three types of values to achieve its vision and fulfill its mission: a) economic-pragmatic, control or praxis values, usually predominant and never sufficiently developed (efficiency or quality, for example);

b) emotional, developmental, “poietic”, creative or generative values (imagination or warmth, for example), abusively and wrongly denied or belittled on many occasions within the pragmatic efficiency-minded perspective; and c) ethical values (generosity, respect and honesty, for example), being integrated as the norm within economic and emotional values, and not locked inside codes or considered a separate category, and certainly not outside the core element of productive business. The concept of authentic leadership developed by Walumbwa, Avolio, and Zhu (2008) also plays an important, if complementary, role. According to these authors, the emergence of this concept is mainly due to two factors which, for different reasons, call for the existence of a new kind of leadership: on the one hand, the disappointing response to the economic crisis by political leaders, and on the other the response of the financial sector in its attempts to address the situation.

From this point of view, the loss of trust towards leaders underscores the importance of ethical and moral aspects of leadership. Indeed, in recent years, positive psychology has proposed changing the approach to psychology away from a concern to treat negative aspects, such as deficiencies and pathologies, to encourage the development of positive qualities. These include, for example, creativity, integrity, ethics, leadership, wisdom, being a good citizen and satisfying work. Within such an environment, authentic leaders are profoundly conscious of their values and beliefs, how they behave and, in turn, how they are perceived by others (Walumbwa et al., 2008).

In this context, (Love, 2013) proposes the principles of authentic leadership be integrated within an organization based on the principles of management by values, and advocates:

- 1) Using social technologies and collective intelligence tools.
- 2) Creating spaces that facilitate the joint creation of innovative solutions.
- 3) Using the inspirational qualities of improvisation and play in promoting innovation and creativity.
- 4) Connecting with others through authenticity to catalyse the talent of the group and learn to work together.
- 5) Generating positive changes in the world through personal transformation.

Below, we highlight two methods for managing and achieving leadership aims:

- a) The **Search Inside Yourself Leadership Institute** is a training programme designed by Google and comprising three stages: mindfulness training; self-knowledge and self-control; and creating mental habits. It is based on the scientific concepts of emotional intelligence and mindfulness. Thanks to this training program, emotional intelligence skills are developed while generating trust and better communication between employees and the company. Meditation helps to reduce stress, generates happiness and calm and clears the mind (Tan & Sullivan, 2012).
- b) **The Art of Hosting conversations that matter (AoH)** is a new approach to authentic and transformational leadership which scales up from the personal to the systemic using practices such as facilitation, dialogue and the co-creation of innovative solutions to complex challenges. Co-creation has been successfully implemented in organizations such as Apple and Google to achieve more creative, flexible and innovative outcomes than their competitors (Boyatzis & McKee, 2005).

In addition, and in line with the conclusions drawn by Seisdedos et al. (2015a), for companies to move in a smart direction, leaders must implement actions in the following areas: 1) vertical - the company equips itself with the necessary technology to improve its management; 2) horizontal – a cross-departmental platform is developed to connect the different departments of the organization; 3) connected - different companies begin to share information and interoperate with each other via the management platform; and 4) smart – it becomes possible to conduct advanced, predictive and real-time management of the business and provide information and services with high added value to customers, employees and suppliers, creating an innovation ecosystem.

4.3.2. Information technology

Adapting the conclusions reached by Seisdedos et al. (2015a), standard, open and interoperable platforms facilitate improvements in the management and development of a smart business ecosystem.

Complementary to this, according to Guzmán and Palacios (2006), creative thinking strengthens and promotes productivity in business. To be competitive, as well as having high-quality technology, companies must be able to create and produce a product that favours its market penetration and customer loyalty. At the same time, they must have a management style capable of seizing opportunities and managing resources, especially human capital, to optimize results.

Similarly, according to Suárez (2003) specialist training should lead to changes in content and the training of future professionals to allow abilities and skills to flourish such as creativity, talent and innovation, facilitating the execution of certain tasks. It is important, above and beyond content, to facilitate personal development tools to ensure that trainees enhance their skills and abilities in relation to creativity, leadership, communication, etc. This will allow work teams to identify more with their duties, performance and responsibilities in the medium and long term (García Sánchez & Dolan, 2003).

Moreover, as Herzberg (2003) concludes, when a company manages to obtain high-performance teams the achieved result is generally significantly greater than the sum of individual results. One way to measure a company's creativity, although difficult to do, is to compare the number of products, services or processes it has before and after introducing innovation strategies.

According to Herzberg (2003), most executives do not consider the need for or importance of creativity in their teams, even though they do see the need to innovate. However, innovative companies have often emerged out of creative companies, and business creativity and innovation can be applied in various fields within the organization, above and beyond marketing: human resources, production, finance, etc.

In this environment of innovation and creativity, the concept of **collective intelligence** stands out. This refers to a way of maximizing the knowledge and cognitive abilities of a group, promoting collaboration and cooperation among its members. The term was first used to refer to the behaviour of certain species such as insects or ants that work together to function as a single organism. It is also used when the Net is used as a collaborative environment.

Among the resources aimed at collaborative use for generating collective intelligence we find **TED, Technology, Entertainment, and Design**, a non-profit association which aims to share ideas in communities around the world. Ideas are spread through short talks which make a big impact. TED now covers a wide spectrum of topics ranging from science to business, in over a hundred languages. It is based on an understanding that ideas can change attitudes, lives and ultimately the world. It is, therefore, a place for the exchange of free knowledge, formed by thinkers, aimed at spreading great ideas and provoking debate. Many companies use it as a source of inspiration Jacobson (2000).

Other tools that facilitate knowledge-sharing and contribute to generating cooperation and collective intelligence are the so-called **MOOCs (Massive Online Open Courses)**, an open education programme on the Internet. If connections between nodes of content and people are promoted, this facilitates learning and consequently knowledge creation. Thus, MOOCs promote the democratization of learning while also opening up educational environments, allowing people around the world to follow different free educational initiatives provided by the most prestigious universities in the world, such as Harvard, Stanford and Massachusetts Institute of Technology.

It is thought that the current growth in online collective creation applications may lead to a more efficient, fair and inclusive society (Kuklinski, 2007).

The following table provides a definition of key concepts related to information technology being developed and applied in the field of intelligent or smart companies (Seisdedos et al., 2015a):

Table 7. Concepts related to smart companies (Seisdedos et al., 2015a)

- **Big data:** Rapid processing and analysis of large volumes of data in real time from various sources, with a very short response time. The capacity to generate intelligence from stored information is being successfully applied in fields such as health services, disaster management and collaborative projects.
- **Cloud computing:** Processing capability through scalable and flexible technology made available to customers using the Internet. Its use rationalizes investment, reduces obsolescence and provides instant scalability, due to the user paying by capacity used.
- **Cognitive computing:** Systems based on big data, cloud computing, new security tools, etc. which are not programmed like current systems as they are able to understand the natural language people use, learn and answer complex questions in a few seconds due to their advanced capacity to analyse data (Paniagua, 2013).
- **Internet of Things (IoT):** Different devices connected to the Internet via fixed and mobile networks represent a source for capturing highly relevant and useful information, which is filtered and interpreted to provide a suitable real time response.
- **Lean Startup:** System for introducing new products or services based on a validated learning market, whereby constant experimentation and iteration shorten development cycles, measure progress and constantly feedback to ensure their implementation (Ries, 2011).
- **Open Data:** Making information available to third parties, enabling models based on the participatory economy and entrepreneurship.
- **Open technological solution:** The use of standard, horizontal, interoperable and scalable technology allows the integration of all systems on a single management platform and ensures the development of an innovative ecosystem.

Adapted from Seisdedos et al., 2015a

4.3.3. Communication

Seisdedos et al. (2015a) state that “The outbreak of the digital revolution is creating a hyperconnected and collaborative society that decisively transforms the relationships between citizens”. According to Contreras (2010), new technologies offer individuals the opportunity to engage in new forms of participation. Thanks to the Internet, users are able to develop, give opinions on, collaborate on and

distribute content virally or in a personalized way, as well as customizing applications. Currently, content can be produced in different formats, including text, images, video and audio, and multiple platforms allow its production and distribution, principally via instant messaging, email, websites, blogs and social networks.

Customers, employees and suppliers have ample opportunities to create and publish content and leave a testimony of their experiences with companies. This reality contrasts with the usual chain of publication in the traditional media and the processes of selecting and preparing publishable content. It is worth noting that the time needed for its creation and distribution has also been significantly reduced.

According to Kolbitsch and Maurer (2006), what the different communities of Internet users have in common is the possibility of participation and openness. In addition, another aspect of the Internet that directly affects democratization is that users have the power to pick and choose which content they want to read, view, consume and leave an opinion on.

Historically, according to Parra Valcarce (2008), Internet 0 arrived in 1969 and comprised a communications infrastructure that allowed large computers to connect to one another. By 1993, Web 1.0 had turned the Net into a large information storage space in which the major search engines appeared as key figures. Shortly after that, there was the arrival of Web 2.0, with Internet users worldwide able to enter into dialogue and share content and opinions.

According to Ramonet and Moreno (2004), in democratic environments the press and media have become a resource for citizen protection against the abuse of legislative, executive and judicial powers. Numerous violations of citizens' rights have been uncovered thanks to reports in the media. In this respect, the authors use the term "fourth power" to define the civic sense and loyalty shown towards citizens by journalists and the media, who have a duty to publish, challenge, and address democratically illegal decisions that would be unfair on innocent citizens.

However, today the media are controlled by a set of economic groups and globalizing companies with more influence on business than some governments and states. Thanks to their economic power and the digital revolution, these

worldwide media groups control the mass media, including radio, newspapers, television channels, news sites, etc.

With regard to the reach of social networks, according to Seisededos et al. (2015a), in the second quarter of 2015 Facebook had 1.49 billion active users, while every second 3,600 photos are shared on Instagram and 100,000 tweets are generated. As for mobile access via broadband, wifi and apps, in 2015 there were around 3.7 billion unique mobile subscribers worldwide. In this environment, customers and businesses are destined to interact virtually through social networks, resulting in organizations needing to manage and generate opinion in a new collaborative and participatory reality.

This environment has given rise to citizen journalism, conceived by Gillmor (2006), which entails the socialization of information. In this context, society's participation is essential in driving discourse and generating information.

Citizen journalism might be termed the fifth power, awarding citizens the democratic and civic strength to oppose the new dominant coalition of media groups, accomplices in their dissemination of liberal globalization.

There is an urgent need for the mainstream media to act more ethically on behalf of citizens and with greater veracity of information. In this environment, the new democratic communication allowed by the Internet and the digital revolution can encourage citizen journalism to place conscience and values above the interests of groups, companies and employers. Given this new reality, we propose an ecology of information be developed in order to separate significant and truthful information from that which is not.

Companies' freedom of action cannot prevail over citizens' rights to receive verified and accurate information. The strength of democratic communication lies in employees, customers and suppliers being able to evaluate the companies they interact with - whether working for them, buying from them or selling to them - and share their opinions with other citizens and Internet users in an open public environment of dissemination to create an economic environment which is more ethical, responsible, honest and democratic on both a micro and macro level.

Some authors are now referring to the Web 3.0, which is synonymous with a smart network and based on the application of expert artificial intelligence systems.

4.4. Social Networks Citizens' Voices Go Viral

The exponential growth in social networks has set alarm bells ringing in the traditional media and they have come to be considered the main sources of entertainment and information, able to incorporate elements, resources and characteristics of the traditional media alongside new elements such as interactivity, videogames, audiovisual content and virtual reality, as well as offering an economically more austere cost model. According to Campos (2008), although the traditional media have the advantage of being more information- than entertainment-oriented, it requires an effort for them to regenerate themselves in the current media landscape.

In April 2016, Facebook had 1,650 million active users worldwide, of whom 934 million entered Facebook on a daily basis; 22 million were based in Spain. In July of the same year, Twitter had 310 million active monthly users, of whom 1.5 million were Spanish. According to García-Galera, del Hoyo-Hurtado, and Fernández-Muñoz (2014) social networks are increasingly used to actively claim a space for citizens' voices.

In Spain, a profound transformation is taking place whereby journalism and the traditional media are moving progressively towards some Spanish cybermedia on social networks such as Facebook to locate and develop new journalistic products. However, results show that the majority do not take advantage of the Net to encourage participation, leading to the conclusion that spaces and resources are not optimized (Vivo, 2010).

Recent studies suggest that more than 95% of British university students think Facebook is more useful for socializing and talking with friends about work than actually doing work. They also believe that it is not a network used for purposes

related to formal education, although it is sometimes used informally for the purpose of learning (Madge, Meek, Wellens, & Hooley, 2009).

Given their enormous influence, companies are now being forced to integrate social networks into their communication and marketing strategies. We analyzed Facebook and Twitter use by the three main commercial brands in 15 different sectors in Spain in order to offer an overview of and analyze the activity of those accounts most sensitive to criticism and identify and assess the communication strategy implemented by their respective managers. After analyzing 5,433 tweets and 3,000 posts, we were able to verify the companies' massive presence on social networks as well as companies' increasingly widespread use of them to communicate with their customers (Dasilva, 2013).

The results of an investigation by Aced Toledano and Lalueza Bosch (2016) showed that, general speaking, there is no significant difference between the use of social media by American and Spanish companies. A statistically significant difference is observed in customer service via Twitter, which is more widespread among IBEX 35 than Fortune 500 companies. A further significant difference is that IBEX 35 companies publish more audiovisual content in blogs and receive twice as many likes on Facebook as Fortune 500 companies. In both cases, there is a strategic use of social media by professionals from both countries. In fact, according to the results of the investigations by Islas, Arribas, Piscitelli, Adaime, and Binder (2010), companies must make an effort to "Understand social networks as media environments" as it is observed that citizens make an exponential use of social networks to report business malpractice.

A recent study on Starbucks by Chua and Banerjee (2013a) exhaustively analyzed the chain's communication in newspapers, magazines, articles, books and social networks, emphasizing the extent to which the latter means of on-line communication can help obtain more knowledge about customers so as to better manage their needs. The study concludes that, due to their interactivity characteristics, social networks are the best means of finding out more about consumers and managing the organization's online reputation. Starbucks is redefining customer relations, going from being passive recipients to key active

collaborators in the company's innovation. Finally, the company also uses social networks to build customer loyalty.

4.4.1. Review websites

Users who share their experience on the net

A study conducted by the ITB-Berlin (2014), which analyzed data from a survey of around a thousand Internet users who had reviewed 17 pages of comments, revealed that 96% of travelers consult review websites and 82% trust published opinions. Furthermore, 30% think that a high percentage of criticisms are false, while website managers stated that fake reviews make up between 1% and 5% of the total. To evaluate the authenticity of comments, users rated the content that seemed genuine, and statistically 70% stated that the establishment was as good as the comments indicated, while 20% described it as even better. In the same study, 1,500 questionnaires were administered to hotel managers. The results indicated that 94% thought review websites have a great influence on consumers when choosing accommodation, while 81% believed comments had a direct impact on the image of the hotel.

With 350 million unique visitors per month and over 320 million reviews and comments, Tripadvisor was considered the largest travel website in the world in 2016. According to Horner and Swarbrooke (2016), the site has introduced a series of interesting developments that have made a significant contribution to the Net: An accreditation program for hotels and their environmental policies, called Green Leaders; A travel forum where travelers can pose questions and other travelers can post responses; Apps for smartphones and tablets that make it easier to consult information during a trip; A link to Facebook that makes it easy for our friends to see what content we have been reviewing on Tripadvisor; and its own awards for, among others, hotels, destinations, and tourist attractions.

In light of the growth in content generated on the Internet, research carried out by Chua and Banerjee (2013b) focused on analyzing the reliability of reviews appearing

on TripAdvisor. The results suggested that such reviews could largely be considered reliable.

In contrast, according to Cánovas, García, and María-Dolores (2015), the reliability of the more than 170 million reviews published on the site is continuously questioned. Although TripAdvisor or Booking.com advise establishments to encourage customers to participate by giving their opinion, they explicitly prohibit anything being offered in return. The study detects a significant number of cases where draws are held, observing that these condition participants by biasing their responses towards positive scores.

Furthermore, a study carried out by Tuominen (2011) on 1,752 opinions of 77 hotels in 6 different cities concluded that there is a correlation between the average ratings awarded to hotels and the number of ratings obtained. It is suggested that previous opinions of other users influence subsequent ones. Although many consumers consult online reviews before booking trips, research on the impact of user ratings and comments on tourist accommodation is insufficient. The results showed a positive correlation between the performance of the hotels and the scores and reviews obtained. The research suggests the need to take into account and correctly manage reviews as well as the quality described and perceived through the scores awarded in them.

Among the many review websites in existence, Booking.com stands out. In July 2016, it operated in 224 countries and had 990,369 accommodation establishments worldwide and 98,780,000 verified reviews. A study by Sparks and Browning (2011) explored four factors considered to be key when influencing consumers' perception of truthfulness when assessing reviews of establishments on Booking.com, as well as the subsequent choices they make. An experimental design was used to investigate four independent variables: the aim of the comment or review (personal or professional); the overall balance of opinions (positive or negative); the formulation of opinions (whether negative or positive comments come first); and numerical score accompanying the text.

The results of the study indicated that consumers are more influenced by early negative information, especially when the overall set of comments is negative.

However, positively framed information accompanied by numerical scores generates confidence in the consumer and influences intention to book. The results suggest that consumers tend to trust comments that are clearly worded and easy to process. Comments that focus on interpersonal customer service also generate high attributions of truthfulness.

After analyzing the results of the aforementioned studies, the authors concluded that more and more users trust opinions generated on the Net compared with other sources of information when deciding on their travel option (Sparks & Browning, 2011).

4.4.2. Citizen Journalism A Social Loudspeaker for Complaints Managed by Users

Processes such as digitization and the appearance of the Internet are the main factors that have revolutionized communication. The new formats present special and particular characteristics at narrative of discourse level (Seisdedos et al., 2015b). Citizens have the fundamental right to receive information and express themselves. In the current media landscape, there is a certain information overload due to the sheer number of media outlets, and although it should be guaranteed that their content is of public interest and the information they disseminate is true, this is not always the case. The rights of citizens must be guaranteed as, despite the volume of messages they receive, they may be uninformed or receive contaminated information. It is necessary to guarantee the right ethical attitudes of communication professionals so that they work with the right goals in mind (Alonso González, 2015).

According to Bowman and Willis (2003), citizen journalism is considered to be that which takes an active role in the process of collecting, analyzing and disseminating information in the community, making contact with its needs.

The mass media should be the real power behind the voice of the people. In some authoritarian and dictatorial countries, however, the State uses the mass media to

its own ends. In other countries, despite being democratic, there are also abuses and errors in the handling of information to ensure power is exercised through control. In this context, public opinion, an indispensable element of political and social pluralism, has found a new means of expression in citizen journalism (Pavlik, 2005). The birth of social networks and citizen journalism represents the emergence of a fifth power that allows citizens to denounce media control by the financial giants and ensure that the information that reaches us is at least contrasted and refuted. Receivers have become specialized and demanding issuers with a voice, who have the ability to choose and participate in a different way to that traditionally allowed them (Carballido, 2008).

Furthermore, faced with this new media landscape, the genres representative of quality journalism, such as reports, chronicles or analyses, are threatened due to their making production routines more expensive and slower, while readers increasingly want the greater speed, interactivity, emotionality, and hypertextual superficiality of online journalism (Parratt, 2012).

One of the ways to develop new journalistic products for the Internet is using different social networks as a platform for publishing the contents of citizen journalism. Furthermore, in this environment, formats such as blogs or video blogs have become widespread with content generated exclusively by users, including the magazine "Qué!", the first Spanish medium to be produced by its own readers (Ayerdi, 2005).

Sometimes it is also referred to as social journalism, when it assumes responsibility, reflection and a search for solutions in the social sphere. According to Merritt (1998), who coined the term, "the contemporary press needs to be able to transcend the limited mission of telling the news, to achieve a broader mission, to help public life function correctly and to act based on this imperative".

According to Meso (2005): "Citizen journalism is that which allows the active participation of social actors in all the processing of information of public interest. Therefore, its essential characteristics are forming public opinion through the creation of deliberative audiences and promoting citizen participation."

4.4.3. Collaborative Economy

Disruptive Economic Models Based on Sharing over the Internet

According to Hadad Hadad and Valdés Llanes (2010), economic crises are increasingly more frequent and at the same time, economic slowdowns have an acute impact on the disadvantaged classes. This situation accelerates the appearance of alternative economic models for the production and commercialization of goods. In this environment, the collaborative economy represents a significant change from the capitalist model, since it is founded on a market based around collaboration and the exchange of goods and services between individuals.

According to Rosa (2014), disruptive models, and especially technological ones, are generating significant changes in markets and interpersonal relationships. In addition, this author emphasizes that civic technologies generated via the collaborative model allow for a more in-depth understanding of citizen participation mechanisms that contribute solutions to common problems characteristic of governance. They provide a basis for the opportunities generated by movements such as free software, open source, common creative licenses or open data, and are characterized by their enormous potential growth, which has a significant economic, environmental and social impact. Platforms are created for: the rental of products between private individuals - cars, caravans, vans, boats and homes; booking office and warehouse space for work purposes; sharing taxis between individuals; formalizing loans between individuals; putting teachers and students in contact for online courses, etc.

Contrasting with the advantages of the collaborative model, Pascual (2015) analyzes “some of the innumerable and important legal problems posed by these systems, taking as an illustrative example one of the sectors that has generated the most controversy in this regard: that of the taxi”. This means of transport has been shown to suffer from disproportionately limiting regulations compared to others, a variable that has probably accelerated the rise of the collaborative economy in this sector in a way that raises relevant legal dilemmas. Furthermore, there has been an

emergence of social and business movements contrary to the development of collaborative economies, including taxi drivers against Uber, professional drivers against Blablacar and the hotel industry against Airbnb or HomeAway. The author points out the need to establish a specific legal system that contemplates optimal limitations for guaranteeing the security and quality of services rendered while at the same time protecting the legitimate development of other economic activities.

4.4.4. Ethical Principles

Self-regulation for New Formats and New Products

The Internet poses a new scenario for communication, in which companies can choose from a wide range of digital devices to provide content to reach the user anywhere and at any time. The use, consumption and production of information have been transformed. In transmedia production, new guidelines for multi-platform regulation and multimedia recommendations are also required as consumers go to playing an active and key role in the design and architecture of new platforms. In these new communicative narratives, the public must act with ethical principles as they participate actively in the production and consumption of audiovisual content over the Net. It is important to educate new generations with the skills to differentiate reality from fiction (Jenkins, 2009).

In order to assess what society thinks about certain content broadcast in the media, a series of concepts such as audiences, critics, opinion polls, television viewers' associations and information and communication councils are used. Legal regulations are required that guarantee certain fundamental principles in any media and transmedia content broadcast (Van Dijk, 2016).

According to Kolbitsch and Maurer (2006), the information that is emitted or published on a medium must be truthful, rigorous, impartial, and respect human rights. It is necessary to act with responsibility and rigor when obtaining information in the case of information or opinions with content that may lead to discrimination, avoiding expressions or witnesses that may be offensive or harmful. A necessary but not sufficient condition for information to be more objective and fair is that it be complete, in the sense that it include all relevant points of view and

also maintain a reasonable balance between all parties in the conflict, a fact that guarantees greater objectivity.

According to Kramers et al. (2013), the principles of the deontological code of journalism are applicable to the new realities of communication. Therefore, information should be presented in accordance with regulatory mechanisms, respecting the principle of impartiality and neutrality. It must be narrated with precision and accuracy, in context and in depth. If there are contradictory sources on the issue, the different versions should be presented. Information needs to be contrasted in order to ensure it is not false or misleading. At the same time, it must be taken into account that certain aspects are emphasized depending on the chosen frame, shot, and camera movement in the recording, etc. Another aspect to take into account is the position of the camera with respect to the object. Equally, special care must be taken in selecting and arranging the image and sound, since editing and staging are a key phase in the development of the audiovisual product for it to be faithful, as a whole, to the truth.

In light of the deontological problems constantly posed in social media, self-regulation is necessary to guarantee that the principles of truth, freedom, justice and responsibility are observed. In line with this, a systematic study of cases published on social networks has revealed best practices and negative aspects to be improved. The data observed allow us to list a guide of 15 ethical principles to be used in the sphere of digital media (Bowen, 2013).

Furthermore, the use of audiovisual elements on social networks should give greater consistency to information, and in no case contribute to sensationalization per se. Obviously, the use of fictitious or archive images to exemplify or reconstruct facts must be made explicit.

The digital revolution has crossed the frontiers of traditional forms and genres of communication. In this environment, another important aspect when correctly presenting information is choosing the appropriate journalistic genre. According to Parratt (2012), in current times the traditionally used classificatory theory of journalistic genres “is insufficient to accommodate the enormous number of variants that continually appear as a result of the evolution of the journalistic

profession, heading towards the proliferation of mixed genres and influenced by audiovisual media.” While it is true that this classification must evolve and be completed in accordance with the times, it is no less true that classifying a publication as news, report, chronicle, commentary, criticism, etc. greatly facilitates its reception by the reader. It is important to continue developing ethical principles of self-regulation to be able to find one’s way on the Net.

Table 8. 15 Ethical guidelines for social media use

Adapted from Bowen (2013)

Guideline	Justification and application
#Analysis Analyze the situation	<i>Examine messages rationally from all points of view. How could it be misinterpreted?</i>
#Good Encourage the good	<i>Does your message help build connectivity, commitment, and community?</i>
#Clarity Emphasize clarity	<i>Special attention must be paid to stating the source of the information and sponsorship, if it exists.</i>
#Consistency Consistency generates trust	<i>Consistency allows audiences to better know and understand you, and you can identify their expectations.</i>
#Dignity Maintain dignity and respect	<i>Ensure that the publication maintains dignity and respect towards the publics involved.</i>
#Deceit Avoid deceit	<i>If the news item may be misleading, even if only possibly, simply do not publish it.</i>
#Identification Identify clearly	<i>Information and personal opinion should be clearly differentiated for publications representing an organization.</i>
#Intention Examine intention	<i>Did you take your decision only out of goodwill?</i>
#Prudence Be fair and prudent	<i>Consider fairness, justice and citizens’ right to be informed.</i>
#Responsibility Establish your responsibility	<i>Is your publication fulfilling its responsibility to do what is right?</i>
#Revelation Reveal	<i>Be transparent with the date the message was created and the date of the events.</i>

#Reversibility Is it reversible?	<i>How would you feel if you were at the receiving end of the message? Is it still ethical then?</i>
#Secret Avoid publishing secrets	<i>These could be trade secrets or other secrets protected by law.</i>
#Transparency Be transparent	<i>Clearly identify who finances the publication.</i>
#Verification Verify sources and data	<i>Always remain credible, do not use rumors or speculation.</i>

4.5. Forum for reflection and debate: people, the heart of companies

The University of Girona held the 1st Forum for reflection and debate on inclusive, open and democratic companies. It took place on October 18, 2016, and was a meeting place designed to reflect on the Vusiness project [business, with a “V” for values], which aims to promote smart, open, democratic, sustainable and inclusive companies that inspire the future. The project is run by the Arpa Research Group (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales), which forms part of the University of Girona’s Department of Philology and Communication.

According to Echazarreta and Costa (2017a), “In the current environment, the world economy has suffered a serious and rapid deceleration that fundamentally affects the most vulnerable social sectors, generating unemployment and deficits in decent employment”.

The recession has had a negative impact on economic activity, increasing unemployment and destroying quality employment, while at the same time deteriorating living and working conditions. In Spain, there was a significantly higher rate of job destruction than in most European Union countries, due to its specialization in the construction industry and jobs being destroyed due to the housing bubble and the subsequent collapse of the sector. In addition, the impact on certain social groups has been exacerbated by the policy of cuts, aggravating the effects of the crisis (Rocha & Aragon, 2012).

According to Ioé (2011): “A quarter of households whose annual income does not reach the Minimum Interprofesional Salary are in a situation of poverty or at risk of

it". As a direct consequence, society presents an increasingly unequal distribution of wealth. As regards access to home ownership, there was an increasing indebtedness among working families until the crisis put an end to real estate speculation. Although in recent years it is true that the prices of real estate purchase and rental have fallen, unemployed families have also lost a significant amount of purchasing power and now have greater difficulty accessing credit. Furthermore, 93,000 home foreclosures were registered in 2009 and 120,000 in 2010 compared to 15,000 cases per year in 2005.

In addition to the above, the Spanish public authorities, faced with a mid-crisis unemployment rate of around 22% in 2012, have targeted economic recovery and the creation of employment, which has had an impact on the quantity and not so much on the quality of work (Merino, Somarriba, & Negro, 2012).

The digitization process and development of artificial intelligence have resulted in a profound and significant change in how work is structured in companies, in addition to that already mentioned deriving from globalization processes (García Echevarría, 2018). Following Lombardero (2015b), the fourth industrial revolution will be characterized by the digitization of 90% of work related to industry and services, an aspect that could be positive if used as an opportunity to develop a new economic model that facilitates the end of the current crisis in our markets.

According to Torrent-Sellens (2017b): "Concern for the future of work is a recurring theme whenever a process of disruptive change in technology becomes evident. Economic analysis has indicated that technology does not destroy work, but skews abilities and skills, and displaces tasks, jobs, occupations and people". In a new globalized economic environment, new forms and conditions of work are established, characterized by the following five elements: a) Integral use of information and communication technologies in all processes; b) Companies adopting a competitive strategy based on innovation; c) Flexible work organization; d) Skilled, versatile, and committed workers with a division of labor based on all types of knowledge; and e) Advanced human resource management (selection and work based on competences, ongoing training, variable remuneration, flexible forms of employment relations, etc.).

According to Mendizabal and Errasti (2006), “The globalization of competition and information and communication technologies allows companies to generalize subcontracting and outsourcing processes with decisive consequences for industrialized countries. Under these conditions, the processes of ‘business relocation’ become a central element of an economic and social offensive that directly affects the productive fabric and social rights of workers”, having a relevant and negative impact on employment. The victims of this dynamic in industrialized societies are usually the less qualified workers.

According to Echazarreta and Costa (2017a), “In order to overcome the current economic system, which is a source of inequality and exclusion, the main objective of so-called inclusive companies is to reinvent themselves and evolve towards a business concept in which the collaboration, participation and involvement of employees are indispensable and determining factors”.

Studies conducted by Eguiguren (2011), Executive Director of The Global Alliance for Banking on Values (GABV), conclude that the management of economic and social crises, delocalization, globalization and climate change, among others, promotes and accelerates the search for alternative economic models capable of laying a more solid foundation and providing a better response to the shortcomings of the current capitalist model. Eguiguren highlights the need for companies that act in the global market with a sense of ethics, responsibility, transparency, democracy and participation; companies that are led by corporate values characteristic of an inclusive business culture at the social level, sustainable at an environmental level and wise at the level of using technology in the service of quality of life.

In order to contrast and expand the information gleaned from the bibliographic review phase, three forums have been held to reflect and debate on inclusive, open and democratic companies.

4.5.1. The debate

The main objective of the Reflection Forums is interaction between different professionals related to the business sector to discuss and define relevant and

significant indicators that facilitate the identification, differentiation and promotion of open, democratic and inclusive companies. The reflection and debate generated on this forum of experts serves to generate qualitative research.

At the **inclusiveness** level, the following specific objectives were proposed in line with the conclusions drawn by Echazarreta and Costa (2017a):

- To overcome the current economic system, which is a source of inequality and exclusion.
- To promote inclusive companies that generate opportunities for development and aim to improve the quality of life of people who suffer from social exclusion.
- To describe the main characteristics of inclusive companies, which are based on the following four founding principles: values, team management, corporate social responsibility and responsible marketing.
- To promote inclusive companies that contribute to the common good, championed by leaders who promote the use of information and communication technology as a means to improve citizens' quality of life.

Founding missions were proposed, such as overcoming the economic crisis, combating social inequality, counteracting the aging of the population and curbing rapid urbanization.

Inclusive companies improve the quality of life of people who suffer from social exclusion. According to the United Nations Development Program, inclusive companies focus their mission on eradicating extreme poverty and hunger; achieving universal education; promoting gender equality; reducing the child mortality rate; improving health, ensuring environmental sustainability; and promoting global partnerships for development.

The debate on inclusiveness in companies was organized around four aspects that according to Echazarreta and Costa (2017a) stand out in related previous studies: inclusive companies, team management, corporate social responsibility and responsible marketing.

4.5.2. What characteristics identify an inclusive company?

Inclusive companies. What is meant by inclusiveness? Is there a lack of education on the subject?

The economic slowdown has significantly increased the number of unemployed (Rocha & Aragon, 2012). According to Cayetano Alemán, a 57 year-old who is long-term unemployed: “The only jobs are small ones for a few days or weeks... After 33 years in a paper factory they closed and I was made redundant. When you **submit your resume you see they’re looking at your age**. Everywhere accepts your resume but even if they don’t tell you, a younger guy always comes in. It’s normal, a businessperson is more likely to train a young guy than an older man, even if you already have experience. **The arrival of machines has also resulted in a significant loss of labor**, with toll stations, for example. We’ve replaced people with machines. Another problem is the temporary nature of contracts, the young people of today won’t even have 15 years of social security contributions. While they’re being given temporary jobs, for hours, weekends, they’ll never contribute enough. Why don’t we retire them at 50? Pre-retire them, have them training young people”.

Inclusive companies are characterized by offering more efficient services to improve citizens’ quality of life and well-being (Echazarreta & Costa, 2018a). According to Javier Blázquez, coordinator of international projects for the ONCE foundation, “Inclusive companies are characterized **by having a more open mind, not being closed to new challenges**, new possibilities, new jobs, different people, and considers that **everyone can contribute something to their organization**. The model of integrating people with disabilities has evolved towards inclusion, which means **different people are working in the same environment, or in an environment that is not different**”.

According to Mohamed El Amrani, project coordinator for the Suara cooperative and president of the association *Xarxa de Convivència* (Coexistence Network), “The inclusive company has to be one that is capable of **listening, is more human**,

closer and of promoting **internal communication** to encourage the **participation of its workers**".

Esther Carreras, External Relations manager for La Fageda, states that "An inclusive company is one that **does not exclude any group** for reasons of gender, race, etc. There is a need to teach this, and it would be important to start in primary school. For ideas to change, some generations must pass. **If the main value of a company were the person**, and all the other values pivoted around the person, all companies would have another path".

Javier Blázquez of the ONCE Foundation states that we are experiencing a second industrial revolution. The mechanization of processes entails society having to adapt to technology and considering whether **machines should contribute to social security**. In this sense, Mohamed El Amrani affirms that part of the benefit of said contribution would have to be invested in **development, knowledge and research**.

For Khaoula Echaouech, an unemployed geographer, one of the main characteristics of the inclusive company would be "**acknowledging the diversity that exists in society**". Because fortunately we are not all equal and we find various different kinds of groups in society".

The crisis has affected the general population, and specifically the most disadvantaged. In this context, according to Agustín Matía, General Manager of Down España, "In the labor sphere, the challenge is to get people with Down syndrome **actively working, as autonomous as possible, as integrated as possible in their society**. There are 35,000 people with Down Syndrome in Spain, only 5% of whom work in an ordinary environment; if we add a sheltered environment, it still doesn't reach 15%. As for the disabled in general, 35% work."

Commenting on the challenge for people with different degrees of disability, Esther Carreras, External Relations manager at La Fageda, says: "**We like to talk about people with different abilities**. At La Fageda, people with a disability certificate drive a tractor on a farm, something that many people without that certificate would not be able to do. There is a lack of education in this area, and it would be important to start it from primary school".

With regard to employment opportunities for people at risk of exclusion, she explains that La Fageda is a special employment center where around 130 holders of the intellectual disability certificate or people with severe mental disorders work. They make yogurts, ice cream and jams and also provide gardening services for public and private spaces. They also have a community integration service, which was created in 2007 and consists in trying to integrate people with a disability certificate into ordinary companies because their certificate allows them to do work outside the framework of the center. To promote integration, the center informs companies of the benefits of the Law on the Social Integration of the Disabled (LISMI), although Carreras states that sensitivity on behalf of human resources managers employed in ordinary companies is the key to their labor market integration.

By way of analogy, Javier Blázquez, Technical Coordinator of International Projects for the ONCE Foundation, explains that the Foundation aims to eliminate all types of barriers, whether physical, technological or intellectual, so that all people have the same rights to access all areas of life: education, work, leisure, culture, etc. To promote labor market integration, the ONCE Foundation has a business group known as the Ilunion group, which comprises more than thirty companies from different sectors: industry, technology, cleaning, security, media, a contact center, hotel chains, etc. It was created because companies with more than 50 employees in Spain must comply with a 2% quota of employees with disabilities according to the LISMI. “Most companies do not comply with it, or don’t want anything to do with it,” Blázquez notes. “The Ilunion group is an alternative, a way to comply with this law. To comply with the LISMI, companies can hire workers or contract the services of special employment centers, provided at least 70% of the staff at these centers have disabilities. In the end, this indirectly generates jobs for people with visual, auditory, physical or intellectual disabilities. There are currently some thirty thousand people working in the Ilunion group.”

Referring to the sphere of terminology used in Spain, Agustín Matía, General Manager of Down España says, “One of the problems we have is education, and that is because the inclusive concept is not well understood here. We’re using a concept

that comes from English -“inclusive”- which is a translation of the Latin-based word ‘*inclusivo*’. It is understood better if we use the Latin-based term than talk about ‘inclusive’ organizations and companies. The ‘*inclusivo*’ model implies that companies are very open, incorporate the diversity of society itself, and think more about people. The more organizations adopt a model of openness to the environment, the easier it is to generate this culture of change. For this reason, **the objective is for the organization to change its model towards an open organizational culture, with a capacity for listening, which is transparent, coherent with society, committed and responsible.**”

He continues: “Inclusive companies are those that transfer the concepts of participation and dialogue from the outset and the ones normally more open to understanding diversity. They are more likely to have express commitments as a social option to the big problems we face, such as disability.”

Another issue that the General Manager of Down España considers key for inclusive companies is the challenge posed by integrating the younger generation into the labor market, who, he says, “come late to the labor market, late to the emancipation process”. He predicts that they will work for little more than fifteen years and that there is a danger they will find themselves on the streets at fifty, even if the retirement age by that time will be seventy. He recalls Servan-Schreiber’s *American Challenge*, an economic analysis book about the 1950s and ‘60s that describes how the post-war and the technological revolution of the century influenced the economy. **“Companies that opt for the open model and inclusion are notable throughout the process, not only when recruiting people; rather it’s a cultural process.** It’s a process that nourishes the company’s own project. This is what characterizes the difficulties of inclusive dynamics. **Inclusive processes are processes of cultural change for the entire organization to make them truly include all human diversity: race, gender, age, disability, etc.** The problem is that to make this adaptation you have to change the whole concept of the company because **the real challenge in disability is not employment but education not being committed to inclusion.**”

According to Javier Blázquez, “The word change is fundamental. The problem is fear of change and adaptation”. He stresses that although sensitivity is the seed, training is needed to address people’s ignorance regarding what is happening and how to act when hiring a person with a disability.

By way of example, he explains that the ONCE Foundation conducts an awareness-raising campaign that usually coincides with the Christmas period. One of the ads describes a situation where the head of the accounting department has hired a special colleague, a blind person. To announce this to all employees, he prepares an e-mail in which he notifies everyone that he imagines the blind person will need to be helped in even the most basic matters, that he will probably be shy and have difficulty communicating, and that they will all need to be patient and hope that he does not take long to adapt to the new job. While he is writing the e-mail we see the blind person enter the company, take the elevator, go up, go back down, go for a coffee with a colleague, sit in front of his computer and start writing with his screen reader. Suddenly, the accountant realizes the situation, deletes the e-mail and simply writes, “Today a new colleague is joining us, let’s all welcome Juan”. According to the Technical Coordinator of International Projects for the ONCE Foundation, the only way to overcome this fear is to eradicate it through knowledge, training and awareness.

Continuing the theme of prejudices, Mohamed El Amrani, project coordinator at the Suara cooperative, describes three key elements to counter them. On the one hand, the education system must educate children about inclusion. The second aspect he highlights is a lack of leadership. And finally, he emphasizes the role of the media and how they can help raise awareness and influence society.

The General Manager of Down España warns that one of the problems of educating about inclusion or diversity is “relating disability to a simple optimistic discourse, in the style of the United Nations when it presented its objectives for the millennium. These kinds of discourses sound like pleasant music that no one in their right mind can say no to. But the difficulty lies in modern societies being different, complex, and full of inputs and contradictions. **In the area of diversity, one element when building an inclusive society is for society to accept the challenges that lie**

ahead with clarity and awareness. Therefore, disability should not be adorned with terms related to eliminating the difficulties, problems or complications inherent in it, that's a mistake. We must accept the reality of disability and describe it in all its complexity. This is why language is decisive as an element of change but can also be counterproductive as an element that blurs reality.”

According to Carmen Echazarreta of the University of Girona, “When we talk about education we must base it on two axes. On the one hand, it is essential to use training to break prejudices and stereotypes, which are normally built on negative aspects; it is not about showing pity, since strategies, procedures and actions will then be too protectionist and often limiting the possibilities. And on the other hand, **it is about being aware of who everyone really is and their diverse capacities, taking inspiration from Gardner's multiple intelligence theory.**”

The Technical Coordinator of International Projects for the ONCE Foundation, Javier Blázquez, relates the above to the fact that it demonstrates how **these different capacities exist and can be used and promoted for the purposes of employment.** According to Blázquez, different studies conclude that deaf people perform better than people who hear well in very noisy environments, since this continuous noise affects the way people work in manufacturing and machinery environments. “**Studies show that there are a number of disabilities that become capacities when doing certain jobs. For example, when performing repetitive and monotonous tasks, people with intellectual disabilities are able to work for hours without there being a loss of production.**”

Continuing with inclusive companies, Agustín Matía states that **the Business project's aim of encouraging companies to have values has consequences in terms of rebalancing or changing the actions of these organizations. Therefore, under the surface it involves generating organizational change.**

To analyze the definition in more detail, Albert Costa of the University of Girona adds three concepts related to inclusive companies. First, he says that although we usually focus on the workers in an organization, **it is important to also take into account customers and suppliers and consider to what extent the**

organization respects them and considers establishing fair conditions and prices on both sides. Second, he focuses on the **democratization of communication thanks to the Internet and social networks**, which guarantee that customers of companies are informed about competitors' prices and conditions, while at the same time allowing them to report or rate certain business practices. And third, he talks about the **importance of defining the company's values through a participatory and open process that workers, customers and suppliers are all involved in and facilitates their alignment with the mission and vision of the company.**

This concludes the first section, in which one of the most recurrent key ideas that generates consensus is to define the inclusive company as open: which means having the capacity to listen, being transparent, in coherence with society, committed and responsible.

4.5.3. What role do work teams have?

Team management. Is the basic idea that the management of a company based on values is more collective than individual? What dynamics should these teams have?

In respect of this, Mohamed El Amrani, project coordinator at Suara Cooperativa, says, **“Knowing what value each worker brings to the company is key to managing a team well; knowledge management is essential, as well as fair compensation for workers.”**

For his part, Javier Blázquez, Technical Coordinator of International Projects for the ONCE Foundation, believes that **“companies must move from an absolute pyramidal hierarchical, military-style model, from top to bottom, to a much more dynamic style of team management that creates these working groups”**. He gives the example of leadership by projects, in which the most competent person with the most specific knowledge of each project is the one who leads it. He also proposes a more collaborative model, comprising teams based on

flexible structures, in which roles are exchanged according to each project or service, and which encourage continuous updating and recycling.

Continuing with the theme of team management, the representative of La Fageda states that “the pyramidal hierarchy is coming to an end. We are talking increasingly about collaborative teams, in which each member contributes all their strengths to the group. At the individual level, if each professional has internalized the values, mission and vision of the organization, the relationship with their work environment is hugely facilitated and it becomes easy to add more elements.” She believes that it is important for different teams to empathize with one another in an organization. At La Fageda, for example, she argues that the team in charge of production and the one in charge of welfare need to work in coordination with one another, as they need to consider issues such as whether it is more important to buy a new machine for yogurt production or a van to transport the disabled workers home.

For his part, in relation to work teams and their management the project coordinator at Suara Cooperativa states that it is important to move from the **ego to the echo, to move from an egocentric part of team management to a more collaborative ecosystem, teams driven by values.**

The General Manager of Down España states that “**for a work team dynamic to reflect its values it must be open, focused on innovation, transparent by conviction, focused on interaction with its suppliers, customers and fans and very socially involved**”. He reflects on the idea that society usually preconceives company management based on values as being more collective than individual, despite the classical and neoclassical business management discourse throughout this century, as well as discourse regarding entrepreneurial talent and the successful entrepreneur tending to focus on the individual, citing the case of Steve Jobs, who appears omnipresent and whose individual talent is always highlighted. He therefore shows that the values projected onto one of the most modern and successful companies are related to the individual.

For his part, Mr. Javier Blázquez, Technical Coordinator of International Projects for the ONCE Foundation, contrasts the idea that Steve Jobs can be seen as a pyramidal

leader or as a promoter. **He believes that each individual team must have a facilitator who inspires, legitimizes, stimulates and promotes personal development.**

On this point he describes **Scrum, a tool that facilitates agile team management.** The way a scrum advances in rugby was the inspiration for the tool's founders, Nonaka and Takeuchi, to call an agile way of working, typical of technological companies such as Honda, Fuji-Xerox and Canon. Scrum introduces a process in which a set of good practices is periodically applied to collaborative work as a team, subdividing any project into tasks. The entire team estimates the time they think it will take to complete the task. The time allocated to each specific task is then the average of the times given by the whole team. The Scrum method allows workers to get involved in and commit themselves to a team.

Another element that helps team management, according to Esther Carreras, External Relations manager for the Cooperative "La Fageda", is the organization managing its **internal communication** effectively, since a key factor in motivating workers is to keep them informed about everything the organization does. **It is key that the organization cares about the welfare of its teams and promotes medical and health care to ensure hygiene and safety at work.**

For his part, Carles Serra, Assistant Rector for Social Commitment at the University of Girona, adds a key factor in team management, which is **educating in values:** "Companies have to imbue their values in their workers. Democratic and participatory processes that educate in values have to be worked on. When we speak of deliberative democracy, it means dialoguing, giving reasons, building, which workers usually respond quite reasonably to. Sometimes we equate democracy with everyone's opinion and we would probably agree that an informed opinion is better than one that is not. If you work using debate and deliberation, informed opinion gradually imposes itself and the whole organization moves forward". **He also points out the need to reconcile work and family life through the employment of new models and environments such as teleworking.**

With regard to the idea of educating in values, Agustín Matía, General Manager of Down España, says that the collective configuration of values is important for the

organization itself: “The more participative a process is, the more democratic the education system, the more work is done learning in teams. When more inclusive dynamics are generated, these are not neutral, they have an underlying axiological basis that is collective, participatory, and community-based, which can sometimes partly explain reasons for their rejection. What you are looking for is to change the mental schema, the perceptions of the workers that are going to form part of those teams and will transfer it within an organization, in a company. It’s a collective process. **No sustainable organization can be based only on the ideas of one person. Organizations are currently very dynamic and changing. The pace of interaction is so fast that if they are not collective processes they are not sustainable.** A company that is socially connected with its workers, customers and opinion leaders will constantly change as a result of these interactions, which involves loss of the classic concept of control.”

To conclude this section, Mohamed El Amrani’s opinion on the values that promote team management are as follows: “When a company wants to transmit values, it transfers knowledge. When it does this, it is important to bear in mind that there are two types of knowledge: codified, which I can transmit through “read this” and “the company is this”, and tacit knowledge, based on experience, ideology, value; transmitting the latter is more complicated and becomes one of the challenges for companies.”

We conclude the second section with some key ideas for defining the inclusive company in more detail. These are: **Leadership that inspires, legitimizes and stimulates; work in teams driven by values; remunerating its workers fairly; fostering continuous updating and recycling; promoting professional development and caring about the well-being of its teams; promoting medical and health care to ensure hygiene and safety at work; and promoting the reconciliation of work and family life as well as teleworking.**

4.5.4. How should social responsibility be applied to make it more than just a strategy?

Corporate social responsibility (CSR). Social responsibility is fashionable right now, because it is strategic for many companies, but how should social responsibility be applied to make it more than just a strategy?

Esther Carreras of “La Fageda” begins this section, stating that **socially responsible companies have CSR as a principle, integrated in their founding principles, not as a separate department.** And socially responsible actions emerge from all departments as a consequence. **They treat their workers, customers and suppliers fairly.** Although having a separate department can be a good starting point to internalize what CSR entails and means, in the end it has to be integrated within the very pores of the company. When a multinational contributes money to an NGO, it can be a simple “make-up” operation, whereas true social projects are already socially responsible from their conception.

In the same vein, Javier Blázquez states that CSR has to be a transversal axis of the company and not the last little tab at the bottom of the company website. **A key factor is that companies work on credible aspects of CSR.** He gives the example that many claim to use disability in their strategies and this is not always true.

To conclude the section, Agustín Matía comments that there is increasing evidence of social pressure being at the heart of companies carrying out social actions. This leads us to four ideas. First, a 2016 scientific study concludes that **customers expect CSR to be incorporated within the different processes of manufacturing and selling products and in the rendering of services,** and not just in an isolated way to execute actions with a social dimension.

Second, **he criticizes the fact that companies implement social actions. He argues that companies can choose, decide, collaborate and coordinate the implementing of actions with different actors from the third sector, who operate and specialize in the social field.** The mutual understanding between the company and the organization can lead to **the action being strategic, relevant and fundamental.**

Third, **he criticizes companies applying CSR according to the manuals produced by North American universities**, where the reality is significantly different, since CSR has been in place and evolving there for over fifteen years. **It is important that CSR is carried out in line with the relations existing in each community.**

Finally, in fourth place, he states that when companies are clear on their values, they are integrated and communicated without the need to sell them. If CSR is not integrated into the structure of the company, it will be just another layer, like impact and quality systems, along the lines of that noted by Esther Carreras and Javier Blázquez.

We conclude this third section with some of the ideas that have been highlighted: **the socially responsible company has CSR integrated within its founding principles; it treats its workers, customers and suppliers fairly; and it has strong links with the community, encouraging volunteering, making donations, etc.**

4.5.5. Which display features of responsible marketing?

Responsible marketing. Thinking in terms of marketing actions, which display features of responsible marketing?

Thanks to new technologies, companies' customers, workers and suppliers have ample opportunities to easily create and publish content and leave their testimony about their experiences. In the first quarter of 2017, Facebook had almost 1.9 billion active users, while in a single second 3,600 photos were shared on Instagram and 100,000 tweets posted on Twitter (Borgatti, Everett, & Johnson, 2018).

This new reality generates the need for organizations to manage opinions. Citizen journalism represents a fifth power that allows a democratic and civic citizen force to oppose the new dominant coalition of media groups

In this new communicative environment, Moreno (2008) concludes that **responsible marketing aims to satisfy the rational, weighted and proportional needs of consumers via the manufacture and marketing of**

products and services, for which it obtains a reasonable and fair price as compensation and aspires to obtain sufficient profit to continue contributing to social development and ensure the licit compensation of those who risk their capital and dedicate their work to it.

Esther Carreras, External Relations manager of the “La Fageda” cooperative, sets the ball rolling by explaining that in their case: “We manufacture yogurts for the Catalan market. With the profits we obtain from sales, we reinvest and guarantee the durability of the project. Our competitors are large multinationals such as Danone and Nestlé, unparalleled with regard to budget. At “La Fageda”, **we do not have the money to advertise in conventional media such as radio, press or television, but we have found a very powerful marketing tool related to transparency.** “La Fageda” is located in a privileged environment in the middle of a protected Natural Park, and for 15 years we have been receiving visits at our facilities, until we finally set up a visitor service. **Each year, more than 40,000 people come on guided and organized visits.** Schools, universities, organizations, and families at the weekends. Through the visits they see how the yogurts and jams are prepared: sensorial marketing throughout the visit. We never ask them to buy the product because of who we are. On the packaging we invite you to visit our facilities and not to buy from us just because we are a social project. We want to sell because of the quality of our products. Most people who visit us come because of word of mouth. Because of our size we cannot sponsor anyone in economic terms, but we do contribute products to activities related to blood donation, excursions, marathons, etc. Quality is our law, we produce about 60 million yogurts a year.”

Javier Blázquez, Technical Coordinator of International Projects for the ONCE Foundation, adds his opinion on the suitability of the strategy adopted by “La Fageda”: “On the one hand, **it manages and controls its word-of-mouth advertising**, an essential element in marketing, and on the other **it focuses actions directly on its target public**”. From ONCE Foundation was developed through Ilunion Group: “In our hotels consumers find comfort and quality, they are very well adapted and have a good design. In a normal hotel when you are given an adapted room you think you are in a hospital. At an Ilunion hotel, you do not even notice. **To**

design good marketing strategies, you must first have a good product and be very committed to your company. It's important to create an environment that respects and promotes equality and diversity and rejects all forms of discrimination.”

He explains one of the most successful advertising campaigns run by the ONCE Foundation under the title “Prepared”, in which three well-known figures worked with a disability for a whole day: “The chef Ferran Adrià wore earbuds with music playing to prevent him from hearing, the president of Coca-Cola Iberia, Marcos de Quinto, worked blindfolded, and the president of Microsoft Ibérica, Maria Garaña, sat in a wheelchair all day. Each of them worked for a day with a disability. It was a report aimed at allowing them to see how it felt having the disability and to realize the difficulties it involved in the workplace, as well as improvements that they would have to make in order to contribute and hire more people with disabilities.

Companies must guarantee universal accessibility.”

Finally, he explains that in the city of Venice they organized a marathon and set up provisional wooden ramps over all the canals. After the race, visitors to Venice demanded that the ramps not be removed.

Carles Serra, Assistant Rector for Social Commitment at the University of Girona, recounts from his experience: **“In our society, charity as such is frowned upon. When people go shopping, they do not want it to be for charity. First we have to have a good product that works; marketing has to be responsible and subtle.”**

Agustín Matía states the following: **“We ask companies to be responsible for the entire process they ultimately carry out to produce a product or service.** The ideal goal is for the company to use marketing in relation to that, as Ausonia does at P&G, which collaborates with research against breast cancer. When consumers perceive dissonances they become increasingly critical; this is what happened with the tobacco companies that tried to cover up the carcinogenic consequences of smoking for years.”

In this fourth section, we have highlighted a couple of key ideas to be able to implement responsible marketing, such as the company **creating an environment**

that respects and promotes equality and diversity and rejects all forms of discrimination and guaranteeing universal accessibility.

4.6. Forum for reflection and debate: sustainable companies, tackling climate change

The University of Girona promoted a forum for reflection on sustainability and companies. The debate took place on October 18, 2016, and provided a meeting place for reflection on the Vusiness project.

According to Echazarreta and Costa (2018c): “Climate change represents a pressing threat with potentially irreversible effects. In the current economic environment, globalization significantly increases the unbalanced use of non-renewable finite energy resources”.

The Oficina Española de Cambio Climático (2006) has stated that: “At present, there is a broad scientific consensus that the phenomenon of climate change is an unequivocal fact, caused mainly by the actions of man”.

The studies conducted by Ordóñez and Masera (2001) similarly concluded that: “Human activities, such as the use of fossil fuels for producing energy and the processes derived from changes in land and forest use, are generating large emissions of greenhouse gases (GHG) such as carbon dioxide (CO₂), carbon monoxide (CO), chlorofluorocarbons (CFC's), nitrogen oxides (NO_x) and methane (CH₄), mainly, CO₂ being one of the most important GHGs due to the large amounts in which it is issued.

Analyzing the origins of climate change, Moscoso (2018) states that during the 18th century, the Industrial Revolution was characterized by large-scale mechanical production thanks to the use of steam engines. This factor favored rapid growth and economic development but also meant the beginning of climatic imbalances generated by the massive use of energy resources such as coal.

In line with these conclusions, Acquatella (2008) argues that: “The most significant greenhouse gases generated by industry over the last century and a half are carbon dioxide, methane and nitrous oxide, the first being the most important, with an

increase from a pre-industrial age value of 280 ppm to 379 ppm in 2005, surpassing its natural behavior over the last 650,000 years.” The authors propose technical, political, economic and scientific strategies to reduce and stabilize the increase in greenhouse gas emissions: drafting and approval of a specific legal framework for the control and reduction of atmospheric emissions, application of incentives and environmental taxes on companies, and the use of green technologies and renewable energies.

With regard to the effects of climate change in recent decades, Stocker et al. (2013) have the following to say: “Since the 1950s, many of the observed changes have not had precedents in recent millennia. The atmosphere and the ocean have warmed up, snow and ice volumes have decreased, sea levels have risen and greenhouse gas concentrations have increased.” This author concludes that climate change generates adverse effects, the impacts of which can jeopardize the development of countries and the integrity of the world’s ecosystem. Numerous plant and animal species affected by pollution and habitat loss will not survive in the coming years. Scientific analyses predict that high temperatures, heat waves and heavy rainfall will continue to be more frequent in the future, which could be disastrous for the environment.

When it comes to recommendations, Bрева (2006) categorically and urgently states that: “As global geopolitics evolves, consuming less oil and more renewable energy is an urgent need for Spain, it must be an objective and a State policy. It is a unique opportunity because all the conditions are in place to achieve it and we are world leaders in renewable technologies, but it is necessary and urgent to transfer a different energy culture to society.”

Regarding the reduction of consumption, Linares Llamas (2009) stated the following: “Energy saving and efficiency are a fundamental element for improving the environment, especially in regard to global warming.”

With regard to renewable energies, alternatives to conventional ones based on oil, coal and natural gas, Boyle (2004) highlights the following energy alternatives: solar, thermal, photovoltaic, bioenergy, hydraulic, tidal, wind, wave and geothermal.

Another key aspect when dealing with climate change is influencing mobility. Miralles-Guasch (2002) stated that: “In recent decades, profound social, economic and technological changes have led to a new model of urban mobility.” This model, which tends to be implemented globally, is characterized by an increase in average distances traveled, changes in motives for travel and changes in the location of productive activities.”

Estevan and Sanz (1996) stated that cities were designed, reformed and built to satisfy above all the needs of motorized vehicles and, in particular, the automobile, which has generated consequences such as congestion, pollution and noise. These authors emphasized the need for new models of urban planning and mobility, which result in an ecological reconversion of transport.

In the same line, we can highlight research conducted by (Mollinedo, 2014), which analyzed the environmental and social unsustainability of the current urban mobility model, together with negative externalities caused by transport. This author presented some of the principles that should govern a sustainable urban mobility model to improve the quality of life and address climate change, while highlighting the need for an adequate public transport network. Technological advances are highlighted, especially in relation to the storage capacity of batteries in electric vehicles such as bicycles, motorcycles and cars. And finally, modes of collaborative economy are also mentioned, such as the new forms of shared transportation, carsharing, rentals by the day or hour and applications that offer a transportation service based on the user’s geolocation, such as Uber and Cabify, which are causing great controversy in the traditional taxi sector.

According to Echazarreta and Costa (2018c) “Sustainable companies are based on two fundamental principles, which are the environment (renewable energy resources, sustainable development, preservation of the environment, responsible energy consumption, minimizing emissions, eco-efficiency, the circular economy) and mobility (collective public transport, electric vehicles, clean and non-motorized mobility systems).”

4.6.1. The debate

The main aim of the Reflection Forums is for professionals in the business sector to debate and define relevant and significant indicators that facilitate the identification, differentiation and promotion of sustainable companies. The reflection and debate generated in this forum of experts serves to generate qualitative research.

In terms of **sustainability**, according to the conclusions of research conducted by (Echazarreta & Costa, 2018c), the following assertions can be made:

- Gaps exist in information and research related to climate change.
- The instruments currently used to mitigate its effects are insufficient and inadequate.
- Better governance indexes and a transnational strategy are urgently needed.
- There is a need for sustainable companies that combine business development with the environment and protection of the planet.

According to Eguiguren (2011), the mission of a sustainable company is based on ideals and values committed to the planet, contributing to the common good and at the same time generating a volume of profit similar to other companies.

According to the United Nations Development Program, sustainable companies focus their mission on promoting the following areas: a) Clean water and sanitation; b) Affordable and non-polluting energy; c) Sustainable cities and communities; d) Responsible production and consumption; e) Action for the climate; f) Underwater life; and g) Life of terrestrial ecosystems.

The debate on sustainability in companies was organized around five descriptors that according to (Echazarreta & Costa, 2018c) stand out in the studies mentioned previously: sustainable companies, climate change, the environment, mobility and corporate social responsibility.

4.6.2. What characteristics identify a sustainable company?

Sustainable companies. What is meant by sustainability? Is there a lack of education on the subject?

Joan Barfull, Technical Manager of the SME Girona branch and responsible for sustainability kicked off the debate: **“Sustainability is a cross-cutting issue that must be addressed at the environmental, social and economic levels.** A key indicator is that companies operate causing zero or negative impact on the environment. Although the company is founded with the aim of making money, there is increasing awareness that **it must contribute to improving the environment in which it operates, contributing positive values to society.**

Josep Serra, viticulturist and entrepreneur at La Vinyeta winery then added that sustainable companies **are managed with a short and a long-term vision, internalizing the impacts they have on their environment, making the defense of their interests compatible with solidarity in their environment and thinking of future generations.**

Continuing the discussion, Pere Macias, President of the Circle of Infrastructures Foundation and Professor at the Polytechnic University of Catalonia stated the following: “In a similar way, in the world of infrastructures, some forty years ago in the more advanced countries they started to evaluate the environmental impact infrastructures had on the territory. This area has now been overtaken by strategic environmental planning. In the area of sustainability in companies, **beyond mitigating impacts, the key lies in sustainable business strategies.** For example, if we produce diesel engines, even if we put a lid on it, the mistake lies in manufacturing this type of engine in the first place.” He then underlined the importance of maintaining an industrial culture characterized by capitalizing human teams trained to improve their production chain and make it more sustainable and not reduce costs thinking only of the short term.

Next, Sara Pizzinato, responsible for energy and climate change companies at Greenpeace Spain, defined **sustainable companies as having zero or positive impact, taking into account the entire process, analyzing from the outset, for example, how they obtain and transport raw material, until the final consumption of the product.** “Dangerous activities for the environment should be limited by legislation. Only sustainable activities should be allowed.” She went on to

explain that the problem lies in the fact that voluntary recommendations are not followed by companies. For example, the European association of car manufacturers has been applying pressure for the last twenty years to make compliance with the objectives set out by European regulations regarding CO₂ emissions in cars voluntary.

She noted that: **“The fundamental elements of sustainability are measurability and transparency”** and gave as an example of the difficulties her organization faces that of obtaining electricity consumption data from large data centers belonging to companies like Facebook, Google or Amazon, which consume large amounts of energy.

Imma Pérez, Director of Nottopic - CSR, communication and networks, continued with the theme, stating that sustainability lies in the company operating without harming the environment or society. It is important to differentiate sustainable strategy from **“greenwashing”, which consists in companies presenting their services and products as being respectful of the environment even when this is not true.** She argued that **sustainability brings companies profitability and that other key aspects of sustainability are transparency and ethics.**

When companies incorporate sustainable development into their business model, they have workers who are much more committed, innovative and talented, and are more accepted by the community as a whole. **Sustainable companies are also collaborative companies, even with their competitors.**

In line with this, Sara Pizzinato said that **“Sustainable companies use their good practices, their desire to go beyond what is legally binding, to make others do the same.** They use their representativeness and influence to promote a sustainable market and a system based on renewable energies that can be useful for all companies.”

For his part, Joan Barfull added that in Spain it is important to differentiate the big energy lobbies that have enormous influence, even in the drafting of regulations, from SMEs, small and medium-sized enterprises that have enormous potential to minimize and compensate all the negative impacts they can have. Despite the **system of sanctions**, it is necessary to take into account the possibilities offered by

environmental certificates, which encourage truly sustainable companies. In this environment, **the circular economy means a change of business model, as it seeks to enhance and extend the life cycle of products, materials and energy resources and reduce waste generation. Values increasingly have more market value.**

Accordingly, Josep Serra explained that what is desirable is for “**Sustainability to be part of company’s competitive advantage**, add value and generate differentiation. Differentiation is valued and perceived by consumers. Good products are increasing in value and people are willing to pay a little more for them.” As a counterargument, Pere Macias noted that becoming sustainable is more complicated in some sectors than others. He gave the example of the country’s meat industry, where there is a lot of competition and it is difficult to improve quality in the process between pig-breeding and meat exportation.

This is the end of the first section, in which the following **characteristics of sustainable companies** have been highlighted: a) Transparent; b) Ethical; c) Measurable; d) Focused on the environmental, social and economic level; e) Contributors to improving the environment in which they operate; f) With a short and long-term vision, internalizing the impacts they have on their environment and thinking about future generations; g) Managed by means of sustainable business strategies; h) Do not do greenwashing; i) Collaborative, even with their competitors; j) Sustainability arises out of competitive advantage.

4.6.3. How can companies help mitigate the consequences of this change?

Climate change. Global warming is now a fact that is having, and will have more, serious consequences for the climate, atmosphere and biodiversity. How can they reverse the situation?

This second section began with Sara Pizzinato stating that: “Climate change requires a State strategy, since an urgent reduction of emissions of between

7% and 8% per year is needed in order to prevent global warming and try to reduce the average temperature of the planet by 1.5 degrees.” It is the State that must have a strategy and mark society’s priorities with regard to companies: **“States must regulate taxation on certain products with greater rigor:** airlines should pay taxes on hydrocarbons, diesel should have a higher taxation rate than gasoline and regulations should be provided to make charging points available for electric vehicles.”

She complemented the idea by stating that citizens must internalize the social, environmental and economic costs of activities that pollute. **Sustainability has to be a fundamental, basic and obligatory value for any product**, while excellence or quality can also make a difference.

In the same line, Joan Barfull said that **use should be made of the Mediterranean climate to promote renewable energies.** He believes that the government should facilitate the production and consumption of renewable energies, whereas the decree on self-consumption presents an opposite scenario, since it discourages companies from considering investments in this respect.

According to Pere Macias, one of the most important means of intervention available to States is **taxation**. Thanks to taxes, the State redistributes according to political priorities. The principle of **tax disaffection** has been applied since the 19th century, which involves taxes not being allocated to the same place they were collected from, but redistributed according to political priorities. It brought an end to the so-called *portazgo*, a medieval tax on the transit of people, goods or animals. Macias believes that: **“The tax disencumbrance model is in crisis because we need to internalize the social and environmental costs clearly.** Only taxes such as water are invested from the first to the last penny in improving the water cycle. Citizens understand that they pay a lot for water because it has to come back clean. In cases such as air, the opposite happens, with diesel, which is more polluting, being cheaper. Transport also needs to internalize costs, promoting payment for use: those who travel have to pay all the costs of their movement, from the physical costs of fixing the road to the environmental costs of the pollution generated by their

movement. Education is required for citizens to understand and accept this, since **we are talking about transforming taxes, not raising or lowering them.**”

Imma Pérez recalled the idea described in the first section, explaining that the circular economy is expanding and that **the collaborative economy is also getting stronger**. One process that is slower than consumers themselves is the definition of a legal framework for collaborative activities. A change of mentality is required to this end. For example, given the disadvantage of owning a vehicle there are more efficient and cheaper alternatives, such as the use of public transport or car sharing.

Sara Pizzinato continued on the theme of how to tackle climate change, establishing three types of companies.

“The first type of company is the one that has energy generation as its core or main business; these are the major emitters of greenhouse gases, including energy companies, transport companies and poultry farming. As a country, we cannot continue to have thermal power plants or coal mines, or continue to burn fossil fuel if we want to prevent climate change. If our priority is change, then certain sectors have to be transformed 100%.” It should also be borne in mind that: “Some sectors are changing radically; for example, the biggest revolution in the field of electric vehicles is being headed by the electric battery manufacturer Tesla, and not Volkswagen.”

The second type are companies that do not have such polluting effects in their core business, but use finite energies to provide their services. Here we should highlight companies that are revolutionizing the use of renewable energies; for example, several vineyards in La Rioja have incorporated windmills.

The third block is comprised of companies that set out a long-term strategy and visualize the necessary services in a renewable, efficient and intelligent system: car-sharing services - hourly car rental service, carpooling - shared private transport system, demand management, ecological food and its distribution, etc.

Finally, she emphasized that the government has the responsibility to make the reduction of gas emissions compatible with a healthy economy.

In this second section, different actions were presented that could mitigate climate change: a) A State strategy to reduce emissions by between 7% and 8% per year and reduce the average temperature on the planet by 1.5 degrees; b) Strict fiscal regulation for finite energies; c) Sustainability conceived as a fundamental, basic and obligatory value for any product; d) The Mediterranean climate being favorable in promoting renewable energies; e) Internalization of social and environmental costs; f) Emergence of the collaborative economy; g) Transformation of the energy, transport and poultry sectors as major emitters of GHGs; h) Control of services provided by companies that use finite energy; i) Promotion of long-term sustainable strategies.

4.6.4. What factors do you consider key in a company to preserve the environment?

Environment. What measures should be taken?

Joan Barfull started the debate by stating that companies act appropriately from an environmental point of view when **they minimize consumed resources and look for ways to reuse them.** He also stated: **“What the company produces must be easily recyclable or reusable. In addition, they have to make an effort to communicate it to their customers and consumers. Having environmental certifications such as ISO 14001 or the environmental quality label EMAS helps.”**

In a complementary sense, according to Barfull: **“The development and use of renewable energies at SME level in Spain is legislatively complicated.”**

He went on to say that: “Pollution is not free. Regulation always determines the control and penalty system. If there are repeated infractions, companies can even be closed down.” The latest regulations favor the **segregation and separate management of each type of waste.** He added that the good practices some companies implement should be encouraged in a positive way, **via positive taxation.**

Pere Macias highlighted two factors: **transport and travel**. He explained that companies can influence both, starting, for example, with workers' travel. In France, if you go to work by bicycle you have a higher salary and the company receives public subsidies. Some companies are organized to achieve the highest levels of sustainability even at the level of transportation.

He then argued that historically the use of the territory has consisted in segregating uses and that industrial estates have been separated from cities for this reason, although most operations do not currently require any special kind of segregation. Widely dispersed industrial estates force workers to travel, their geolocation hinders their mobility and the resulting organization of public transport is expensive and inefficient. This indirectly encourages the use of the private car.

Another relevant factor: **energy**. He explained that historically in Spain there has been much progress in **cogeneration** but that this model is partly in crisis. For Macias, another revolution is on the way: that of **storing energy**. Tesla and other manufacturers are applying the latest technological advances to optimize the capacity of batteries to such an extent that cities like New York are building energy storage facilities, which allows the city to operate more efficiently. One of the most revolutionary ways of storing energy is through the use, recycling and reuse of used vehicle batteries. Energy storage should also be considered for shared use on industrial estates.

Josep Serra introduced **teleworking** as an option that would avoid the environmental costs of transport, contaminants and large consumers of energy resources. He also introduced the concept of **the local market**, as a counterpoint to the corporate fashion of promoting import and export.

Imma Pérez spoke about **energy use**, highlighting **management by objectives**, teleworking and **flexible timetables** as factors that increase energy savings. There are now apps that report on traceability and environmental emissions by companies, which makes it easier for consumers to decide on their sustainable purchase.

She also noted the Unilever strategy of optimizing the transportation of merchandise by studying routes according to whether or not they require cold storage to emit less CO₂ and increase profits.

She also referred to Knorr, which has involved more than 350 farmers in Extremadura in improving its production processes, increasing the amount produced, decreasing water consumption by 20% and making its products more sustainable; the measure has even brought back the local biodiversity.

She explained that in 2008 she had the opportunity to participate in a project that **linked equal opportunities to productivity**. The aim was for workers to work more efficiently based on their satisfaction. It involved 32 companies simultaneously and had a direct impact on some 3,000 people. More women than men work in the handling plants of many companies in the Vallés area. Due to the constraints of raising children and a lack of public transport, there were high absenteeism rates that ended in penalties and sackings. On the one hand, the situation had a strong social impact for the families that were unemployed and, in turn, the company lost productivity due to absenteeism and the need to re-incorporate new workers and train them. In the municipalities of Rubí and Barberà del Vallès, the production chain schedules were scaled, making them compatible with those of public bus services. The measures increased loyalty, improved the working environment and increased productivity.

Another aspect highlighted by Pérez is the need to promote guided responsible activism among citizens. **Raising awareness through educational actions** is key to this end.

According to Sara Pizzinato, it is crucial that companies have a **sustainable strategy**. One of the aspects that stands out as fundamental is location, as Macias mentioned, to guarantee **a sustainable mobility plan**.

Regarding the idea that companies collaborate to optimize costs, she explained the case of Google, which agreed with Greenpeace to become 100% renewable. In the Netherlands, in collaboration with Siemens and another company, Google has signed a 25-year contract at a guaranteed price with a group of farmers and ranchers to invest in and receive renewable energy.

Also, with regard to **managing energy demand**, there are several options even if the company does not have battery storage capacity. Certain production processes can adapt their consumption to increase activity at off-peak times or slow down activity when demand increases.

Finally, she highlighted **financing cooperatives**, which support projects that have a positive effect on the environment: enhancing photovoltaic panels, purchasing sustainable wood, energy reform in a store, etc.

Measurable and objectifiable criteria are required, since money is not neutral. It is important to know whether a bank invests in coal or in weapons.

She also criticized the role of the State in favoring large electricity companies that do not pay the costs of CO₂ emissions as stipulated by the Kyoto Protocol. Even though they are the ones that make the most use of carbon and gas plants, it is always citizens who end up footing the bill.

Labeling products to inform the consumer is recommended. It would be positive if bad practices could be labeled: “This product has high emissions” or “This product is toxic”.

Dr. Carmen Echazarreta, Assistant Professor of Audiovisual communication and advertising and Director of the Arpa Research Group, agreed with regard to labels and added: “I think they are very important in reinforcing the decisions of committed consumers, because they affect the conscience. This type of process leads the consumer to pay a little more if necessary for a sustainable product and at the same time to penalize certain companies, such as some in the textile sector, which have transnationalized their production processes in a perverse way.”

In certain cases, the multinationals control the agenda setting of some media in such a way that they manage to hide bad practices with respect to sustainability, meaning that information is lacking.

This third block highlighted that the key factors in a company when it comes to preserving the environment are: **a) minimizing consumed resources and looking for ways to reuse them; b) manufacturing easily recyclable or reusable products; c) having environmental certifications or environmental quality stamps; d) segregating and managing each type of waste separately;**

e) positive taxation; f) transport, travel and sustainable mobility; g) energy storage; h) energy demand management; i) labeling; j) strategic management of the territory: location of industrial estates, empowering the local market; k) equal opportunities, teleworking and flexible hours; i) communicating sustainable processes to customers and consumers; and m) raising awareness through educational actions.

4.6.5. Thinking in terms of actions aimed at promoting mobility, which would generate the most impact?

Mobility. Which can be fostered via business initiatives? (collective public transport, electric vehicles, clean and non-motorized mobility systems)

Pere Macias began this section: “I like to define mobility as a historical process. When the railroads first appeared, people discovered that they could move collectively, comfortably, safely, with a certain speed, that they could move goods... Territories with a railroad were very different from those without one. It was the period of “We can move”. In the 20th century when when Henry Ford began to produce the Ford T on a massive scale, mobility changed. Anyone with a car said “I can move”. Society was transformed to the point that people went to live on housing estates, the American system, and not next to the railway station. Now we are in the “I need to move” phase. Faced with this situation, there are some aspects that are the responsibility of society, others the administration and others still, such as mobility or logistics, that fall on companies.

At present, there are battles going on such as the need to organize **efficient and affordable public transport systems**; technological advances such as **electric vehicles** can help; **energy storage** to promote mobility or **transport on demand**. It is important that everyone assumes their mobility in a wise way, one step beyond smart or intelligent. It is also worth noting the importance of convincing citizens about the use of sustainable means of transport like the bicycle.

The **administration has to take decisions** such as the development of a large linked-up network so that cyclists can access and park anywhere. “Those societies

that know how to build bridges between citizens, administrations and companies are going to advance the most. Sometimes you have to take unpleasant decisions, as the Norwegians and the mayor of Paris did when they banned the entry of diesel vehicles because of the high pollution rate and harmful effects on health.”

Imma Pérez stated that “It is important to note that society is increasingly becoming accustomed to **car sharing, using bicycles** and being a user of public transport. With regard to **public transport**, people would especially like to use the train to go to work, but cannot trust it because it is not always on time and the company penalizes them for being late. The administration must make an effort to improve public transport and businesses to promote flexible hours and teleworking.”

She also reflected on the fact that sustainability and social responsibility are related to innovation. In this country, “innovation lives in solitude. First people think you’re weird, and then they copy you”. Committing to **collaborative innovation** is key for the future. It only requires belief and overcoming resistance to change.

With regard to innovation, Pere Macias believes that there are **innovative ecosystems** in our country, such as the 22@ District in Barcelona, and that many entrepreneurs are committed to innovation. Although it is true that for some years there has been a certain ideological hegemony of seeking assurances and staying in the comfort zone; in this sense innovation involves risk.

Joan Barfull criticized the fact that there are companies that will not select candidates if they travel to work by train. He also said that **mobility plans** are only regulated for larger companies. Small and medium-sized companies only have them based on their own convictions.

Sara Pizzinato highlighted that the reality of daily life forces us into an irrational mobility. She also criticized the way in which **goods are transported**. There are large international agreements for the import and export of certain products that are grown or produced here.

If we analyze **greenhouse gas emissions** in the different economic sectors, **transport is the only sector where they are increasing in Europe**, all others are reducing their emissions. Within transport, **goods have a very important impact**,

but so does the **mobility** of people. Within this, private cars account for almost half of the emissions.

To reduce emissions, the number of kilometers goods and people travel should be reduced. **Mobility on demand**, public transport, bicycles, etc. also favor the reduction of emissions.

The second aspect is the **electrification of transport**, feasible for all types of transport and more complicated for aviation and international shipping. Currently in Europe there are 8 million electric bicycles and electric motorcycles. The electric car has autonomy limitations, it should probably be conceived as a mini bus for four people. In Spain, 30% of the train system is pending electrification and still depends on diesel locomotives.

A third aspect is **increasing the occupancy of all types of vehicles**: buses, trains, bicycles, motorcycles, cars, etc., although this does entail a change of mentality in the system, rethinking the ownership, service and use of vehicles.

A fourth element for reducing emissions is promoting **proximity between work and school**. It is estimated that 80% of movements by transport are captive.

Josep Serra highlighted the need to commit to a balance in the territory, criticizing the overpopulation of cities while everywhere else is underpopulated. He stated that “If people could live in villages in a deconcentrated way, they could access companies intelligently.”

Marc Casadellà, Director of Par3 Pitch & Putt Gualta, President of the Catalan Pitch and Putt Association and promoter of the *Burricleta*, an electric bicycle used in tourist activities, stated that the number one problem we have is **saving the planet**. Large doses of social awareness are required.

He explained that, as an industrial engineer, he has applied various measures to his Pitch and Putt course, which is located in a town of 300 inhabitants where he was born. He explained the difficulties that arose when he decided to buy the first electric lawn mower to be used in Spain from the United States. It only had 3 or 4 hours of autonomy, so he added a solar panel on the roof that fed an additional 5% energy and according to his calculations allowed him to save around 90% in consumption. And it did not generate noise pollution. At first he recalls that the biggest problem

was with the people who had to drive the machine, because they did not trust it. They also decided to install solar panels to feed the underfloor heating and not to install air conditioning on the premises because it is only used a few specific days each year.

In the fourth section, the following actions aimed at improving mobility were highlighted: **a) efficient and affordable public transport; b) electric vehicles; c) bicycle use; d) car sharing; e) transportation and mobility on demand; f) electrified transport; g) energy storage; h) improving freight transport; i) decision making by the administration; j) mobility plans; k) collaborative innovation and innovative ecosystems; l) increased occupancy of vehicles of all types; and m) proximity of work and school.**

4.6.6. how should social responsibility for the environment be applied to make it something more than a strategy?

Social responsibility. Corporate social responsibility (CSR) applied to climate change and the environment is in fashion, because it is strategic for many companies, but how should social responsibility for the environment be applied to make it something more than a strategy?

Joan Barfull began by explaining a project centered around SMEs and developed three years ago that aimed to diagnose how they addressed CSR in environmental, economic and social terms. The results indicated that in most cases companies were working on some of the areas of CSR **without the need for a quality stamp or certification. In all cases, they did so because it was practical and profitable.** They believed that CSR improved the working environment, communication and participation in the company. Initiatives were implemented such as vehicle sharing, timetable flexibility, etc. They also concluded that **in none of the cases were the measures communicated to improve their corporate image.**

Josep Serra thinks that we have to raise awareness among companies and individuals, because in these times of crisis many of them go in the opposite direction from sustainability.

Imma Pérez explained that **it is common misconception that CSR is for large companies and expensive**. It is important to draw up **a strategy linked to concrete actions and to measure it**. It is also worth noting that it generates profitability. Pérez explained that the concept of CSR is being redefined and updated with “Sustainable Development”. Another positive aspect of this type of measure is that: “When companies achieve a good working climate and good economic returns, **they attract talent**. In five years, the so-called generation Y, also known as the millennial generation, will occupy jobs and we have to attract good people and generate companies heading in the right direction that **make money but are sustainable and ethical**.”

Finally, she explained the concept of **intrapreneurship**, which consists in carrying out entrepreneurial activity in the heart of an organization that already exists. Thanks to this, innovative initiatives are implemented to improve the business model, which can be a source of hope and motivation for many people.

Pere Macias criticized the CSR practiced by some of the big corporations, which are merely greenwashing: websites, fantastical reports, etc. He related an anecdote that a petrochemical company in Tarragona had an accident and to alleviate the effects of it wanted to do something for society. The administration ordered them to put up large informative billboards to report their emissions, and they did not like the idea. They ended up making a magnificent book about the landscapes of Tarragona.

He believes that small businesses carry out other types of actions that have a real impact. It is important to **value and compensate the environment that allows you to make your products and services and consume them**.

Marc Casadellà added the idea of **proactivity** as an important element in promoting sustainable development. He explained that we sometimes talk about businesspeople and workers as if we were in the midst of the industrial revolution, even though concepts have changed radically: “Today you are one thing and tomorrow another. The difference is between those who believe that the future depends on them and those who believe that their future has to be resolved by someone else. Proactive and passive. On Earth, there are those who dare and those that do not.”

Finally, Sara Pizzinato added the aspect of **motivation**, which the company has to promote among its workers in order to favor a CSR-friendly environment.

She thinks that companies should guide their **CSR strategies in the core business as their main activity** - improving it, setting objectives, strategies, etc. “If what you’re doing is compensating, penance, then you’re just greenwashing.”

In this final section, the following key aspects of CSR have been highlighted: **a) CSR strategies aimed at the core business, the main activity; b) why they are practical and profitable; c) no need for a seal or certification; d) no need to communicate measures to improve the corporate image; e) they are not expensive; f) they are not only for large companies but for all; g) strategies linked to concrete and measurable actions; h) they attract talent; i) sustainable and ethical actions; j) intrapreneurship; k) proactivity; l) motivation, and the need to compensate the environment that allows companies to make their products and services and for them to be consumed.**

4.7. Forum for reflection and debate: Smart businesses, creating the future

The University of Girona promoted a reflection Forum on smart businesses that use technology to improve people’s quality of life.

The discussion Forum, held on 22 November, 2016, was a meeting place designed to reflect on the Vusiness project.

Mendizabal and Errasti (2006) asserted that globalization helps businesses relocate production, which universalizes outsourcing and offshoring with critical consequences in industrialized countries, directly affecting the production fabric and the social rights of workers, negatively and relevantly affecting their employment status.

In this vein, Echazarreta and Costa (2017a) state that: “The destructions of thousands of jobs, increasing job insecurity and unemployment constitute risk

factors for social exclusion and marginalization. In industrialized societies the victims tend to be less qualified workers.”

According to Merino, Somarriba, and Negro (2012) Spain reached an unemployment rate of 22% in 2012. The government has taken a path to promote economic recovery and face job destruction by creating jobs, with a focus on quantity, rather than job quality.

Secondly, another currently alarming factor is climate change, which represents a pressing threat with potentially irreversible effects. In the current economic climate, globalization significantly increases the unsustainable use of finite, non-renewable energy sources. There is a need for sustainable businesses that reconcile business development with protecting the planet and environment (Echazarreta & Costa, 2018c).

A third key factor that is beginning to make significant changes to the global economy, and specifically the job market is the 4.0 Industry. According to Ceballos (2016): “The confluence of technologies gives industry unimaginable opportunities, defining thus a new industrial model, based on digitalization. The effect of digitalization is felt in all areas of business, strategy, the offer of products and services, the business model, operations, and in organization and company culture. This change involves a new company model, and industrial profile, which must face this opportunity for reindustrialization.” The new model will probably result in the gradual disappearance of mass production as we know it, as the internet allows direct contact between consumer and producer, enabling product customization thanks to the automation brought about by technological advances.

According to Lasi, Fettke, Kemper, Feld, and Hoffmann (2014), the convergence of different technologies has the disruptive potential to transform businesses, sectors and markets. Furthermore, the fact that the latest technologies are affordable for the majority of businesses, regardless of their size and turnover, contributes to the democratization and digitalization of industry.

Lombardero (2015a) asserts that the fourth industrial revolution will involve the digitalization of 90% of jobs in industry and services. The combination of advances in digitalization and automation may involve opportunities for innovation, growth

and job creation. The resulting model may involve an opportunity to develop business models that require new occupations which help us end the recession.

Seghezzi (2016) asserts that with the new production model, workers will enter new occupations such as designing the production process, setting goals, and programming, supervising and maintaining machinery.

The web also enables the creation of a virtual market which brings about the collaborative economy, that is, the ability to access goods and services without intermediary companies (Todolí-Signes, 2017).

At the same time, according to Echazarreta and Costa (2016): “online society has developed alternative communication models, which act as loudspeakers for citizens. Thanks to the development of new means of citizen expression, communication, and collaboration such as social media, op-ed sites, citizen journalism and the collaborative economy, we contribute to the democratization of society and freedom of communication.”

In contrast, Goerlich (2016) claims that the automation of production, and digitalization of services entail a large negative impact on the job market, causing significant job destruction. In a scientific study by Frey and Osborne (2017), 702 occupations in the United States job market were carefully examined, with the aim of identifying which ones were at risk from digitalization. They conclude that in the next two decades, 47% of jobs are at high risk of disappearing as a consequence of technological advances and their application to industry and services.

Arntz et al. (2016) estimate an average job loss of 6 to 12% in the member states of the OECD, with the average around 9% in the next few years. In the same report they state that the impact on the configuration of job posts will be between 25 and 45%.

Torrent-Sellens (2017a) concludes by stating that each time there is a disruptive technological advance, there is genuine concern about jobs in society. Conclusive data from economic analyzes indicate that technology does not destroy jobs, rather it skews abilities, tasks, and skills, and shifts jobs, occupations, and people.

According to Echazarreta and Costa (2017b): “To overcome the shortcomings of the current economic system we need smart businesses, championed by leaders who promote the use of communication and information technology as a means to

improve citizens' quality of life. Ultimately, society needs businesses and consumers to act in the free market responsibly, ethically, justly, and with solidarity. They must make their economic growth compatible with the distribution of wealth.”

Eguiguren (2011), executive director of The Global Alliance for Banking on Values (GABV), came to the conclusion that the previous phenomena such as globalization, displacement, climate change and automation speed up the search for alternative economic models, which are capable of overcoming the shortcomings of the current capitalist model. We need businesses to act with corporate values worthy of a company culture that is savvy in its use of technology to improve quality of life, inclusive at a personal level and sustainable from an environmental point of view.

In view of these challenges, the Vusiness project promotes open, democratic, sustainable, inclusive businesses that make a smart use of technology, with the challenge of becoming a transferable model in the fields of research, education, entrepreneurship, and business.

4.7.1. The discussion

The main goal of the reflection forum is to identify the differentiating elements that characterize businesses that make a smart use of technology, in order to improve people's quality of life. Moreover, the reflection and discussion generate qualitative knowledge that complements the literary review.

At the **smart technology** level, the following specific goals are proposed, consistently with Echazarreta and Costa (2017b) conclusions:

- Having an in-depth analysis of businesses with a basis in factors such as sustainability and inclusivity, necessary accessories to “smartness”
- Developing a unifying model, based on smart use of technology, sustainability, and inclusivity, focused on business creation, administration, and management.
- Defining quantitative and qualitative indicators for evaluating said new model

- Developing educational content and informative and training material for the new model, with the aim of raising awareness with the general population, and training executives, workers, suppliers and customers in order to favor the new model and thus contribute to corporate sustainability in the medium and long term.

Technologically smart businesses can improve the quality of life of people living in social exclusion. In harmony with the United Nations Development Programme, smart businesses direct their mission to build smart infrastructures, promote inclusive and sustainable industrialization, foster innovation, and promote sustained, inclusive and sustainable economic growth, full productive employment, and decent employment for all.

The debate about the smart use of technology covers four points that, according to Echazarreta and Costa (2017b), stand out in the previous, related studies: technology, innovation and quality of life; communication; leadership and management of human resources, and smart businesses.

4.7.2. How can technology contribute to a better quality of life for people?

Technology, innovation, and quality of life. Does it depend on technological advances or corporate will? Do the tools have limitations? Innovation is fashionable because it is strategic to many companies, but how must it be applied in order to be much more than a strategy?

Mariona Serra, cofounder and CEO of GoodGut, starts off the discussion: **“Innovation is a priority**, it must not be a fad, but rather an implicit value to all businesses. This is why a close relationship must be established for **transferring knowledge between universities, which create innovation and knowledge, and businesses, which develop and commercialize it**. Universities must **conduct research in a more guided and applied manner.**”

Carmen Echazarreta, from the University of Girona, continues by adding that, although it is necessary and evident that there must be a rapprochement between

university and business to transfer knowledge, this causes a divide and debate in the heart of the university: **“Should knowledge creation be in harmony with corporate expectations? Or should it be pure knowledge, unconditioned by those expectations?”** In certain areas, such as engineering, economics or law, the application is heightened and more direct.

Joan Batlle Grabulosa, professor in the Computer Architecture and Technology Department, comments on the effect of technology on quality of life **“Technology improves quality of life in the physical world.** Yesterday I was chopping wood in the forest with a mechanical saw, which I carried in a trailer with my car. Our day-to-day is very physical: At home you cook, you use the washing machine... At the edge of this physical world is where **one must ask oneself if technology improves mental quality of life,** and this is where I have my doubts. Emails, messages... **There is a part of technology which falls outside my fundamental needs and which creates needs I didn’t use to have.** New technology: social media, smartphones... has pros and cons.”

Meius Ferrés, responsible for digital strategy tracking and protocol at the University of Girona follows: **“We must guide teenagers who come into initial contact with technology and teach them values.** There is a thing I always say in my course, which is: We teach them to put the world in their pocket and we don’t teach them how to use it. This is a huge problem because they are alone, without teachers or parents. The parents have lost the battle, and teachers even more so. We have found that couple’s relationships have lost value, we’re regressing because of technology, as it introduces controls and bullying. This is why, **from the University we must educate, teach and warn in matters relating to cyber security and cyber bullying. We must attach added value to training, fostering competencies that last.**”

Revisiting the topic of values, Gema Guzmán, responsible for professional development projects at the Princess of Girona Foundation, asserts: **“Behind every quality of life improvement or positive repercussion from technology, there is a will, and a series of values, which ensure that the change is positive.”** She gives the example of Luz Rello, one of the latest people to be recognized by the

Princess of Girona Foundation, who suffers from dyslexia and has developed a technological system for the early detection of specific learning disabilities as well as their improvement and treatment.

Marc Teixidor, at PIMEC Young Businesspeople of Girona, claims: **“Innovation is what allows you to improve the value of your solution and solve the needs of the customer.”**

Antoni Sudrià, emeritus professor at the Polytechnic University of Catalonia and former director of the CITCEA Center for Innovation and Technology, follows up on the subject of the transfer of knowledge and values, confirming: **“Knowledge transfer is bidirectional.** The University transfers a specific type of knowledge and at the same time receives a different kind of knowledge from businesses, which is very enriching and allows the University to advance.

On the other hand there is a contradiction between technological development and quality of life, or sustainability. **Fads, and what they sell you in the media is unsustainable. In today’s society the most important value is economic.** This technological innovation, the new slavery in social media, young people’s dependency... **It’s a less autonomous society.** When a kid has to make a phone call, they find they’re incapable: **Their ability to reason and learn has been simplified. Technology causes a loss of human skills,** as before we were capable of designing tools, contributing to the environment being autonomous and surviving nature.

Finally, **there’s a clear economic incentive in putting products on the market to be consumed.** In contrast with waste and consumerism there are minority movements that support long-lasting technologies, for example, mobile phones that last 5 or 6 years and not the latest one that follows the trends and has just come out. At the same time, some manufacturers decide to lower the production rate of certain technological products, as they have found that the energy use is significantly lower, and not squander finite natural resources. **We lack social innovation and education in values.**

Joan Batlle continues his intervention on technology, condemning emerging technologies: “3D printers are the old lathes that have always been around,

AutoCAD has always been used to draw, and all car parts have been made in 3D. Augmented reality, networking cars, drone robotics, smartphones, the cloud, big data, digital currency... **The biggest risk with all of this are the massive servers that store all the information they generate, and which are controlled by multinationals who exert a huge and disproportionate control over society.** Furthermore, “emerging technology creates costs and needs for society in areas where they didn’t previously exist. Online shopping, for example, and the need to have all your products such as food, clothes, etc. delivered quickly to your door. Services that involve transport, weight, consumption and energy, are the main generators of consumption from citizens. There is always a significant energy impact. It’s been years now since **solar and wind power should have been the future.** In 5 years’ time Germany won’t even have nuclear power.” At an environmental level, the former president condemns the **lack of commitment and the indifference from society towards sustainability.**

Mariona Serra disagrees. “It is precisely **technology that promotes development and allows new business models to appear which are moving towards platforms and communities which prioritize sustainability thanks to the collaborative economy**” with examples such as *carsharing* or coworking – shared workspaces; at a household level, home automation can also save energy.

Gema Guzmán adds: “We’re talking about a qualitative jump thanks to the collaborative economy, such as the case of the non-profit, green energy consumption cooperative Som Energia.”

Antoni Sudrià adds: “**Sometimes technology is abused, society pushes you to purchase goods that you don’t need at all and you end up doing social mimicry.** Is quality of life being able to spend more or is it about living equally well while spending less? Technology allows us to be more sustainable and have a better quality of life, but it’s important not to make a perverse use of it.

It is also important to note the **resistance from businesses to the digitalization process.** The problem lies in the fact that some companies that can still make profits without changing, may have disappeared in ten years if they don’t incorporate

technology. On this point, there are noteworthy areas where there has been huge innovation in the past decades, such as in gastronomy with Ferran Adrià.

Joan Duran, strategy at the Ministry of Telecommunications, Cyber Security and Digital Society of the Generalitat de Catalunya: **“I believe that what is really important is the application of technology. If you are new to a platform which is uncharted territory for you and you don’t know what you want to get out of it, it’s better that you don’t use it.”**

Meius Ferrés says, along the same lines: “I’m a fan of TED (Technology, Entertainment, Design, a US non-profit organization devoted to “Ideas worth sharing”). Very young people participate and they explain real actions through these innovative communication channels. For example, a group of youngsters explains that they are taking vaccines to India with GPS, which means they are combining innovation with sustainability. The danger is when people resist change. **We must evolve communication with young people**, as they don’t read emails. It’s not their means of communication. At the same time, we need to educate them about the need to be on LinkedIn, not to search for work, but as a change in mentality, to display their biography. **Networks are for speaking about our professional and social life**. When you use them for personal use is when you have problems. When you search for jobs, a recruiter’s obligation is to check who you are on social media, as you see what values someone has through these networks.”

We close this first block in which key ideas come to the fore: **Innovation as a priority; guided and applied research; knowledge transfer between university and business; technology as an improvement of quality of life and at the same time generating consumerism; the need to educate with values in face of the challenges posed by technology, designing strategies and educating about cyber security and cyber bullying; lack of social innovation; resistance against digitalization and professional and social use of social media.**

4.7.3. What changes can new and emerging means of communication generate, in the business sphere?

Communication. How can the relationship between the business and customer, supplier or distributor be boosted and stimulated?

Albert Costa, Doctoral candidate at the University of Girona, explains that **social media sites such as Facebook, Instagram or instant messaging services such as WhatsApp, can be friendly environments in which to get closer and speak to young people** about their concerns and to receive psychological support and advice on intimate and confidential matters such as sexuality, drugs, couple relationships, eating disorders, etc.

He also points out the **democratizing role of networks, as any citizen can use them as a loudspeaker against social injustice, generating a certain media impact.**

Joan Batlle considers that the possible benefits of these networks are of interest, but he claims: “Keyboards should contain heat sensors, as often people give their opinion in a hot temper, without thinking.”

Mariona Serra gives her opinion on networks: “**Society itself penalizes and favors self-control.**” On the topic of communication in business she states: “**Communication and networks are key for gaining customers.** At GoodGut, before the first presentation press conference, we started following societies of patients with bowel cancer, intestinal illnesses, etc. After a few days the patients went to Trueta Hospital to see if the kit had been developed yet. Thanks to communication we can do market research. For example, a company that wanted to develop an app for showing which beaches had the most waves to go surfing on, based on the number of people interested in downloading the app, discovered that there was real demand, and that it made sense to develop it.”

Marc Teixidor continues: “**Communication is the Achilles heel of any company at all levels: production, people management, relationships with customers and suppliers, etc.** Communication even allows you to pre-sell your product before it exists.

Albert Costa continues: **“Social media sites allow small companies to segment their customers and nurture loyalty with them.** Years ago, companies invested in conventional advertising in the general media, with less strategic sense. For its part, **with social journalism you can condemn and show up bad business practice through networks, which democratize and enable freedom of expression.”**

On the subject of **business communication**, Isabel Godoy, responsible for inclusive tourism at the Costa Brava Pirineu de Girona tourist board, explains that they are working towards a diagnosis on accessibility for 700 Girona businesses in the tourism sector. They have been surprised, as with the case of a scuba diving business: “they have a platform that enables people with disabilities to go diving but they haven’t advertised this in any way. How is a tour operator supposed to notice this business and send tourists their way, if they don’t advertise this facility?”

Gema Guzmán: “The media becomes **a controlling element of how businesses act, as they tend to be very concerned about their reputation.** Through social media, citizens have a lot of power, and this contributes to businesses wanting to continually improve.”

Meius Ferrés, on the topic of business communication: “New youngsters do not trust institutional communication in the slightest, they go to **op-ed sites, community testimonies.** According to Xavier Marcet, “Tripadvisor and Booking have changed the behavior of hotels and restaurants.”

Antoni Sudrià highlights the risk of agencies generating reviews online, but he admits that new technology has socialized communication. He also reflects on the **digital gap which creates inequality between people who have access to and knowledge of new technology, and those who do not.**

Joan Duran claims that businesses are placing more and more value on customer communication and use the best tools to get close to them and nurture loyalty. **But he sees challenges in the business-supplier relationship. He says that meetings and negotiations tend to be face-to-face and not easily substituted with technological communication solutions:** “You realize in fairs, such as the

Mobile World Congress or the Smart City Expo, that businesses need to deal face-to-face with the people who they will sign a contract with, and will supply them.

On the subject of Smart Cities, Meius Ferrés suggests that **they should work for vulnerable people** and she condemns a case in Reus, a very technological city, where an elderly woman who had her electricity cut off, died in a fire started by a candle.

Joan Batlle says that “current technology is more than advanced enough for this to be avoided”. He explains that 8 years ago they developed a touchscreen with Skype code and a LED frame, which allowed any domestic television to be turned into a touchscreen. It was designed so that elderly people could be connected with their families for a very low cost, but it proved impossible to raise funding or interest from the administration, and advance this social project.

Antoni Sudrià comments on the needs of people at risk of social exclusion, explaining that **the study on individuals’ energy consumption patterns will enable us to quickly detect cases where an intervention is needed urgently**. “For example, you can detect if they have skipped their morning shower or not heated up their breakfast milk”.

Referencing new media, Joan Duran claims some social media platforms that are considered emerging are **Twitter, LinkedIn, Slack** –which is used for teamwork and divides conversations by topic-, **Telegram or Pidgin**. At the same time, he highlights the use of email and instant messaging for managing work with non-invasive tools. Tools such as **Drive or Dropbox are completely insecure from a data protection and confidentiality perspective**.

Returning to the original topic, Ioanna Alsasua, from SIMBIM Solutions, thinks about the **opportunities generated by new tools and emerging media in technology businesses** that have their focus on construction, and Smart Cities: “**The introduction of BIM** (Building Information Modelling) technology allows us to construct virtual prototypes of our buildings and see what will happen before we build them. We can work much more efficiently, as it allows us to, from the first phases, avoid construction problems, know the exact costs generated and how to

provide maintenance for the building, etc. Ultimately, it allows us to manage the whole lifecycle of the building in a unified way.”

Carmen Echazarreta points out: “Technology allows us to optimize knowledge and **we save energy thanks to virtual systems, which contributes to sustainability**”.

On cost savings, Joan Batlle claims: “Thirty years ago people already worked online, the problem was **system speed and high costs**”, matters that have changed significantly in our time.

Ioanna Alsasua continues: “although architecture is an industry which has traditionally been reluctant to share information, **the technologies that get used tend to follow a model of collaboration between professionals. The main value sought by support tools is transparency.** Multiple architects can be working on the same file in real time, hugely optimizing their work, and cutting down on the amount of information that would have been sent through instant messaging or email. Although it must be said that there is a **lack of education when it comes to working with collaborative systems.**”

Joan Duran continues with the claim: “In time businesses will have to be more transparent. Suppliers will be forced to share their information more openly, allowing a more virtual relationship with their potential customers. CRM (*Customer Relationship Management*) software will become indispensable for managing customer relationships.

Speaking about the bases of the collaborative model, Antoni Sudrià claims: “**A lack of investment in Catalonia has promoted the creation of many industrial estates which don’t provide the necessary scope for businesses within to work collaboratively with their stakeholders**”.

The second block closes with some key ideas for examining the changes that new and emerging media can bring about, and how the business-stakeholder relationship can be improved: **Social media and business communication that can segment and bring in customers while nurturing loyalty; transparent communication management; guaranteed data protection and security; fostering teamwork; lack of education and training to work with new**

emerging models; social journalism with a democratizing role; appearance of op-ed sites and community testimonies which foster a concern for business improvement and reputation, and finally we highlight the digital gap which creates inequality between people who have access to and knowledge of new technology, and those who do not.

4.7.4. What should leadership look like?

Leadership and human resources management. Do we assume that management in a smart business is more collective than individual? What role do the teams have to take?

In this new block Marc Teixidor begins by explaining that Sergi Garcia Preckler, who has been director, manager and vice-president of the Human Resources department at Sony Iberia for 15 years, leading a team of more than 3,000 people, delivered a conference at PIMEC and asked the managers in attendance: “What does your job entail? What is a CEO’s most important job?” Most of the answers were “I handle the big accounts, the most important customers.” Then, he compared this with family and children: **“You must give your employees the tools to develop and try to make them better than you, so that they grow. You must create an environment in your organization where employee motivation and recognition are first-rate. We need leaders who are talented, responsible and have the ability to communicate. A leader makes the people around them better. They must be humble, and capable of teamwork.”**

Gema Guzmán adds that the term used is no longer human resources, but **people management**: “We need **shared goals and vision**. You can’t have a team and not tell them where you’re going. This is why it’s easier to work in start-ups, as the team identifies more easily with the project.”

Meius Ferrés claims: **“48% of jobs will be taken up by robots in ten years’ time. Manual and mechanical jobs, which are not generally fulfilling,** will be done by machines. Carlos Zahumenszky, editor at Gizmodo ES, claimed at TEDxReus that we will have to find a new way of working. If our job is threatened by a robot, **we**

will have to make our job more human. He spoke of doctors at a primary care center, who see an average of 35 patients from 8:00 to 15:00. Patients tend to use additional services such as psychology or homeopathy because they get seen for an hour. He claimed that machines may be able to do many of a doctor's tasks, but **the job of understanding a person, can only be done by another person. Automation is a social challenge, we must support individual talent and promote more creative jobs.** Volunteering will also become important in future as it makes us better people.”

To Mariona Serra: “The team is the main building block of a business. Employees must understand that the company is their own, they must feel a part of it. In the newer generations we're used to working **collaboratively, in multiple languages, and multitasking.** For example, the company Mango works with shared goals and vision. These times require **greater flexibility in working hours, to encourage harmony and enable women to take leadership.** On personnel recruitment, Michael Page, a leading worldwide consultancy in selecting qualified staff, point out that you tend to hire people like yourself. It's important to **select people for the role they will fill. You must think of the profile you require for a specific role.**”

Joan Batlle highlights that “The problem lies in that **salaries are very low for the majority of people. Automation** will get rid of a specific kind of unskilled labor, but at the same time **will create more qualified jobs.**”

Antoni Sudrià highlights that: “**Human resources is changing significantly in highly technological businesses.** For example, Indra Sistemas S.A., a Spanish multinational in the communication and information technology sector, hires **on a project-basis, with no working hours, and does not provide a fixed workplace.** Hierarchies disappear and a method of cooperative active players who must be smart and communicate with each other, is applied.” At the same time, he highlights that “People with a lot of talent often have high mobility. **Talent is difficult to retain.** They tend to work on projects, and when they finish one they move to a different country and project. It is in times of recession when we have the best **knowledge transfer contracts** with businesses.”

Albert Costa claims: “It’s worth noting that not everyone has to be enterprising in their workplace. **We must expect employees to get involved to a reasonable extent. The person in charge is the one with all their capital at risk, and only the businessperson can gain all the profits.**”

In the same vein, Joan Batlle says: “The difference between business owners and workers is always there. In the middle of the recession, employees really felt for their company, until they were told their salary was cut in half. At that time, all they saw was the owners living in luxury homes, with nice cars and pools... The Catalan businessperson at an SME, seeing things are going wrong, tries to hold on, a big mistake, and begins to use credit facilities and ask for personal loans to maintain workers who are like family. But then one day the employees discover that they’re not family, and that this is not the company they thought they loved.”

Some key concepts to highlight in this third block are: **“People management; leadership that is talented, responsible, with an ability to communicate, which improves the people it surrounds; teams with shared goals and vision; progressive automation and humanization of more creative jobs that boost individual talent; greater flexibility in working hours to encourage harmony and the importance of adequate remuneration.”**

4.7.5. What do we mean by “smartness” in relation to business?

Smart businesses. What characteristics define smart businesses? Do we need education on the subject?

Joan Batlle begins the third block, by warning that **“The business must make a profit in order to be viable.”**

Antoni Sudrià adds that, furthermore, **“it must generate knowledge by investing capital and valuing talent.”** He comments that some Girona businesses, especially the family-run ones, find it hard to value knowledge and realize that to advance and innovate they must study certain factors. In the 4.0 Industry data analysis will become more and more indispensable for improving strategies. He also adds: “An indicator to evaluate if a company is smart or not is the **employee**

training program. How much money do they invest in training? Finally, he highlights **the need to look after staff, and manage them effectively**: “It’s important to detect states of stress or unhappiness. You must take an interest in the personal state of your employees. You must do the opposite of what business schools tell you: maintaining pressure does not work. **A smart business is able to recognize its mistakes.**”

Marc Teixidor and Mariona Serra agree with Sudrià and highlight that smart businesses: **“Reconcile economic activity and all the players that make it possible. Generating value for every stakeholder and recognizing the value of knowledge created and employee training”**. Teixidor also highlights that **“management must be humble, and able to know their employees’ names and what they do”**.

In the same vein, Gema Guzmán highlights: “It is the business that takes into account all its stakeholders for **the ultimate common good of all parties**. Another important point is to have a good **work environment**.”

Meius Ferrés highlights the importance of **“Creating pride of belonging”**. **She also highlights the need to safeguard good working conditions in business**. She gives the example of bad practices in certain emerging collaborative businesses such as Uber, where there are no employees or workers’ rights. Another characteristic feature of smart businesses in the **“ability to give back to society.”**

Carlos Grau, talent developer, and technology and innovation associate at Konsac group, highlights that “the outstanding issue is the **university-business transfer**. At the same time, it’s important to bring **innovation** to organizations. There is an important debate in industry surrounding big data, machine learning and business intelligence. **60% of jobs that consist of sequential and repetitive information analysis, and aren’t highly complex, will disappear in the US and in many businesses over the next 3 or 4 years**. Just as it happened on the factory floor, this will be done by robots that can semantically analyze documents. By using logic and algorithms, they can analyze steps and a process which was simply a controlled flow of information from one colleague to the next, for validation. The big opportunities

for smart businesses are **tasks relating to online work, working with third parties, creativity, greater customer-focus...**

Smart businesses are the ones marching in this direction. They accept that the most repetitive, manual and tedious tasks will end up being substituted by automated systems. Everyone is terrified and believes their job will disappear. **The challenge is in creating many jobs of value.**”

Joan Duran gives the antagonistic example of two companies: “**Apple** has historically fed on innovation. In Steve Jobs’ time it could be considered smart because they tried to make varied products and deliver value. Since his loss, the strategy has changed. Instead of investing their profits in innovation, they distribute them to their investors, and the company will slowly lose market share. On the other hand, I believe that **Amazon** is smart, and worthy of examining. They are innovating in the ecommerce world. They create new products and services on a daily basis. It will grow indefinitely.”

Gema Guzmán points out that, to the best of her knowledge, Amazon UK has dismal working conditions for its employees, unworthy of a smart company. There must be, then, a balance between innovation and people management. She continues and explains that in the Basque Country’s 2016 unemployment forum, Michael West, professor at the University of Lancaster, intervened, stating that the most important thing is to “**treat people working within an organization with dignity, compassion and empathy, and to listen to them**, and that they will do the same with other employees, customers, or patients. **If we create a positive workplace atmosphere, we will be better people at the end of the day.**”

Carlos Grau highlights that **the organizational cultures of smart businesses are based on features like creating fields of innovation, the ability to transform, constant humility and modesty however well things are going, being curious, respect to generational, cultural and general diversity, and pride of belonging to the project.**

He highlights a socially responsible labor integration project that was developed by **Fundación DKV Integralia**. He explains that they placed around 300 disabled people over 15 years and that the foundation is driven and managed solely by people

with disabilities. They manage call centers, customer service centers for large companies and even ministries. “You see their success stories and their will to overcome and are impressed, you learn many things. Some companies develop CSR (Corporate Social Responsibility) themes around art, culture, entertainment and leisure... More importantly than which area you work in, what matters is that what you do is transversal, and that it generates a real impact in the business model. **Smart businesses involve their employees, create a sense of pride and belonging and promote volunteering.**”

Another detail that Grau highlights is that “In the United States various companies are creating a professional profile that **apologises**. In a business culture of innovation and making mistakes, it is important to know when to apologise to customers. **Although every occasion where a problem arises with a customer is an opportunity to improve, managing the situation and knowing how to apologise is one of the most sophisticated tasks in the world**”.

In this last block on the characteristics that define smart businesses, we highlight the following concepts: **economic feasibility; generating knowledge; valuing talent; training and recycling for employees; care for and management of staff; reconciling economic activity and generation of value for stakeholders; humble and modest managers who know the names of their employees and what their tasks are; healthy work environment; pride of belonging and involvement of employees; care for working relationships; giving back to society; university-business knowledge transfer; progressively generating creative online customer-focused jobs of value in face of automation; treating customers with dignity and compassion; curiosity; respect for generational, cultural, and general diversity; promotion of volunteering and apologising.**

4.8. Study and conceptualization of the Valometer: A system of business indicators for values-based management

The Valometer, European system of business indicators for value-based management, is a voluntarily applied management tool specially designed for companies by the University of Girona. It aims to promote sustainable, intelligent, open, democratic and inclusive companies that are equipped to face the challenges of the future.

From the **ARPA research group** (Analysis group for reception and playback quality of Audio-visual Screens), which belongs to the University of Girona's Department of Philology and Communication, is born Vusiness [from business, with a v for values], a business model for creativity and management based on values. It offers an alternative to the current model, as it is designed to address phenomena and challenges such as climate change, economic and social crises, globalization, precarious labour conditions and digital transformation.

The aim of the Valometer is to help and guide companies to monitor and measure the results of their management in areas such as identity, administration and management, people, sustainability and technology using a comparable common methodology.

The results of monitoring are based on self-evaluation, observations, data collection from different sources and their analysis by companies. No minimum values are set that must be achieved, and nor are certifications awarded. That said, identifying indicators provides companies with the basic information to monitor the aforementioned five areas, thereby facilitating more efficient management in accordance with values oriented towards people and the environment.

The Valometer is based on fifty indicators, divided into the following five categories:

- a) Identity
- b) Administration and management
- c) People
- d) Sustainability
- e) Technology

Methodologically, the initial draft of the Valometer indicators was based around the use of three complementary techniques. First of all, an exhaustive diagnosis was performed of four bibliographical reviews focusing on inclusiveness, sustainability,

technology and communication.

Secondly, fifty professional experts (scientists, professors from different academic disciplines, businesspeople, entrepreneurs, managers and advisors from different business sectors) were selected, and they participated in three focus groups. And thirdly, in-depth interviews were conducted with these experts to obtain a joint vision of the Valometer.

The utility and viability of the Valometer as a value-based business management tool was tested through the application of a pilot experience. To this end, companies were invited to help test the tool and provide the University of Girona with information about their experience.

The first edition is the result of the pilot test. Based on the comments received, a group of experts from the University of Girona will periodically review the system. We hope, through subsequent editions, to offer a verified and suitable system.

4.8.1. Companies with values

The global economy has suffered a serious and rapid slowdown that particularly affects the most vulnerable, generating high unemployment rates and temporary work with precarious conditions.

As a result, unemployment has increased and quality employment has been destroyed, leading to a significant deterioration in living and working conditions. In just four years, almost five million jobs have been lost in Europe. In Spain, the real estate bubble has meant that the economic crisis has hit particularly hard. In addition, the policy of cuts has aggravated the effects of the crisis for the most disadvantaged groups.

Increasingly, family incomes are not reaching the minimum wage, which is accentuating the situation and the risk of poverty. Difficulties in accessing housing, whether rented or owned, are due to the growing indebtedness of working families, the loss of their purchasing power, the difficulty of accessing a loan, and in particular a more unequal distribution of wealth.

In the midst of the current transition to the fourth industrial revolution, digital transformation and the development of artificial intelligence have generated profound change for companies. A number of studies have indicated that employment in the industry and services sectors is set to become 90% digitalized. This change may be viewed as either an opportunity if it is used to develop a new economic model to facilitate an exit from the crisis or as a huge concern if it involves the destruction of thousands of jobs.

Disruptive changes in technology have resulted in a new globalized economic environment, where companies subcontract and outsource processes to companies located in developing countries with very low salaries. Here, we must also highlight the estimated two hundred million jobs that children aged between five and seventeen do around the world, as they are subject to the worst forms of child labour, related to arms, household chores or child exploitation.

Another problem that must be addressed is climate change, most likely caused by human activity leading to a rise in temperatures. The effects of climate change are having devastating effects on ecosystems and the health and well-being of the population; what is more, they are not expected to improve in the medium term.

To overcome the deficiencies of the current economic system, which is a source of inequality and exclusion, companies that are committed to value-based management have the main aim of reinventing themselves and evolving towards a business concept in which the cooperation, participation and involvement of employees are both indispensable and decisive.

In order to establish the scientific foundations for the creation of an alternative model based on companies with values in the framework of the Vusiness Project, a thorough bibliographic review has been carried out in a structured and methodical way to select the conclusions of the most relevant studies since 2015. With the aim of contrasting and expanding the information gathered during the bibliographic review phase, three forums were held to reflect and debate on inclusive, open and democratic companies. In addition, in-depth interviews were conducted with professionals from different disciplines.

Below we present the **Valometer**, the European system of business indicators for value-based management, conceptualized by fifty professional experts (scientists, professors from different academic disciplines, businesspeople, entrepreneurs, managers and advisers from different business sectors).

4.8.2. What is the European system of business indicators for value-based management?

The Valometer is a management supervision tool for the self-employed and micro, small, medium-sized and large companies. It is designed as a process driven by the heads of companies to collect and analyse data to improve management of the company.

The aim of the Valometer is to contribute to improving management based on values and, specifically, inclusive, sustainable management that makes a smart use of technology in companies. The tool is designed to facilitate the measurement of management processes in five areas, monitoring their performance and measuring their progress.

The model has been inspired in the European Tourism Indicators System (ETIS) and the document “Smart cities: the digital transformation of cities”, produced by PwC’s Center of Innovation for the Public Sector and IE Business School.

4.8.3. Why measure and monitor indicators on the basis of values?

The self-employed and heads of micro, small, medium-sized and large companies often make decisions based on a limited set of balance sheet data, or even out of inertia or habit. Financial data do not represent the company in its entirety. The compilation and analysis of data in five key areas for company development ensure business growth and consolidation that is respectful of collaborators and their surroundings.

4.8.4. Which companies can apply it?

Any company can apply the Valometer, regardless of number of workers and turnover volume. It is also recommended that companies with outsourced processes (production, transportation, administration, etc.) submit those companies that provide that product or service to the evaluation.

Thus, for example, self-employed people who use a transport company to perform their logistics and distribution service can analyse their sustainability axis through the transport company. It should be borne in mind that customers are increasingly aware of the devastating effects of the carbon footprint, that is, the amount of greenhouse gas emissions, and choose companies whose products and services pollute less.

4.8.5. Why apply the European system of business indicators for value-based management?

The Valometer is a tool for value-based management and not a certification system. It was conceptualized to facilitate the evaluation and improvement of business management on five axes to make companies more open, inclusive, sustainable and technologically intelligent.

By using the European system of business indicators for value-based management, companies can evaluate and analyse their performance and develop strategic plans and actions to improve their values in the short, medium and long term.

The tool guides companies with regard to its application. Through the awareness and participation of the company as a whole, it is intended to generate positive effects on a quantitative and qualitative scale, which can be measured, collected and analysed to promote continuous improvement.

It is recommended that companies create multidisciplinary working teams to prioritize specific axes and actions, stimulate and promote the participation of all company staff, take the appropriate strategic decisions to favour consolidation of the company, apply and measure the impact of activities, and promote continuous improvement.

4.8.6. What are the main advantages of applying the Valometer?

The aim of applying the European system of business indicators for value-based management is to compile information and data from increasingly strategic and essential areas for decision-making, such as people, sustainability and technology. The tool allows companies to prioritize projects and intervention actions and establish comparative results.

Another aspect worth noting is the improvement of the work environment as a consequence; on the one hand, improvements in personnel management, and, on the other, more active participation by employees in managing the company as a whole. In parallel, the system also promotes improved relationships with stakeholders.

A third key aspect are the positive effects implementing the Valometer has on the environment and the planet.

Finally, and no less important, it improves customers' experience, perception and loyalty towards the company.

4.8.7. How does the European system of business indicators for value-based management work?

The Valometer is a comprehensive management process based on five axes: identity, administration and management, people, sustainability and technology.

It contains fifty basic indicators that can be used individually, by axes or in its entirety, depending on the company's needs for improvement. At the same time, the indicators can be integrated into other business management systems that already exist in companies. Being able to choose the criteria and indicators according to the particular need of the company provides the tool and the flexible system necessary to increase the viability of its application and its consequent performance.

The European system of business indicators for value-based management is designed to be applied collectively, involving all staff. To ensure its success, decision-making and responsibilities must be shared between the different members of the

steering group.

4.8.8. Guide to the application of the European system of business indicators for value-based management in seven steps

Step 1: Awareness raising

Once the company management team has decided to implement the Valometer system, it is important to communicate this decision to the employees as a whole so as to increase their commitment, foster active participation and promote the implementation of actions and activities in accordance with the objectives established by the different criteria.

It is common procedure to create a steering group to apply and develop the European system of business indicators for value-based management.

Internal communication, through tools such as email or instant messaging and the use of social networks, can be useful to ensure that communication is fast and fluid among all the people involved in the process.

If the initiative to implement the system for value-based management comes from the employees themselves, it is advisable that they have the support and explicit commitment of the management team.

Step 2: Defining the scope of intervention

First, the strategic axes where it will be applied must be defined. It is recommendable to start with **identity** and continue with **administration and management**. If these two are considered to be consolidated, then **people, sustainability** and **technology** can follow. Although it is advisable to use the ten criteria with their respective indicators, it is also possible to use and adapt those that best suit the needs or challenges of the individual company. The tool can be downloaded from the website www.vusiness.com.

Step 3: Setting up the steering group

To implement the European system of business indicators for value-based

management, it is recommendable that a working group be set up of between eight and twelve members. Obviously, if we are dealing with a micro or small company, this number will be lower. The steering group must be composed of representatives from the company's different departments interested in implementing the system as a tool to promote change in the organization (production, logistics, administration, quality, sales, etc.).

The group must be led and coordinated by the business owner, director or general manager, or a member who is delegated these responsibilities and functions.

This person's active role will allow the design and initiation of an action strategy. Through a first meeting, business challenges will be jointly identified and the most appropriate criteria and indicators chosen. From here, it is advisable to discuss how the data may be obtained based on the knowledge and experience of the members.

Step 4: Functions, responsibilities and planning

It is important that the first meeting is used to determine the responsibilities of each member of the steering group, what data are to be gathered, how and over what period. Flexibility is key throughout this process.

Delegating responsibilities triggers a sense of commitment and adhesion. By way of example, the person who is responsible for logistics might collect data related to the consumption of finite resources based on petroleum, coal and natural gas, and compare this with renewable energy such as solar, thermal, bio or hydraulic energy.

Step 5: Data collection

Data collection must initially take place in a continuous and fluid way, so that each criterion can be rigorously evaluated and possible improvements detected during the subsequent follow-up phase.

As mentioned above, it is important that each company choose the most relevant criteria and indicators according to their needs and challenges.

It is recommendable that even if data are collected and compiled by different units, they are centralized to obtain a global and, at the same time, detailed overview of the process. In some criteria, information must be obtained through the conducting of

surveys, interviews, discussion groups or other tools.

Depending on the company, the types of data to collect and the time or costs involved in obtaining them, it is recommendable that each steering group decide the appropriate timing cycles for data collection for each criterion and indicator.

Step 6: Results and analysis

The collected and processed data can then be analysed and discussed with the objective of establishing a strategic plan of actions to improve the criteria. The steering group, convened by the coordinator, meets to analyse the results and take decisions. Together, they define realistic goals and agree on the best actions for achieving them.

Once the results are analysed, it is recommendable to establish priorities and the most appropriate measures for achieving the objectives. Areas that are considered urgent must be addressed immediately, deciding who initiates the action plan, how and when.

Step 7: Innovation and continuous improvement

Guaranteeing the successful implementation of the European system of business indicators for value-based management requires a well-defined strategy, a steering group with the capability to maintain the system in use and the constant communication of results.

When the improvement system is under way, the design of a long-term improvement strategy - from three to five years - should be considered. Each unit comprising the steering group must take responsibility for one area and generate and feel responsible for changes in the company.

The criteria and indicators must be reviewed periodically. In addition, the gradual extension of the criteria will allow companies to have a broader view of their situation.

It is also important to verify whether the company has optimal financing to continue implementing improvement plans.

It is recommendable that companies disseminate both the results and success stories through different communication mechanisms. This information may be useful to address the long-term strategy.

Finally, application of the Valometer is expected to maximize social and economic benefits for the company.

4.8.9. Basic indicators

The basic indicators compile **the company's key and fundamental data** to describe, measure and compare its performance and improvement in five strategic axes.

The **fifty basic indicators** incorporate the most important aspects of identity, administration and management, people, sustainability and technology.

Their measurement facilitates **comparisons in the short, medium and long term** to assess whether the action plan achieves the expected results. The periodic collection of data and tracking of selected indicators is recommendable.

When the company has established a clear system for measuring and monitoring the chosen key indicators, additional indicators may be added to collect complementary data adapted to specific problems, needs or challenges of the company.

It is important to clearly specify the data collection method and indicators to ensure that any member of the company can collect reliable and valid data for their subsequent evaluation and comparison.

The following figure shows the Valometer represented as a wind turbine (a generator of electric power driven by wind power).

4.8.10. Sections of the Valometer

The Valometer, a system of business indicators to facilitate management with values, is a voluntary tool designed for companies. The Valometer aims to help and guide companies to control and measure the results of their management in five areas using a common comparable methodology.

The resulting tool is illustrated as a wind turbine consisting of 50 criteria and indicators constructed scientifically and divided into 5 areas:

a) Identity; b) Administration and management; c) People; d) Sustainability; and e) Technology (See Figure 1. Sections of the Valometer).

The criteria and basic indicators are provided below (See Tables 9 to 13).

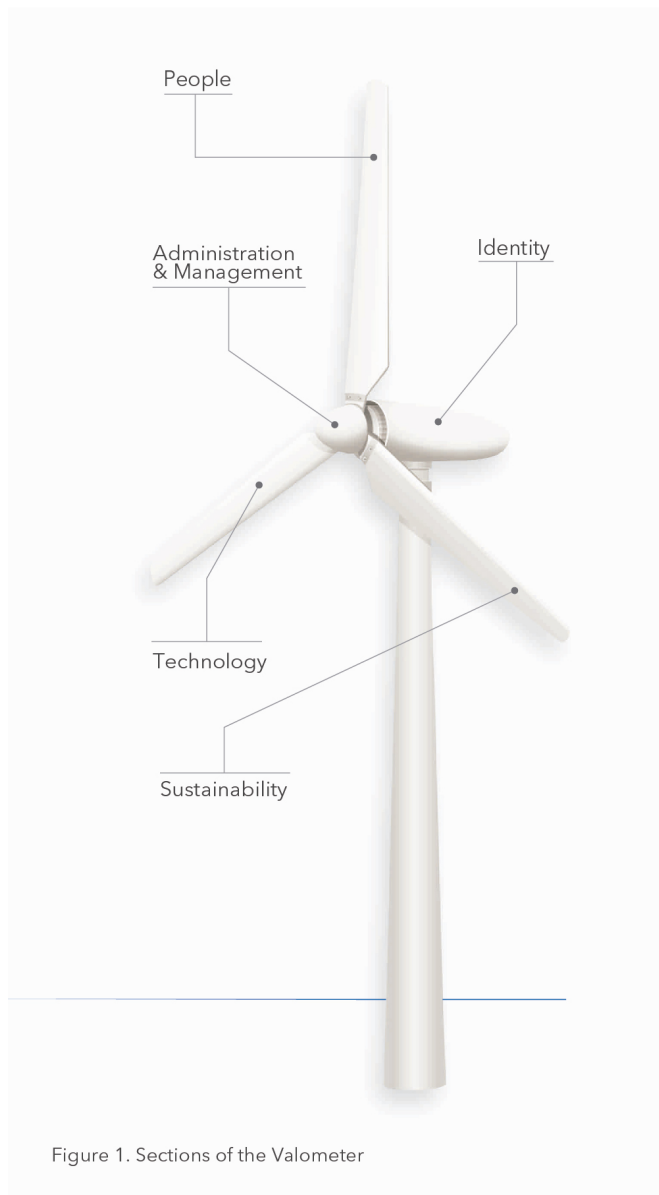


Figure 1. Sections of the Valometer

Figure 1. Sections of the Valometer

Table 9. Section A: Identity

SECTION A: IDENTITY		
CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
A1. ENTREPRENEUR. Characterized by being creative, innovative, communicative, sensitive, honest, committed, ethical, empathetic, approachable, effective, efficient, transparent, responsible and possessing leadership skills.	A1.1	Percentage of the entrepreneur's personality traits and characteristics that determine whether he or she knows how to identify an opportunity and has the skills to put it into operation, over the total.
A2. MISSION. Our mission pursues a noble and commendable purpose. For ex. quality education; gender equality; decent working conditions and economic growth; responsible production and consumption, etc.	A2.1	Percentage of coincidence between company's declared mission and some of the 17 challenges defined in the UN's Sustainable Development Goals (SDGs)
A3. VISION. The company aims to achieve future goals aimed at developing people and sustaining the environment.	A3.1	Percentage of coincidence between the future challenges facing the company and those defined by the UN's Sustainable Development Goals (SDGs)
A4. VALUES. Profound commitment to ethical, social, labor and environmental values that favor the harmonious development of the planet and humanity.	A4.1	Percentage of company's ethical, social or environmental values compared to pragmatic-economic values (efficiency, quality, etc.)
A5. SUSTAINABLE. Contributes to wealth and the common good and does not consume more resources than it generates in any sphere.	A5.1	Percentage of energy resources generated by the company compared to those consumed.
A6. PROGRESS. Acts on technological progress and redirects it to be of help for a better world.	A6.1	Percentage of use of new technologies to promote quality of life compared to their use to eliminate jobs.
A7. RESPONSIBILITY. Freely acts out of full responsibility,	A7.1	Percentage of products and/or services, produced or rendered by

especially towards society and the environment.		the company, respectively, that favor society and the environment, over the total.
A8. TRANSPARENCY. Act in a fully transparent way on the free market.	A8.1	Percentage of access to the decision-making process, free access to documents, instructions, formulas, contracts, etc. that affect citizens or the environment over the total.
A9. ETHICS. Does not engage in any kind of speculative activities, not even marginally, and extends its ethical commitment to its chain of suppliers, distributors and customers.	A9.1	Number of ethical actions taken with regard to suppliers, distributors and customers compared to total activities.
A10. FAIR PROFIT. Aspires to obtain sufficient profit to continue contributing to social development and to provide just compensation to those who risk their capital and who dedicate their work to the company.	A10.1	Profits assigned to employees for just compensation for their work or social development and to improvement of the company in comparison to those assigned to oversized or unnecessary personal expenses or wasteful spending in euros.

Table 10. Section B: Administration and management

SECTION B: ADMINISTRATION AND MANAGEMENT		
CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
B1. TRANSFORMATIVE LEADER. Characterized by being entrepreneurial, innovative, inspiring, creative, sensitive, honest, committed, social, ethical, empathetic, approachable, effective, efficient, transparent, discreet, reliable and responsible.	B1.1	Percentage of personality traits and profile characteristics that determine whether it is an authentic, inspiring leader capable of motivating, uniting and favoring team performance, over the total.
B2. GOVERNANCE. The board of directors, shareholders, management team, audit committee, etc. are organized and make decisions to achieve their legitimate objectives,	B2.1	Number of strategic decisions taken ethically and responsibly and communicated compared to those that are hidden or do not respond to noble ends.

always acting in a fully transparent, ethical and responsible manner.		
B3. SOCIO-ECONOMIC CONTEXT AND OPPORTUNITIES. The company is attentive to the challenges, opportunities and needs of society for it to become more sustainable, developed, just and equitable.	B3.1	Percentage of products and/or services developed in response to environmental challenges or needs to favor the circular economy, sustainable development or a more just and equitable society, over the total.
B4. VALUE PROPOSAL. Product or service that satisfies the rational needs of society.	B4.1	Number of products and/or services needed to live or make a better world compared to those that respond to mere consumerism.
B5. PARTNERS. The company relates with suppliers, distributors and influencers who have certain ethical principles and values and treats them fairly.	B5.1	Percentage of suppliers, distributors and influencers that operate honestly, transparently and fairly, over the total.
B6. CHANNELS. Relates to its clients in an honest way, with marketing that promotes responsible consumption and not consumerism and establishes positive and lasting relationships.	B6.1	Percentage of communications (campaigns, meetings with clients, product presentations, press conferences, brochures, etc.) based on complete, verified, truthful, honest and transparent messages and information, over the total.
B7. PRICES. In accordance with the proposal for value, fair prices are established that allow adequate remuneration for the production or manufacture of the product, especially for small local producers, and fair remuneration of workers who provide a service.	B7.1	Percentage of sales allocated to suppliers, over the total.
B8. TRIPLE BALANCE FINANCE. Seeks a balance between growth and the distribution of wealth, including the aspiration to obtain a sufficient and just	B8.1	Percentage of sales revenue allocated to improving the remuneration of workers based on the company's results or social projects or improving the environment, over the total.

economic profit while attending to the social and environmental dimension.		
B9. LEGALITY. The legal, mercantile, fiscal and labor practices employed are the most adequate for achieving the company's noble ends and contributing to the community as a company, and under no circumstances are aimed at obtaining better fiscal treatment. Ensuring correct behavior in the real economy and not for speculative ends.	B9.1	Number of legal, mercantile, fiscal and labor practices suitable for carrying out its noble aims and contributing to the community as a company in comparison with those designed exclusively to obtain a better fiscal treatment.
B10. SOCIAL ROI (RETURN ON INVESTMENT). Has a system of evaluation indicators aimed at continuous improvement and related to concepts that enhance responsibility and transparency. Seeks continuous improvement through innovation in sustainability, intelligent use of technology and practices cohesive with preserving the environment (local employment, community focus, etc.)	B10.1	Social return on invested capital (ROIC. Return on Invested Capital) in euros.

Table 11. Section C: People

SECTION C: PEOPLE		
CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
C1. JOINT LEADERSHIP. Encourages joint leadership distributed among team members and project leadership to take advantage of individual skills. Leaders must show initiative and a proactive attitude, acting as an inspiring and stimulating	C1.1	Percentage of workers with leadership responsibilities within the workforce over the total number of personnel.

<p>driving force for groups to carry out their work.</p>		
<p>C2. TEAMWORK. Development of and care for work teams through emotional values such as joy, solidarity and freedom to enhance creativity, talent and innovation, acting transparently, promoting active participation and creating mechanisms to make it real and possible. Influences the working environment and gives free rein to people's talent.</p>	C2.1	Percentage of usual hours of teamwork compared to total hours worked.
<p>C3. PROFESSIONAL DEVELOPMENT. Promotes staff development through professional development, offering promotion possibilities.</p>	C3.1	Annual percentage of workers promoted compared to total workforce.
<p>C4. KNOWLEDGE AND TRAINING. Creates mechanisms to attract talent and bring through emerging talent. Enhances knowledge through training adapted to new times and current challenges. Promotes the transmission of knowledge among workers. Uses conventional media as well as digital and virtual reality platforms.</p>	C4.1	Annual average number of hours dedicated to training workers, sessions to enhance their talent or specific meetings to share knowledge.
<p>C5. EQUALITY AND INCLUSION. Creates an environment that respects and promotes social diversity, gender, functional diversity, generational and cultural diversity in the company.</p>	C5.1	Number of measures and projects that promote equality and inclusion (for example, hiring people with disabilities, participation in social programs to promote the workplace insertion of immigrants, adaptation of facilities to improve accessibility, etc.)

<p>C6. CONCILIATION AND TELEWORKING. Promotes the reconciliation of work with personal and family life through measures such as flexible hours and teleworking.</p>	C6.1	Number of measures and projects that promote conciliation and teleworking (e.g. flexible working hours, discretionary transport for workers, possibility of teleworking, etc.)
<p>C7. FAIR REMUNERATION. Makes payments correctly and on time and remunerates according to the specific functions and characteristics of the job as well as assigned tasks, also valuing the worker's involvement, skills and abilities. Also includes motivation.</p>	C7.1	Number of benefits, agreements and additional advantages of personnel at the level of remuneration compared to that determined by the current status of workers' or collective agreements.
<p>C8. NETWORK. Encourages and communicates corporate volunteer activities, the development of participants' personal skills, donations to local institutions, facilitates school visits to the workplace, etc.</p>	C8.1	Number of measures and actions taken to promote links with nearby networks (e.g. guided tours, possibility of non-work placements in companies, ease of internship contracts, collaboration and sponsorship of entities or neighborhood associations, etc.
<p>C9. MEDICAL ATTENTION, HEALTH AND WELFARE. Medical care and health and safety measures in the workplace. Health assistance services complementary to public services: cardiovascular, diabetes, wellness, stress management, etc. to improve the work environment and encourage healthy habits such as sports.</p>	C9.1	Number of cases and situations that receive medical, health or welfare coverage in addition to the mandatory average for each worker (for example: weekly check-ups for pregnant women, online medical consultations, dental coverage, coverage of glasses and contact lenses, etc.)
<p>C10. COLLABORATION. Encourages communication and active collaboration between different departments using all available means, and allowing staff rotation between departments (meetings, communication screens, interactive Ipad tiles, etc.).</p>	C10.1	Number of channels, media, tools and spaces available to encourage communication and collaboration (intranet, instant messaging, email, telephone, cafeteria space, etc.)

Table 12. Section D: Sustainability

SECTION D: SUSTAINABILITY		
CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
D1. ENVIRONMENTAL IMPACT. Consumption of water, gas, electricity, detection and reaction to environmental emergencies: leaks, fires, etc.	D1.1	Percentage of the company's premises controlled via networks of intelligent environmental sensors and smart metering that allows consumption as well as pollutant particles and emissions caused by environmental emergencies to be automatically detected, over the total
D2. CONSUMPTION AND PRODUCTION OF RENEWABLE ENERGIES. Self-generation of energy from renewable sources: photovoltaic plates, low enthalpy geothermics, mini wind turbines, etc.	D2.1	Percentage of renewable energy use (e.g. solar, thermal, photovoltaic, bioenergy, hydraulic, tidal, wind, wave and geothermal) compared to finite energy use (based on oil, coal and natural gas)
D3. ENERGY EFFICIENCY. Allows efficiencies to be increased and energy management improved. Solutions that promote energy consumption management in air conditioning, elevators and lighting.	D3.1	Percentage use of energy efficient equipment: for energy storage, high-energy efficiency and low consumption, such as cogeneration and high-efficiency boilers, automation and LED technology, smart and on-demand lighting systems or presence sensors in comparison with conventional non-efficient means.
D4. BIOCLIMATICS AND SUSTAINABLE BUILDING. Zero consumption buildings, allowing reduced consumption without the need for more sustainable energy installations.	D4.1	Percentage use of sealants, windows, building covers, etc. in comparison with systems that do not favor reduced consumption.
D5. INTEGRATION IN THE LANDSCAPE AND THE ENVIRONMENT. To favor integration in the natural landscape and environment	D5.1	Number of measures designed to favor integration in the landscape and the environment (e.g. plants and vegetation on roofs, walls and company premises to create

<p>and promote thermal reduction through production systems that promote biodiversity and respect for nature in agricultural areas.</p>		<p>shade, air moisture and avoid heat islands, color integration of facilities in the environment, and promoting the consumption of local products that are respectful of the environment).</p>
<p>D6. MANAGEMENT OF INTEGRAL WATER CYCLE AND INTELLIGENT IRRIGATION</p>	<p>D6.1</p>	<p>Number of technological resources used to favor water being a closed cycle (e.g. catchment, transportation, distribution, sewage, consumption meters, invoicing, collection, purification and treatment, etc.; low-energy gardening integrated into the environment and automated sprinkler and sensor networks to measure when and how much to irrigate).</p>
<p>D7. CIRCULAR ECONOMY, REDUCTION, REUSE, RECYCLING AND INTELLIGENT WASTE MANAGEMENT</p> <p>The circular economy involves generating products that maintain their usefulness and value and is characterized as being reparative and regenerative production.</p>	<p>D7.1</p>	<p>Number of measures adopted to favor the ecodesign of products and the reduction, reuse, recycling and intelligent management of waste above and beyond legal compliance. For ex., purchasing materials taking into account the life cycle, eco design in new products, the use of recycled products and products with environmental certification or eco labels, real-time information on container levels, etc.)</p>
<p>D8. PUBLIC TRANSPORTATION AND REMUNERATION FOR TRAVEL</p> <p>Encourages employees' use of public transport to go to work</p>	<p>D8.1</p>	<p>Number of measures encouraging employees' use of public transport to get to work (contribution to the costs of polygonal mobility, adaptation of transport schedules, real-time information on incidents and frequencies, digital advice to the traveler, etc.)</p>
<p>D9. NON-MOTORIZED MOBILITY</p> <p>Ecologically-propelled vehicles and promotion of the use of conventional bicycles or walking</p>	<p>D9.1</p>	<p>Number of measures adopted to favor the use of non-motorized mobility (electric bicycle, motorcycle and car, conventional bicycle or on foot). For example: parking, access to buildings for folding bicycles, provision of a space for changing and showering, availability of charging</p>

		networks, information systems on location and availability, rental systems, etc.
D10. TRANSIT MANAGEMENT Reducing the carbon footprint via the management of company fleets and promote vehicle sharing	D10.1	Number of measures proposed to favor the flow of traffic (calculation of company fleet's carbon footprint, mobility plans, favoring car sharing for workers' vehicles, optimizing the transport of goods, traffic forecasting, smart traffic lights, real-time driver information, warnings about incidents, etc).

Table 13. Section E: Technology

SECTION E: TECHNOLOGY		
CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
E1. DIGITAL TRANSFORMATION. Establishes mechanisms to facilitate the incorporation of technology in all processes. Facilitates the change of mindset that digitalization involves, including trends and advances in fields such as nanotechnology, genetics, and the maker movement, the collaborative economy and the circular economy. All this while addressing ethical issues in favor of people and quality of life over robotization.	E1.1	Average number of annual hours per worker the company allocates to raising awareness, training and guiding employees towards digital transformation and to addressing ethical questions in the face of robotization.
E2. INTERNET OF THINGS (IOT). Internet of things applied to different sectors of activity, allows objects to be connected to each other and to the Internet.	E2.1	Percentage of the company's products that have sensors and embedded computing that allows them to send and receive information in real time, over the total.
E3. OPEN DATA. Makes information available to workers, suppliers and customers in standard, open and interoperable formats to	E3.1	Percentage of the company's data that are in open and accessible formats for workers, suppliers and customers, over the total.

promote transparency.		
<p>E4. CYBER PHYSICAL SYSTEMS. Systems connected to each other and in turn to the virtual world of digital networks. These are advanced communications networks that comprise integrated platforms for management. They integrate monitoring, management and operation capabilities, facilitating supervision and/or control.</p>	E4.1	Percentage of company data monitored and controlled via a platform with a cyber physical system (technical infrastructure connected to open standards; systems connected via the IoT; software-defined platforms and smart service platforms), over the total.
<p>E5. 5G, CONNECTIVITY, CLOUD COMPUTING AND DIGITAL COMMERCE. 5G is the telecommunications infrastructure that enables new digital-based services (autonomous vehicle, remote medical assistance, remote surgical operations, etc.). Cloud computing makes information available to workers, clients and suppliers anywhere and any time thanks to flexible technology that allows all resources to be stored in the cloud. Offers the possibility of buying and selling online.</p>	E5.1	Percentage of company information enabled in 5G, stored in the cloud and accessible from anywhere and at any time thanks to communication technologies used for working, buying and selling, over the total.
<p>E6. COLLABORATIVE TECHNOLOGY</p> <p>Enables collaborative models that allow the birth of new C2B businesses (e.g. Waze, etc.) capacity and asset sharing (e.g. Uber, Cabify, AirBnb, Blablacar, etc.) or the integration of customers and partners in the business process, in addition to new forms of collaboration in business (crowdsourcing data, crowd-funding). Appearance of the blockchain and the possibilities it offers. Also includes collaborative robotics,</p>	E6.1	Company's annual financial resources allocated to collaborative technology in euros.

<p>a new generation of more versatile robots, easy to program and manage.</p>		
<p>E7. ADDITIVE MANUFACTURING. Or 3D printing, includes those devices that produce a 3D object from a digital input, without the need for molds or tools of any kind, through the depositing of layers of material and its consolidation.</p>	E7.1	<p>Percentage of produced objects that are manufactured through 3D printing, over the total.</p>
<p>E8. ARTIFICIAL INTELLIGENCE. Multidisciplinary area that aims to equip machines with cognitive processes typical of human reasoning such as deducing, reasoning and solving complex problems. Includes the branch of machine learning or automatic learning, which seeks to develop techniques that allow machines to learn automatically.</p>	E8.1	<p>Company's annual financial resources allocated to artificial intelligence in euros.</p>
<p>E9. IMMERSIVE TECHNOLOGY Augmented Reality (AR) is the technology that offers digital information superimposed on real vision. Virtual reality or simulation (VR) is used in the factory to recreate a mirror of the physical world in a virtual model. Mixed reality (MR) is the combination of virtual reality and augmented reality.</p>	E9.1	<p>Company's annual financial resources allocated to Immersive Technology en euros.</p>
<p>E10. CYBERSECURITY AND CYBERINTELLIGENCE. Systems for protection and warning of attacks on Internet security of essential services for companies or that can cause damage to users and clients. Physical security of data in the face of Ransomware and/or technological failure. Protection of personal data, complying with current regulations (currently the GDPR, General Data Protection Regulation).</p>	E10.1	<p>Number of measures taken to protect data and critical systems from cyber attacks (e.g., software protection systems, backup copies, personal data protection protocols, etc.)</p>

05

**General
conclusions**

5. General conclusions

5.1. Inclusive Companies, Reinventing Quality of Life

Having described and analyzed recent research into the concept of inclusive companies as a model of creation, management and business leadership, the conclusion is that it is one that, while diametrically opposed to the capitalist model, may be useful when facing the effects of the economic crisis and recession.

It has been shown that inclusive companies can help generate sustainable growth and, at the same time, maintain social cohesion, since they promote the generation of opportunities for development and aim to improve the living standards of people suffering from social exclusion.

The establishment of sustainable companies may benefit firstly, the social inclusion of disadvantaged groups, such as young people, women, migrants, the long-term unemployed, the disabled and people at risk. There is no doubt that the generation of social value for such groups aids in fighting poverty and exclusion.

Secondly, it could give rise to the strategic appearance of **new business seams in areas such as healthcare, health, the environment and education.** Sustainable companies incorporate new elements for the creation, management and administration of businesses that are connected to values, team management, corporate social responsibility and responsible marketing. As Fisac Garcia et al. (2011) point out, four factors help to resolve social problems and those related to poverty, as well as to transform or humanize the capitalist system. Thirdly, as described by Eguiguren (2011), smart, sustainable and inclusive companies encourage a sense of responsibility, transparency, democracy, participation and ethics in management.

The review of publications and other complementary research shows the need for an integrating model. The field of sustainable, inclusive companies is new, and the number of published writings has grown over recent years. The fact that the subject

is so new means that there is a need for material that is essentially expository, didactic, informative and general in nature to teach and raise awareness of it.

By way of conclusion about the forum, the participants define inclusive companies in their own way, highlighting the characteristics and attributes that should lead to the development of indicators.

In order to manage companies, corporate policies and values are required that result in a sustainable business culture at a social, economic and environmental level. Companies whose mission is based on ideals and values committed to people and the planet contribute to the common good, while also being able to generate a similar volume of economic benefits to other companies (Eguiguren, 2011).

Agustín Matía, General Manager of Down España, states: “Socially responsible and inclusive companies must generate profit for environment. They must be **very open companies, willing to form part of society and interact continuously with it, the closer to the area they are in, the better; they must listen, be transparent, and be able to explain everything they do well. Companies have to respond to what society is like: if society changes, is open and its values are being transformed, that must be taken note of.**”

For his part, Carles Serra, Assistant Rector for Social Commitment at the UdG says: “One fundamental factor is alignment. They have to be flexible in their processes, treat people well, and have the capacity and willingness to introduce changes.”

Cayetano Alemán, former machinist at Aconda Papel, adds a motivational and practical indicator: “Inclusive companies are those where after you arrive in the morning you feel like going back the next day, and when you leave you don’t feel like just another number.”

Esther Carreras, External Relations manager for the “La Fageda” cooperative, quotes a phrase from Confucius: “Choose a job that you like and you will not have to work a day of your life”. She states that the ideal company is one that **contributes socio-economic value to society, has the capacity to adapt to the new times and ends up being an inspirational model.**

In the words of Javier Blázquez, Technical Coordinator of International Projects for the ONCE Foundation, **“The inclusive company would be an open,**

communicative, innovative, conscientious, multidisciplinary, inclusive company, with a strategy aligned to its mission, and that places the person at the center of all its processes.”

Mohamed El Amrani, project coordinator at the Suara cooperative and winner of the 2014 *Fundación Princesa Social* Award, believes that the inclusive company **“is a company that fosters creativity and has a non-conformist spirit, but from the constructive point of view, that is to say, it is a company engaged in social and business activism..”**

Khaoula Echaouech, who is an unemployed geographer involved in various social projects in La Bisbal del Empordá, says that **“companies have to acknowledge and reflect the diversity that exists in society.”**

Carmen Echazarreta of the University of Girona concludes: **“The ideal company is one which is founded by people who truly work for the common good, reconciling it with the legitimate goal of working to obtain a benefit.** It is also worth highlighting that it can be different kinds of benefit: in the university it can be benefit in terms of research, quality of teaching or the well-being of the educational community in general, or if it is a commercial enterprise, economic benefit. We are talking about a third sector company with social benefit on all levels. **In inclusive companies, benefiting others is returned in personal benefit.”**

Overall, we would highlight the following differential characteristics of inclusive companies: a) Open: with a capacity to listen, transparent, in coherence with society, committed and responsible; b) Leadership that inspires, legitimizes and stimulates; c) Work in teams managed by values; d) Remunerating workers fairly; d) Creating an environment that respects and promotes equality and diversity and rejects all forms of discrimination; e) Guaranteeing universal accessibility; f) Promoting medical and health care to guarantee hygiene and safety at work; g) Promoting the reconciliation of work and family life as well as teleworking; h) Fostering continuous updating and recycling; i) Promoting professional development; j) Creating strong links with the community, encouraging volunteering, making donations, etc. k) Caring for the welfare of its teams; l) Treating its workers,

customers and suppliers fairly; and m) Having corporate social responsibility integrated as a founding principle.

Based on the characteristics described above, further tools should be developed that favor the evolution and promotion of inclusive companies and foster useful dynamics for combating the social effects of the economic crisis and the recession.

The discussion forum has highlighted that inclusive companies can benefit the social inclusion of people in vulnerable situations. Generating social value for groups at risk of exclusion undoubtedly helps combat poverty and marginalization.

Defining quantitative and qualitative indicators based on the conclusions of the forum “People, the heart of companies” lays the basis for creating a business management tool aimed at the effective management of people in organizations. The results of the bibliographic reviews and discussion forums focusing on the areas of inclusiveness, sustainability and technology and aimed at improving quality of life demonstrate the need and opportunity for an integrative model. Subsequently, experimental studies will be required to test the suitability of any tool that is developed as an instrument to identify and promote inclusive companies.

The results and qualitative conclusions of this forum need to be confirmed in subsequent research that includes other experts in the field. We conclude that, faced with these new changing scenarios and challenges, research in this field must be both multidisciplinary and systematic.

After analyzing different studies on business management focused on people, the environment and the use of technology, we conclude that the Valometer can serve as a useful tool to address some shortcomings presented by business management models aimed at human resources, energy resources and the use of technology.

There is also a need for research that takes a more critical and analytical line and reviews Valometer as a standardized inclusive model that allows the system to be implemented and the overcoming of difficulties involved in scaling a global system of creation, management and administration to the specific conditions of each company or organization. Further studies are needed to confirm the results and conclusions. We conclude that faced with these

new scenarios and challenges, research in this area should be systematic and multi-disciplinary.

5.2. Sustainable Companies, Addressing Climate Change

The conclusion, after having analysed a range of previous studies into sustainable companies, is that they may be a useful alternative with which to overcome the deficiencies presented by the current energy model, providing a progressive and efficient solution to the pressing threat of climate change.

The study assesses the approval of the Paris Agreement on Climate Change by 195 countries, which sets a limit to the emission of greenhouse gases, establishes a funding system, as well as measures to combat climate change.

In line with the summit's conclusions, the axes that are deemed determining for the environment and mobility are: "(a) Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change; (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development".

The studies analysed highlight firstly the need for an in-depth analysis of companies that are based on such factors as being smart and inclusive, both of which are necessary complements to sustainability. According to (Seisdedos et al., 2015b), **"The challenge for companies is to make economic development, respect for the planet and a better quality of life compatible with one another. As in other sectors, information and communication technologies are giving rise to smart management. Like cities, companies are responsible for most of the environmental impact made by human beings. They are large consumers of natural resources (water, energy, raw materials, ...) and generate huge amounts of waste."**

Secondly, in order to create, lead and manage companies that have a value, a smart, sustainable and inclusive integrating model based on joint responsibility, green

energy, climate change mitigation, emission, waste and noise reduction, sustainable tourism, efficient water use and urban green. The present theoretical review takes into account the global commitments of the United Nations Framework Convention on Climate Change of Paris (United-Nations, 2015a); the Kyoto Protocol: International Convention on Preventing Climate Change; models such as *People, Planet Profit*, by Fisk (2010) and Eguiguren (2011) are interesting studies.

Thirdly, scientific studies are needed that review qualitative and quantitative indicators to assess this new Vusiness model. Based on the results of the forum, a series of **differential characteristics of sustainable companies are highlighted in four areas:**

1. Minimizing consumption and promotion of renewable energies: a) Energy storage; b) A favorable Mediterranean climate to promote renewable energies; c) Communication of sustainable processes to customers and consumers; d) With short and long-term vision, internalizing the impacts it has on its environment and thinking about future generations; e) Labeling to guide consumers regarding consumption; f) Manufacturing easily recyclable or reusable products; g) Energy demand management; h) Internalizing social and environmental costs; i) Minimizing consumed resources and looking for ways of reusing them; j) Segregation of and separate waste management; k) Sustainability conceived as a fundamental, basic and mandatory value for any product; and m) Transforming the energy, transport and poultry sectors as major emitters of GHGs.

2. Mobility: a) Energy storage; b) Increasing in occupancy of all types of vehicles; c) Bicycle use; d) Car sharing; e) Electrifying means of transportation; f) Improving freight transport; g) Mobility plans; h) Transportation and mobility on demand; i) Transport, travel and sustainable mobility; and j) Electric vehicles.

3. Social, economic and environmental business management: a) Concrete and measurable actions; b) Attracting talent; c) Collaborative actions, even with the competition; d) Contribution to improving the environment in which activities are carried out; e) Collaborative economy; f) Innovative ecosystems; g) Sustainable business strategies; h) Ethics; i) Timetable flexibility; j) Equality of opportunities; k) Collaborative innovation; l) Intrapreneurship; m) Motivation; n) No to

greenwashing; o) Proactivity; p) No need to communicate the measures to improve the corporate image; q) Sustainable actions as part of the core business or main activity; r) Teleworking; and s) Transparency.

4. Public administration: a) Awareness raising through education; b) Monitoring services provided by companies that use finite energy; c) State strategy to achieve a reduction in emissions of between 7% and 8% per year to reduce the average temperature of the planet by 1.5 degrees; d) Positive taxation; e) Strategic management of the territory: location of industrial estates, empowering the local market; f) Promotion of environmental certifications or seals of environmental quality; g) Promoting long-term sustainable strategies; h) Proximity of work and school; i) Rigorous fiscal regulation for finite energies; and j) Efficient and affordable public transport.

Defining qualitative and quantitative indicators based on the conclusions of the forum “Sustainable companies, tackling climate change” provides Valometer, a tool for the creation, management and business promotion of sustainable management in organizations, minimizing the emissions of finite energies and boosting renewable ones.

In line with that posited by Echazarreta and Costa (2017b), we highlight the need for review a unifying Vusiness model, based on the results of the literature review and the discussion forums centered on inclusivity, sustainability, and technology working to improve quality of life. Some experimental studies are also needed to contrast the suitability of the indicators defined by the various professionals in order to identify and support companies with values. Finally, we recommend the development of an easily applied instrument for businesses with the aim of applying the described values in organizations.

The results and conclusions of the current debate need to be confirmed in subsequent research that includes other experts in the field as well as a different research methodology. Faced with these new challenges, research in this field must continue to be both multidisciplinary and systematic.

The development of didactic content and informative and training material is recommended to raise the awareness of and train the public in general as well as staff, suppliers and clients.

The results of this study are preliminary and have to be confirmed through further analysis. Research in this field should be continuous and multi-disciplinary.

5.3. Smart Companies, Inspiring the Future

Having described and analysed the most relevant and recent research on different models of creation, management and leadership, we conclude that **smart companies may be a useful alternative in overcoming the shortcomings of the current economic model that has triggered profound economic and financial crises.**

In this theoretical review, we have included models such as People, Planet, Profit, devised by Fisk (2010), some interesting research by Eguiguren (2011), managing by values by S. García and Dolan (1997) and Pin et al. (2005), and the principles of leadership and management based on Owen (2008) and Walumbwa et al. (2008). We have also referred to the digital transformation of cities by Seisdedos et al. (2015a) to describe the characteristics of information technology and communication used in this environment.

Of the main elements highlighted here, communication is new to the field of business management models. The authors of this article believe that communication has become a cornerstone of business management, as the emergence of aspects such as citizen journalism, Internet 3.0 and social networks have socialized information and democratized its use, enabling customers, employees and suppliers to create content, give opinions and have an influence on any company.

Our review highlights, firstly, the need for an in-depth analysis of companies based on factors such as sustainability and inclusiveness, necessary complements to intelligence or smartness.

Secondly, it reveals **the need for strengthening an integrative Vusiness model, drawing on the results of this literature review, which bases its principles on three factors: intelligence, sustainability and inclusiveness, aimed at business creation, administration and management.**

And thirdly, descriptive studies are needed to confirm quantitative and qualitative indicators for evaluating this new Vusiness model. Subsequent to this, there will be the need for studies with experimental designs, capable of evaluating the results of the model.

In the forum, Carmen Echazarreta concludes that we live in a time of great technological innovation, with the potential to help give an answer to a majority of social challenges: overcoming the economic and financial recessions, fighting inequality, eradicating climate change, eliminating child labor, counteracting the ageing population or stopping rapid urbanization.

As the forum progresses, we highlight a series of differentiating characteristics of **businesses that make a smart use of technology in different areas of knowledge:**

Technology: a) Humanization and progressive creation of online, customer-facing jobs of value in the face of automation and digitalization; b) Technologies for improving quality of life, and c) Cyber security and data protection.

Administration and management: a) Reconciling economic activity and generation of value for stakeholders; b) people management and talented, responsible leadership by leaders with an ability to communicate and improve the people surrounding them; c) optimizing the work environment, fostering collaborative work and teams with shared goals and vision; d) care for and adequate management of staff, valuing talent, increased flexibility in working hours to encourage harmony and the importance of adequate remuneration; e) generating a pride of belonging and involvement in employees; f) giving back to society; g) treating customers with dignity, compassion, empathy and actively listening; h) respect for generational, cultural, and general diversity, and i) promoting volunteering.

Research: a) Innovation as a priority; b) guided and applied research; c) transfer of knowledge between university and business, and d) knowledge creation

Education and training: a) Educating in values in the face of challenges posed by technology, designing strategies and training on cyber security and cyber bullying; b) education and awareness for working with new emerging models, and c) training and recycling for employees.

Communication: a) Transparent communication management; b) social media and business communication capable of segmenting and capturing customers while nurturing loyalty; c) social journalism with a democratizing role, fostering freedom of expression and the right to gather information; d) op-ed sites and community testimonies that foster a concern for business reputation and improvement; and finally we would highlight e) the digital gap, which creates inequality between those people who have access to and knowledge of new technology, and those who do not. Based on the parameters described here, some tools will be developed to foster the promotion of businesses that make smart use of technology and are able to favor useful dynamics for fighting the social effects of automation and digitalization.

Defining quantitative and qualitative indicators based on the conclusions of the forum “Smart businesses, creating the future” lays the basis for creating a business management tool aimed at the effective management of technology in organizations.

In line with that posited by Echazarreta and Costa (2017b), we highlight the need for reviewing a unifying Vusiness model, based on the results of the literature review and the discussion forums centered on three areas: inclusivity, sustainability, and technology working to improve quality of life. Some experimental studies are also needed to contrast the suitability of the indicators defined by the various professionals in order to identify and support companies with values. Finally, we recommend the development of an easily applied instrument for businesses with the aim of fostering values related to inclusivity, sustainability and smart use of technology.

The results and conclusions of the current debate need to be confirmed in subsequent research that includes other experts in the field as well as a different

research methodology. We conclude that, faced with these new changing scenarios and challenges, research in this field must be both multidisciplinary and systematic. Finally, we recommend developing educational content and informative and training material for the new model, in order to raise awareness among the general population and train managers, employees, suppliers and customers in its use and thus contribute to business sustainability in the medium and long term.

The present results and findings require confirmation in future studies. We conclude that, in the face of an uncertain future, research in this area should be constant and cover different disciplines.

06

Discussion

6. Discussion

6.1 Next steps

According to Echazarreta and Costa (2017a): “The destruction of thousands of jobs, precarious labor market conditions and a lack of work are risk factors in environments of exclusion and social marginalization. Victims in industrialized societies tend to be the least qualified workers”. **Business management with values may provide a progressive and effective response to these problems, challenges and threats arising from globalization and economic and financial crises, the consequences of child labor, the irruption of technology and severe climate change.**

The axis of Identity is committed to creating a more balanced society since, according to Rocha and Aragon (2012), modern society is presenting an increasingly unequal distribution of wealth.

In a complementary sense, **the axis of Administration and Management aims to promote more horizontal and collaborative management models, in which the involvement and loyalty of suppliers, workers and customers is essential and decisive for the company**, in line with the conclusions of studies by Todolí-Signes (2017).

The Valometer’s axis of People is designed to prevent the effects of economic and financial crises since, according to Hadad Hadad and Valdés Llanes (2010), crises create precarious labor markets, causing the destruction of thousands of jobs and an increase in embargoes and evictions that have a social impact on the most vulnerable groups.

In addition, it shows a commitment to awarding value to people, with the aim of enhancing productive processes and slowing down the outsourcing of processes characteristic of a globalized culture committed to offshoring. In line with the theories posited by Mendizabal and Errasti (2006), awarding people value in an organization is shown to have a direct impact on the productive fabric.

Fourthly, **the axis of Sustainability is designed to address and respond to climate change**, which according to Echazarreta and Costa (2018c) represents a pressing threat with potentially irreversible effects. Globalization increases the unbalanced use of non-renewable finite energy resources, largely due to high transport transits. Hence the need for business management models that combine the development and growth of companies with protection of the environment and the planet.

Finally, **the axis of Technology is designed to facilitate the transition to the processes of digitization and artificial intelligence development**, which according to Recio (2018) entail a profound change in how companies organize their work.

The purpose of the indicator system is to improve business management and help determine priorities for action. The data collected during the phases of tool development and pilot testing suggest that only comprehensive management programs using values in the different areas can help overcome the shortcomings of the current business management model described in the four bibliographic reviews.

The results of using the Valometer are based on self-evaluation, observations, data collection from different sources and the analysis of these data by companies. No minimum values were established and no certifications provided.

However, identifying indicators provides companies with the basic information to monitor in the five areas, which facilitates more effective management according to values towards people and the environment.

By way of conclusion, based on the comments received from the companies involved in this study, **a group of experts from the University of Girona will periodically review the system.** The 2018 edition of the tool is the result of the pilot test. It is our hope that later editions will offer a verified and suitable system.

We recommend a steering group be created to make changes and award value to the tool and a unified communication strategy be established for the tool, in the same direction and with the same attributes and values.

With the aim of raising awareness of it in the business world, it is proposed that a White Paper be drafted on “good practices” to encourage management with values.

6.2. Relations with international universities

The Vusiness project has been presented internationally at the Universities of Harvard and the MIT-Massachusetts Institute of Technology

In April 2017, the Vusiness project was presented at the five major universities in Boston and Cambridge in the United States. A delegation from Girona met these five prestigious universities to explain the project and propose a framework for collaboration. Specifically, they met with Ronnie Haas, Director of Strategic Talent Management in the Human Resources Department of MIT in Boston; Pam Bonnell, Director, Staff & Organizational Development at Emerson College, Boston; Bernard R. O’Kane, Director, Office of Employee Development, Human Resources at Boston College; Stefane Cahill Farella, MBA, SPHR, Associate Director, Organizational Effectiveness at Boston College; Lisa Vigliotta, HR Partner at Suffolk University of Boston; Melissa Brown, Director, Center for Workplace Development at Harvard University, Massachusetts; and Jack Jennings, Executive Dean at Harvard Grad School of Education, Harvard Graduate School of Education.

In addition, in Boston the delegation met Marc Gracia, Innovation Manager for ACCIO, belonging to the Autonomous Government of Catalonia, and Ricard Garcia, founder of the Richi Foundation, who also expressed the willingness to work together to foster the creation and management of companies based on values.

On this visit to the United States, the Vusiness initiative was supported by letters from the then President of the Autonomous Government of Catalonia, Carles Puigdemont; the Minister of Labour, Social Affairs and Families, Dolors Bassa; the Rector of the University of Girona, Sergi Bonet; the Girona Delegate of Territorial Services for Work, Social Affairs and Families, Marta Casacuberta; the General Manager of the Princesa de Girona Foundation,

Mònica Margarit; the councillor responsible for Economic Promotion - Diplab - on Girona Regional Council, Josep A. Frias; and the director of Corporate Resources and Legal Representative of ACC10 for the Autonomous Government of Catalonia, Marta Esteves.

This trip represented a qualitative leap forward for the investigation, as it resulted in a collaboration whereby the American universities provide their own material to give value to the Vusiness project. A congress is now being prepared in which Harvard and MIT professors are scheduled to participate.

The **aid programme for the improvement of scientific productivity (University of Girona Research Groups 2016-2018 - UdGMPC2016)** awarded to the Vusiness Project (Business & Values) has proven an immense help with progress in this research.

In addition, during 2018, the Autonomous Government of Catalonia recognized the ARPA Research Group, which the Vusiness project belongs to, as an Emerging SGR 1613 Research Group, classified as **a group with a brief trajectory of joint work but with the potential to become an established reference research group.**

The research generated within the framework of the Vusiness project aims to provide robust scientific evidence to highlight the benefits of a transition to a business model based on values such as sustainability, inclusiveness and the smart use of technology. **It is hoped that this will lead to further descriptive research and initiate experimental investigations based on the scientific bases of the Vusiness model, contrasting whether it is a useful model for the creation and management of values-based companies.**

One of the basic initial challenges emerging from the Vusiness project is the transfer of knowledge on the five axes of education, entrepreneurship, business, governance and society in general (See Figure 2).

Figure 2. Vusiness: A model for the creation and management of companies based on values. Transferring knowledge.

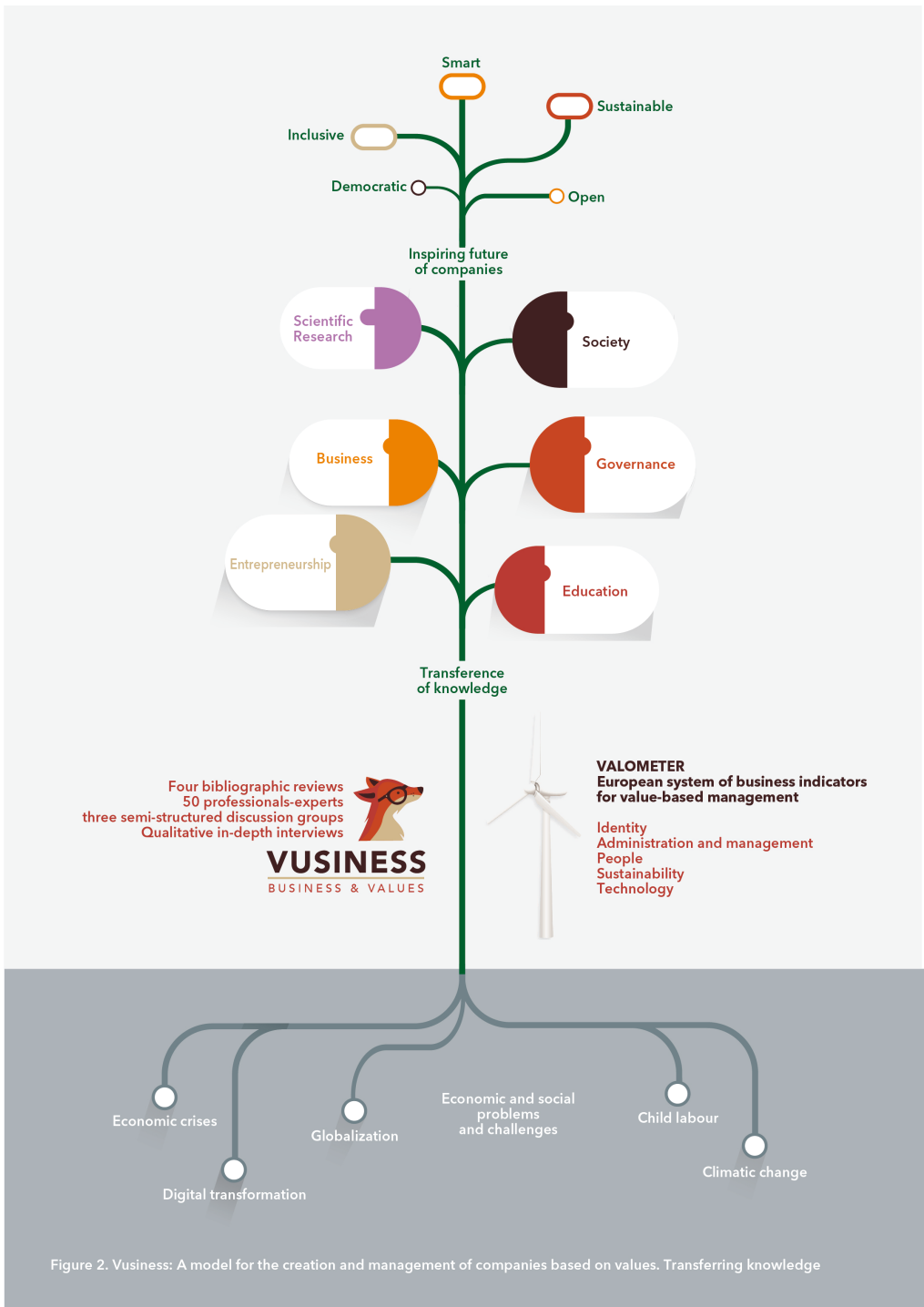


Figure 2. Vusiness: A model for the creation and management of companies based on values. Transferring knowledge

6.3. Transferring knowledge in education

The Vusiness project has created teaching materials for teachers, professors and students to work on content related to the three axes of the project (inclusiveness, sustainability and smart use of technology) in primary, secondary and university education.

At the level of **children's education, a children's story has been written about sustainability**, which will be published shortly and has been read to several primary school classes as a pilot test.

As for **secondary education, joint work has been done with the INS Montilivi school in Girona since the start of the project**. One of the most important actions implemented by this school has been the Arnau project, which entailed pupils creating a system to improve the mobility of a blind boy with cerebral palsy, inspiring the creation of a company for adapting and customizing wheelchairs. In the next school year, we expect the active participation of other schools in the province already interested in the project, such as La Salle in Girona.

Furthermore, a meeting was held with the **Entrepreneurship Network of the Catalan Government's Ministry of Education** at its Girona headquarters on May 18, 2017, with the aim of disseminating the Vusiness Project to a hundred secondary school teachers in charge of entrepreneurship and present activities to work on in the classroom using the Vusiness model.

At the university level, three workshops have been held within the framework of the "Between subjects and attributes" lecture series organized by the University of Girona's Faculty of Tourism. Specifically, the **lecture "Vusiness. Sustainable companies: addressing climate" was held** on March 22, 2018. It can be viewed in full at: <http://hdl.handle.net/10256.1/5088>

In addition, the lecture "Vusiness. Inclusive Companies: reinventing quality of life" was held on April 12, 2018. **It can be viewed at:** <http://hdl.handle.net/10256.1/5111>.

And finally, **the lecture “Vusiness. Smart Companies: inspiring the future” was held** on May 17, 2018. It can be viewed at <http://hdl.handle.net/10256.1/5159>.

It is hoped that a working commission of teachers, professors and students from different levels of education will soon be created with the aim of sharing and jointly developing various actions in the region to disseminate the creation and management of companies based on values (pedagogical material in different formats, spaces for the transfer of good practices, competitions, etc.).

6.4. Transferring knowledge in entrepreneurship

The **Vusiness Plan** has been developed at the University of Girona. It is **a tool for evaluating the viability of a business, making identity (mission, vision and values) the core from which the whole company is developed**. The tool has been transferred to the Entrepreneurs Network, a public-private network comprising more than 150 entities and 500 managers promoted by the Autonomous Government of Catalonia and providing support for people who want to set up a company.

In addition, **seminars and workshops have been held to train and raise awareness** among entrepreneurs regarding the creation and management of companies based on values.

It is important to acknowledge here the **two grants awarded by the University of Girona’s Social Council** to develop Emprèn amb Valors (2017) projects and the Pla d’Empresa amb Valors [Vusiness Plan] (2018), the aim of which is to generate pedagogical material for promoting entrepreneurship with the values of sustainability, inclusiveness and the smart use of technology.

There is also a plan to disseminate and exchange tools and good practices related to the creation and management of companies based on values with other entrepreneurial networks in other countries.

6.5. Transferring knowledge in the company

The Vusiness project received first prize in the III Santander Awards in the category short essay on CSR.

This prize is awarded by the Santander CSR Chair network, sponsored by Banco Santander, and is aimed at promoting participation by university students, professors, researchers and professionals interested in contributing value to society through training, studies or initiatives on CSR.

The organization highlighted the originality, clarity and rigour of the arguments presented as decisive aspects in its selection of first prize for the essay entitled “Companies with values, inspiring the future”. The award ceremony took place at the University of Salamanca.

The transferral of the Valometer in its Catalan, Spanish and English versions has commenced to various companies and business organizations, including PIMEC, FOEG, Chambers of Commerce and Business Incubator Centres in the region. It is hoped that the dissemination and exchange of good practices will be extended to institutions and companies from other regions.

6.6. Transferring knowledge in governance

This has comprised delivery of the lecture: **“Why is Europe failing? Economic Challenges and Social Values”** by **Ramon Tremosa**, on February 8, 2019 in the University of Girona’s Ceremonial Hall, with the presentation by **Quim Salvi**, rector of the University. The lecture was open to all audiences and a hundred attendees participated.

On April 3, 2019, meetings were held with MEPs at the European Parliament in Brussels to discuss the Vusiness Model. Meetings took place with the following MEPs and their teams: **Josep-Maria Terricabras**, MEP and Vice-President of Greens/EFA Group in the European Parliament; **Ramon Tremosa**, MEP and member of the Committee on Economic and

Monetary Affairs and the Delegation for relations with the United States in the European Parliament; **Jordi Solé**, MEP and member of the Foreign Affairs and Budgets Committees in the European Parliament; the team belonging to **Francesc Gambús**, MEP and member of the Committee on the Environment, Public Health and Food Safety in the European Parliament; the team belonging to **Santi Fisas**, MEP and member of the International Trade Commission in the European Parliament; **Izaskun Bilbao**, MEP and member of the Committee on Transport and Tourism and the Delegation in the Euro-Latin American Parliamentary Assembly in the European Parliament. Subsequently, support was also received from MEP **Ramón Jáuregui**, president of the Delegation to the Euro-Latin American Parliamentary Assembly and member of the Conference of Delegation Presidents in the European Parliament.

Based on the various recommendations we have received, we will be contacting the **European Commission's representative in Barcelona** to explain the project and look for lines of collaboration aligned with shared priorities.

Secondly, we plan to contact the **Directorate of the European Commission Grow** and study calls for aid and the bases of the annual prize awarded by the General Directorate of Grow, which gives publicity and rewards the corporate social responsibility actions at a European level. We will also directly contact the Corporate Responsibility Unit of the Grow General Directorate to explain the project and seek out synergies.

Thirdly, we will contact the **Enterprise Europe Network**, which offers a range of services to Catalan SMEs with the aim of improving their competitiveness and accessing European research and development programmes.

And finally, we will also contact the **European Commission's Executive Research Agency** in Brussels to assess the possibility of collaborating at the level of research and knowledge transfer.

The values of inclusiveness, sustainability and smart use of technology promoted by the Vusiness model are aligned with the Cittaslow (Slow City) philosophy promoted by the Association of Municipalities for Cittaslow Quality of Life in Spain and the Cittaslow International Association, with headquarters in Italy. The Cittaslow movement was conceived to provide a response to the stress, rush, crowds, queues, noise and asphalt in cities. Slow cities slow their speed to become spaces where life quality and love for tradition, identity and history are reconciled with comfort and modernity, thinking of future generations. The Cittaslow international network comprises 252 cities around the world in 30 countries: Australia, Austria, Belgium, Canada, China, Colombia, Denmark, Finland, France, Germany, Great Britain, Hungary, Iceland, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Poland, Portugal, South Africa, South Korea, Spain, Sweden, Turkey, Switzerland, Taiwan, Cyprus, and the United States of America. In its general assembly held in April 2019, the Spanish network approved the use of the Vusiness methodology to promote the creation and management of companies based on values. The use of the Vusiness model for the creation and generation of companies at an international level is also expected to be approved at the International General Assembly to be held in Orvieto, Italy next June.

6.7. Transferring knowledge to society in general

We highly value visits made to Madrid to hold meetings with those responsible for **Down España and the ONCE Foundation, as well as meetings held at the UPC headquarters with Marcos Eguiguren and at the headquarters of the Mobile World Capital Barcelona Foundation with Carlos Grau, director of the Mobile World Congress, with whom very good relations have been established.**

The first Mobile Week Girona was organized as a result of these relations, a satellite of the Mobile World Congress, which is an open space for reflection on technological and digital development in favour

of improving quality of life. Under the slogan “Our simple relationship with technology”, the conference invited citizens to reflect on the impact digital transformation has had on their daily lives through areas such as tourism, science and education. On Monday, February 25, 2019, specific lectures were held on new social economies in the Ceremonial Hall belonging to the University of Girona’s Faculty of Arts.

Based on this experience and the relations established with the Mobile World Capital Foundation, we hope to be able to participate in future initiatives related to innovation, talent, technology and society, such as The Collider, Innovation Hub, Barcelona Digital Talent, mSchools, Digital Future Society, and events like 4 Years From Now (4YFN) and Mobile Week.

Complementarily to this, we will explore relationships with different entities, especially in the third sector, to launch joint awareness actions to promote the creation and management of companies based on values.

The Vusiness revolution has only just begun.

07

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7. Bibliography

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08



Annexes

8. Annexes

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Amplificando la voz de los ciudadanos ante la globalización mediática

Amplifying citizens' voice in front of the media globalization

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RESUMEN

Las crisis económicas han afectado fundamentalmente a los sectores sociales más vulnerables y se han generado situaciones de pérdida de libertades y desigualdad. Actualmente, la mayoría de medios son controlados por un conjunto relativamente pequeño de empresas a escala mundial. Ante esta situación, la sociedad conectada en red ha acelerado el desarrollo de modelos de comunicación alternativos, que actúan como altavoces para los ciudadanos. El objetivo de este estudio es describir las principales características de las nuevas formas de expresión, comunicación y colaboración ciudadana como son las redes sociales, las webs de opiniones, el periodismo ciudadano y la economía colaborativa. Se concluye que ante estos nuevos retos es imprescindible continuar desarrollando principios éticos de autorregulación para garantizar la veracidad y rigurosidad de las nuevas formas de comunicación en la red.

Palabras clave:

Comunicación, Redes sociales, Webs de opiniones, Periodismo ciudadano, Economía colaborativa y Principios éticos de autoregulación.

ABSTRACT

The economic crises have mainly affected the most vulnerable social sectors and have created situations of loss of freedom and inequality. Currently, most media are controlled by a relatively small set of companies worldwide. In this situation, networked society has accelerated the development of alternative communication models which act as speakers for citizens. The aim of this study is to describe the main features of the new forms of expression, communication and cooperation of citizens such as social networks, review-sites, citizen journalism and collaborative economy. It is concluded that with these new challenges is essential to continue to develop ethical principles of self-regulation to ensure the accuracy and thoroughness of new forms of communication on the network.

Key words: Communication, Social networks, Review-sites, Citizen journalism, collaborative economy and Ethic principles for self-Regulation

INTRODUCCIÓN

Necesidad de periodismo plural y riguroso

En el entorno actual, la crisis económica ha afectado fundamentalmente a los sectores sociales más vulnerables, generando desempleo y precariedad laboral. Además, se han generado situaciones de pérdida de libertades, desigualdad y exclusión a todos los niveles.

En lo referente a los medios de comunicación, si bien históricamente habían supuesto un recurso de los ciudadanos contra el abuso de poderes, actualmente la mayoría de medios son controlados por un conjunto relativamente pequeño de empresas globales con un peso significativo en la economía a escala mundial. Dichas empresas controlan los grupos mediáticos y a menudo actúan como el brazo ideológico de la mundialización, menguando las reivindicaciones populares; evitando modificar la jerarquía social y manteniendo la desigualdad en la distribución de la riqueza (Ramonet, 2016).

Según Herman y Chomsky (2010), uno de los indicadores para valorar la democracia en un estado es la libertad de sus medios de comunicación. En este sentido se afirma desde Naciones Unidas: "La libertad de información es un derecho fundamental y [...] la piedra angular de todas las libertades".

Por lo tanto, en el momento actual de vulnerabilidad en la que una parte de la sociedad sufre riesgo de exclusión, los medios de comunicación deben hacer un esfuerzo para compatibilizar la rentabilidad social con la eficiencia económica y deberían: a) Promover valores como libertad, igualdad, justicia y pluralismo ideológico; b) Generar el pleno respeto a las minorías a través del debate democrático, la información libre, plural, objetiva y la libertad de expresión; c) Desarrollar actuaciones para promover los derechos de los menores, la igualdad entre sexos y la no discriminación; d) Ofrecer contenidos de calidad, innovación, di-

versidad y con rigor ético, y e) Asegurar la protección de los derechos del consumidor (Manfredi, 2004).

La globalización de la economía ha minvado el poder del que ejercían los medios de comunicación para defender los derechos fundamentales de las personas a estar informadas. En este entorno, organismos como el FMI y el Banco Mundial influyen sobre grandes eventos económicos, tutelan gobiernos y dictan las tendencias de la economía. En contraposición, y actuando como vehículo amplificador de la voz de los ciudadanos, en el presente artículo se analizan las redes sociales, las webs de opiniones, el periodismo ciudadano, la economía colaborativa y principios éticos de autorregulación, oportunidades generadas para garantizar el derecho de las personas a informar y estar informadas.

REDES SOCIALES

La voz de los ciudadanos se hace viral

El crecimiento exponencial de las redes sociales ha encendido las alarmas en los medios de comunicación tradicionales y han pasado a considerarse como las principales fuentes de entretenimiento e información, que toma elementos, recursos y características de los medios tradicionales pero que es capaz de incorporar elementos novedosos como la interactividad, los videojuegos, los contenidos audiovisuales y la realidad virtual así como el hecho de ofrecer un modelo de costos económicamente más austero. Según Campos (2008), aunque los medios tradicionales tienen la ventaja que se orientan más a la información que al entretenimiento, tienen que hacer un esfuerzo para regenerarse en el panorama mediático actual.

En abril de 2016, Facebook cuenta con 1.650 millones de usuarios activos en el mundo,

de los cuales 934 millones entran en Facebook cada día; a la vez 22 millones en España. En julio del mismo año Twitter dispone de 310 millones de usuarios activos mensuales de los cuales 1,5 millones son españoles. Según García-Galera, del Hoyo-Hurtado, y Fernández-Muñoz (2014) cada vez más, las redes sociales son utilizadas para reivindicar de forma activa la voz de los ciudadanos.

En España se observa una profunda transformación del periodismo y de los medios de comunicación tradicionales hacia el progresivo acercamiento de algunos cibermedios españoles a redes sociales como Facebook para localizar y desarrollar nuevos productos periodísticos. Aunque los resultados demuestran que la mayoría no aprovecha la red para fomentar la participación, y se concluye que espacios y recursos no son optimizados (Vivo, 2010).

Estudios recientes sugieren que más del 95% de los estudiantes universitarios británicos piensa que Facebook es más útil para sociabilizarse y hablar con los amigos sobre trabajo que realmente para hacer trabajo. En el mismo sentido, afirman que no es una red utilizada con propósitos relacionadas con la enseñanza formal, aunque a veces sea usada informalmente con la finalidad de aprender (Madge, Meek, Wellens, & Hooley, 2009).

Dada su enorme influencia, las empresas se están viendo obligadas a integrar las redes sociales en sus estrategias de comunicación y márketing. Se han analizado el uso de Facebook y Twitter en las 3 principales marcas comerciales en España de 15 sectores, con la finalidad de ofrecer una visión general y analizar la actividad de las cuentas más sensibles a las críticas para conocer y valorar la estrategia comunicativa de sus responsables. Después de analizar 5.433 tweets y 3.000 posts se pone de relieve la presencia masiva de las compañías en las redes sociales así como el uso cada vez más generalizado que las empresas hacen

de las mismas con el fin de comunicarse con sus clientes (Dasilva, 2013).

Los resultados de una investigación de Aced Toledano y Lalueza Bosch (2016) demuestran que no existe, en general, una diferencia significativa entre el uso de los medios sociales que hacen las empresas estadounidenses y las empresas españolas. Se observa una diferencia estadísticamente significativa en la atención al cliente a través de Twitter, que está más extendida en las empresas del IBEX 35 que en las del Fortune 500. Otra diferencia significativa es que las empresas del IBEX 35 publican más contenido audiovisual en los blogs y obtienen el doble de "me gusta" en Facebook que las empresas del Fortune 500. En ambos casos se observa un uso estratégico de los medios sociales por parte de los profesionales de ambos países. Y de hecho, en línea con los resultados de las investigaciones de Islas, Arribas, Piscitelli, Adaime, y Binder (2010), las empresas deben hacer un esfuerzo para "Comprender las redes sociales como ambientes mediáticos" ya que se observa un uso exponencial por parte de los ciudadanos de las redes sociales para denunciar malas praxis empresariales.

Un estudio reciente de Chua y Banerjee (2013a) sobre Starbucks, analiza de forma exhaustiva la comunicación de la cadena en periódicos, revistas, artículos, libros y redes sociales, enfatizando hasta qué punto este último medio de comunicación on-line pueden ayudar al conocimiento del cliente para su mejor gestión. El estudio concluye que las redes sociales, por sus características de interactividad, es el medio que permite conocer mejor a los consumidores y gestionar la reputación on-line de la organización. Starbucks redefine las relaciones con los clientes, pasando de ser receptores pasivos a colaboradores activos clave para la innovación de la empresa. Finalmente, la empresa utiliza las redes sociales para fidelizar a sus clientes.

WEBS DE OPINIONES

Usuarios que comparten su experiencia en la red

Un estudio de la ITB (2014) resultado del análisis de los datos de una encuesta realizada a unos mil usuarios de Internet y analizadas 17 páginas de comentarios, revela que el 96% de los viajeros consulta las webs de comentarios y que un 82% confía en las opiniones publicadas. Por otro lado, el 30% piensa que un elevado porcentaje de críticas son falsas, mientras que los gestores de las webs indican que los comentarios intencionados suponen entre el 1% y el 5% el total. Para evaluar la autenticidad de los comentarios los usuarios valoran los contenidos que parecen genuinos, y estadísticamente el 70% afirma que el establecimiento era tan bueno como indicaban los comentarios y el 20% lo describe aún como mejor. En el mismo estudio se han realizado 1.500 encuestas a directores de hoteles. Los resultados indican que el 94% piensa que las webs de comentarios tienen una gran influencia en los consumidores a la hora de elegir el alojamiento, a la vez que el 81% de los comentarios tienen un impacto directo en la imagen del hotel.

Tripadvisor, con 350 millones de visitantes únicos al mes, y más de 320 millones de opiniones y comentarios se considera la mayor web de viajes del mundo en 2016. Según Horner y Swarbrooke (2016), Tripadvisor han introducido en los últimos años una serie de interesantes desarrollos que han supuesto una aportación significativa en las redes: Un programa de acreditación de Líderes Verdes para hoteles y sus políticas ambientales; Un fórum sobre viajes donde los viajeros pueden plantear sus preguntas y otros viajeros pueden postear respuestas; Apps para smartphones y tablets que facilitan la consulta de la información durante el viaje; Un enlace a Facebook que facilita que nuestros amigos vean qué contenidos hemos estado revisando en Tripadvisor, y sus propios galardones, que incluyen hoteles, destinos, atractivos turísticos, etc.

Las investigaciones de Chua y Banerjee (2013b), visto el crecimiento relacionado con la generación de contenidos a través de Internet, se centran en el análisis de la fiabilidad de las revisiones que aparecen en TripAdvisor. Los resultados sugieren que las revisiones publicadas en TripAdvisor podrían ser en gran medida fiables.

En contraposición, según Cánovas, García, y María-Dolores (2015), se pone en cuestión continuamente la fiabilidad de las más de 170 millones de opiniones registradas en la web. A pesar de que TripAdvisor o Booking aconsejan animar a los clientes a participar dando su opinión, prohíben explícitamente ofrecer nada a cambio. El estudio detecta un número de casos significativo en el que se producen sorteos y se observa que condicionan a los participantes sesgando sus respuestas hacia puntuaciones positivas.

De forma complementaria, un estudio realizado por Tuominen (2011) sobre 1752 opiniones sobre 77 hoteles de 6 ciudades distintas, concluye que existe una correlación entre los resultados promedio de los hoteles y el número de evaluaciones obtenidas. Se sugiere que las opiniones previas de otros usuarios influyen sobre las posteriores.

Muchos consumidores consultan las revisiones online antes de hacer las reservas de los viajes, pero la investigación acerca del impacto que tienen las puntuaciones y comentarios de los usuarios en el rendimiento de los alojamientos turísticos es insuficiente. A raíz de esta evidencia, Tuominen (2011) realiza una exhaustiva investigación y análisis sobre 1752 revisiones y los datos de rendimiento de 77 hoteles de seis ciudades distintas. Los resultados muestran una correlación positiva entre el rendimiento de los hoteles y las puntuaciones y revisiones obtenidas. La investigación sugiere la necesidad de tomar en consideración y gestionar correctamente los comentarios así como la calidad descrita y percibida a través de las puntuaciones de los mismos.

Entre las webs de opiniones destaca Booking, que en julio de 2016 opera en 224 países, dispone de 990.369 alojamientos en todo el mundo, y dispone de 98.780.000 comentarios verificados. Un estudio de Sparks y Browning (2011) explora cuatro factores considerados clave a la hora de influir en la percepción de veracidad de los consumidores a la hora de valorar los comentarios realizados acerca de establecimientos en Booking, así como las posteriores elecciones efectuadas. Se utilizó un diseño experimental para investigar cuatro variables independientes: el objetivo del comentario o revisión (personal o profesional); balance global de las opiniones (positivo o negativo); formulación de las opiniones (si primero de informa de lo negativo o de lo positivo); puntuación numérica que acompaña el texto.

Los resultados del estudio indican que los consumidores están más influenciados por la información negativa temprana, especialmente cuando el conjunto global de comentarios es negativo. Sin embargo, la información enmarcada positivamente acompañada con puntuaciones numéricas genera confianza en el consumidor y predispone a la intención de reserva. Los resultados sugieren que los consumidores tienden a confiar en los comentarios que están redactados de forma clara y que son fáciles de procesar. También generan elevados niveles de atribución de veracidad los comentarios que se focalizan en el servicio interpersonal de atención al cliente.

Analizados los resultados de los distintos estudios, se concluye que cada vez más usuarios confían en las opiniones generadas en la red, comparado con otras fuentes de información, a la hora de decidir su opción de viaje (Sparks & Browning, 2011).

PERIODISMO CIUDADANO

Altavoz de denuncia social gestionado por usuarios

Los procesos como la digitalización y la aparición de la red de Internet son los principales factores que han revolucionado la comunicación. Las características de los nuevos formatos requieren particularidades a nivel de narrativa del discurso (Seisdedos et al., 2015).

Los ciudadanos tienen el derecho fundamental a recibir información y a expresarse. En el panorama mediático actual se observa cierta saturación informativa, ya que múltiples medios de comunicación emiten, y a pesar de que habría que garantizar que sus contenidos sean de interés público y que la información que difunden sea veraz, no siempre es así. Hay que velar por los derechos del ciudadano, que a pesar de la lluvia de mensajes que recibe, puede estar desinformado o recibir información contaminada. Hay que garantizar las actitudes éticas adecuadas de los profesionales de la comunicación para que ejerzan con la finalidad adecuada (Alonso González, 2015).

En términos de Bowman y Willis (2003) se considera periodismo ciudadano cuando este toma un rol activo en el proceso de recogida, análisis y difusión de la información en la comunidad, tomando contacto con sus necesidades.

Los medios de comunicación de masas tenían que ser el poder real para hacer eco de la voz del pueblo. En algunos países autoritarios y dictatoriales, el estado utiliza los medios de masas para sus intereses particulares. En otros países, a pesar de ser democráticos, también hay abusos y errores de manipulación de la información para garantizar el poder a través de ejercer el control.

En este entorno, la opinión pública, elemento indispensable del pluralismo político y social, ha encontrado en el periodismo ciu-

dadano una nueva forma de expresión (Pavlik, 2005).

El nacimiento de las redes sociales y del periodismo ciudadano ha supuesto un quinto poder que permite denunciar el control mediático de los gigantes financieros, y garantizar que la información que nos llega sea como mínimo contrastada y rebatida. El receptor se ha convertido en emisor especializado, exigente, con voz, que tiene la capacidad de elegir y participar con una forma diferente a la tradicional (Carballido, 2008).

Por otra parte, ante este nuevo panorama mediático, los géneros representativos del periodismo de calidad como son los reportajes, las crónicas o los análisis se ven amenazados porque encarecen y retardan las rutinas de producción, y los lectores, cada vez apuestan más por la rapidez, interactividad, emocionalidad, y superficialidad hipertextual del periodismo on-line (Parratt, 2012).

Una de las formas de desarrollar nuevos productos periodísticos para Internet es a través del uso de las distintas redes sociales como plataforma para la publicación de los contenidos del periodismo ciudadano. Además, en este entorno se han extendido formatos como blogs o video blogs con contenidos generados exclusivamente por usuarios o la misma revista "Qué!" primer medio español elaborado por sus propios lectores. (Ayerdi, 2005).

En ocasiones también se le denomina periodismo social, cuando asume la responsabilidad, reflexión y búsqueda de soluciones alrededor de la esfera social. Según afirma Merritt (1998), creador del término, que "la prensa contemporánea necesita ser capaz de trascender la misión limitada de contar las noticias, hasta una misión más amplia, de ayudar para que la vida pública funcione bien y de actuar fundándose en este imperativo".

Según Meso (2005): "El periodismo ciuda-

dano es aquel que hace posible la participación activa de los actores sociales que intervienen en todo el procesamiento de la información de interés público. Por lo tanto, sus características esenciales son formar opinión pública mediante la creación de públicos deliberantes y promover la participación ciudadana."

ECONOMÍA COLABORATIVA

Modelos económicos disruptivos basados en compartir a través de Internet

Según Hadad Hadad y Valdés Llanes (2010) las crisis económicas y financieras cada vez son más frecuentes, profundas y globales. A la vez, la desaceleración económica repercute de forma más aguda en las clases desfavorecidas. Esta situación, acelera la aparición de modelos económicos alternativos de producción y comercialización de bienes. En este entorno, la economía colaborativa supone un cambio significativo al modelo capitalista ya que se sustenta en un mercado basado en la colaboración e intercambio entre particulares de bienes y servicios a cambio de una compensación entre las partes.

Según Rosa (2014) se generan modelos disruptivos, especialmente tecnológicos que están transformando de forma significativa los mercados y las relaciones interpersonales. Además, el autor enfatiza el hecho que las tecnologías cívicas generadas a través del modelo colaborativo, permiten profundizar en los mecanismos de participación ciudadana que aportan soluciones a problemas comunes propios de la gobernanza. Se sustentan las oportunidades que generan movimientos como el software libre, el código abierto, las licencias creative commons o el open data, y que se caracterizan por su enorme crecimiento potencial generador de impacto económico, ambiental y social. Nacen plataformas para: el alquiler de productos, coches, caravanas, furgonetas, barcos y viviendas entre particulares; la reserva de despachos y naves para el traba-

jo; compartir taxi entre particulares, formalizar préstamos entre particulares; poner en contacto profesores y alumnos para realizar cursos on-line, etc.

En contraposición a las ventajas del modelo colaborativo, Pascual (2015) analiza "algunos de los innumerables e importantes problemas jurídicos que plantean estos sistemas, tomando como ejemplo ilustrativo uno de los sectores que más controversias ha generado al respecto: el del taxi". Se pone de manifiesto que este medio de transporte ha padecido una normativa reguladora limitadora desproporcionada respecto a otros medios, y probablemente esta variable ha acelerado el desarrollo de la economía colaborativa en este ámbito, de un modo que suscita relevantes dilemas jurídicos. Además, están surgiendo movimientos sociales y empresariales contrarios al desarrollo de las economías colaborativas como Uber entre los taxistas, Blablacar entre los conductores profesionales o hacia Airbnb o HomeAway por parte del sector hostelero. El autor apunta la necesidad de establecer un régimen jurídico específico que contemple las limitaciones óptimas para garantizar la seguridad y la calidad de los servicios prestados y a la vez proteger el desarrollo legítimo de otras actividades económicas.

PRINCIPIOS ÉTICOS

Autorregulación para nuevos formatos y nuevos productos

Internet plantea un nuevo escenario de la comunicación, en el que las empresas pueden elegir entre un amplio abanico de aparatos digitales a los cuales proveer de contenidos, para llegar al usuario en cualquier lugar y en cualquier momento. Se transforma el uso, el consumo y la producción de la información. En la producción transmedia también se requieren nuevas pautas de regulación multisoprote y recomendaciones multimedia ya que los consumidores pasan a tener un protagonismo activo y clave en el diseño así como en la arquitectura de las

nuevas plataformas. En estas nuevas narrativas comunicacionales el público debe actuar con principios éticos ya que participa activamente en la producción y consumo de contenidos audiovisuales a través de la red. Es importante educar para que las nuevas generaciones dispongan de competencias para diferenciar realidad de ficción. (Jenkins, 2009).

Para valorar qué piensa la sociedad sobre determinados contenidos que se emiten en los medios, se utilizan una serie de conceptos como son las audiencias, la crítica, los estudios de opinión, las asociaciones de telespectadores y los consejos de la información y la comunicación. Se requiere una regulación legal y normativa que garantice determinados principios fundamentales en los contenidos media y transmedia que se emiten (Van Dijk, 2016).

Según Kolbitsch y Maurer (2006) la información que se emite o publica en un medio tiene que ser veraz, rigurosa e imparcial y respetar los derechos humanos. Para obtener la información se debe actuar con responsabilidad y rigor en el caso de informaciones u opiniones con contenidos que puedan suscitar discriminaciones, evitando expresiones o testigos vejatorios o lesivos. Una condición necesaria aunque no suficiente para una información sea más objetiva y justa es que sea completa, en el sentido que incluya todos los puntos de vista pertinentes y también que mantenga un equilibrio razonable entre todas las partes en conflicto, hecho que garantiza una mayor objetividad.

Según Kramers, Höjer, Lövehagen, y Wanggel (2013) los principios del código deontológico del periodismo son de aplicabilidad a las nuevas realidades de la comunicación. En este sentido, la información tendría que presentarse de acuerdo con los mecanismos reguladores, respetando el principio de imparcialidad y neutralidad. Se tienen que narrar con precisión y exactitud, con contextualización y profundización de la infor-

Tabla 1**15 Directrices éticas para el uso de los medios sociales** Adaptado de Bowen (2013)

Guía	Justificación y aplicación
Análisis Analice la situación	Examine los mensajes racionalmente desde todos los puntos de vista. ¿Cómo se podría malinterpretar?
#Bueno Fomente lo bueno	¿Su mensaje ayuda a construir conectividad, compromiso, y comunidad?
#Claridad Enfatice la claridad	Especialmente debe clarificar la fuente de la información y el patrocinio en caso que exista.
#Consistencia La consistencia genera confianza	La consistencia permite a los públicos conocerle y entenderle, y usted podrá conocer sus expectativas.
#Dignidad Mantenga la dignidad y el respeto	Asegúrese de que la publicación mantiene la dignidad y el respeto hacia los públicos involucrados.
#Engaño Evite el engaño	Si la noticia es engañosa, incluso aunque fuera una posibilidad, simplemente no la publique.
#Identificación Identifique claramente	Debe diferenciarse con claridad la información y la opinión a nivel personal respecto a las publicaciones como representantes de una organización
#Intención Examine la intención	¿Tomó su decisión únicamente con buena voluntad?
#Prudencia Sea justo y prudente	Considere la equidad, la justicia y el derecho de la ciudadanía a estar informados.
#Responsabilidad Establezca su responsabilidad	¿Su publicación mantiene su responsabilidad de hacer lo que es correcto?
#Revelación Revele	Sea transparente con la fecha de creación del mensaje y con la fecha de los hechos.
#Reversibilidad ¿Es reversible?	¿Cómo se sentiría en el extremo receptor del mensaje? ¿Si-gue siendo ético entonces?
#Secreto Evite publicar secretos	Podrían tratarse de secretos comerciales o de otra índole blindados legalmente.
#Transparencia Sea transparente	Debe identificarse con claridad quien financia dicha publicación.
#Verificación Verifique las fuentes y los datos	Sea consistentemente creíble, no use rumores o especulaciones.

mación. Si hay fuentes contradictorias sobre la cuestión se tendrían que exponer las distintas versiones. Se tiene que contrastar la información para evitar que sea falsa o engañosa. Teniendo a la vez en cuenta que en función del encuadre, el plan elegido, el movimiento de cámara en la grabación, etc. se enfatizan determinados aspectos. Otro aspecto a tener en cuenta es la posición de la cámara respecto al objeto. Del mismo modo, hay que tener especial cura en la selección y ordenación de la imagen y sonido, puesto que la edición y el montaje son una fase clave en la elaboración del producto audiovisual para que sea fiel, en conjunto a la verdad.

Ante los problemas deontológicos que se plantean constantemente en los medios de comunicación social, es necesaria la autorregulación para garantizar que se cumplan los principios de verdad, libertad, justicia y responsabilidad. En esta línea, después de un estudio sistemático de análisis de casos publicados en las redes sociales, se revelan las mejores prácticas así como aspectos negativos a mejorar. Los datos permiten concretar una guía de 15 principios éticos para usar en la esfera de los medios digitales (Bowen, 2013).

Por otra parte, la utilización en las redes de elementos audiovisuales, deben dar mayor consistencia a la información, y en ningún caso contribuir a la espectacularización per se. Obviamente, la utilización de imágenes ficticias o de archivo para ejemplificar o reconstruir hechos, debe explicitarse.

La revolución digital ha superado las fronteras de las formas y géneros tradicionales de la comunicación. En este entorno, otro aspecto importante a la hora de presentar correctamente la información es la elección del género periodístico adecuado. Según Parratt (2012), actualmente la teoría clasificatoria de los géneros periodísticos usada tradicionalmente "resulta insuficiente para acomodar a la enorme cantidad de variantes que continuamente aparecen como

resultado de la evolución de la profesión periodística, encaminada hacia la proliferación de géneros mixtos e influenciada por los medios audiovisuales." Si bien es cierto que debe evolucionar y completarse dicha clasificación según los momentos actuales, no es menos cierto que clasificar una publicación como noticia, reportaje, crónica, comentario, crítica, etc. facilita enormemente la recepción por parte del lector. Es importante continuar desarrollando principios éticos de autorregulación para poder orientarse en la red.

A MODO DE CONCLUSIÓN

En el panorama mediático actual, analizadas las investigaciones recientes se ha evidenciado que los grandes grupos financieros emiten una enorme influencia sobre los medios de comunicación. La mundialización económica genera grandes grupos mediáticos que subordinan el poder político de los estados al interés del mercado financiero.

Para garantizar que los medios de comunicación sean plurales, puedan emitir contenidos libremente y sean representativos de la democracia moderna hay que velar para evitar el intervencionismo de los grandes gigantes financieros, apostando por los mecanismos de regulación y de autorregulación, única garantía para preservar la transparencia y defender las sociedades abiertas caracterizada por profesionales de la comunicación que muestran actitudes éticas.

Se requieren profesionales de la información para garantizar una correcta gestión de los contenidos generados por usuarios, que actúen con rigor profesional y no movidos por criterios e intereses económicos relacionados únicamente con las audiencias.

Ante esta situación en primer lugar, las redes sociales han devenido una herramienta al servicio de los ciudadanos ante la glo-

balización mediática; un contrapoder a los grandes grupos de comunicación, y una oportunidad para las sociedades para expresarse y reivindicarse libremente.

En segundo lugar, en un entorno dominado por los grupos económicos planetarios, las webs de opiniones obligan a las empresas a optimizar sus servicios así como mejorar la relación con el cliente, situando en el epicentro los comentarios de los clientes.

En tercer lugar, el periodismo ciudadano, supone, para los ciudadanos, un quinto poder que les garantiza el derecho a expresión así como a recibir información correcta y veraz, no contaminada por intereses económicos.

En cuarto lugar, la economía colaborativa supone un cambio radical respecto al modelo económico actual, ya que antepone la colaboración y el intercambio a la posesión gracias a la red.

Por lo tanto, ante estos nuevos retos es imprescindible continuar desarrollando principios éticos de autorregulación para garantizar la veracidad y rigurosidad de las nuevas formas de comunicación.

A la vez, es indispensable la creación de instancias imparciales, creíbles e independientes que ayuden a amplificar la voz de los ciudadanos ante la globalización empresarial y mediática.

Con este objetivo, nace Vusiness [del inglés Business, negocios, con "V" de valores] un observatorio que promueve las empresas abiertas, democráticas, sostenibles e inclusivas, que deben inspirar el futuro. El observatorio se crea a través del grupo de investigación Arpa (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales) del Departamento de Filología y Comunicación de la Universitat de Girona. Vusiness es una propuesta para que las empresas avancen hacia una nueva ética y política empresarial.

El presente estudio se considera preliminar y pretende describir una aproximación a la revolución y oportunidad que supone Internet para la sociedad ante la globalización económica.

Según los resultados de la presente revisión bibliográfica, se pone de manifiesto el enorme desafío que supone continuar avanzando hacia nuevos modelos integradores, capaces de ayudar a amplificar la voz de los ciudadanos de una forma éticamente regulada, en un entorno tan cambiante debido a Internet.

La literatura en el ámbito de la globalización mediática y de las nuevas formas de comunicación de la sociedad a través de Internet presenta un crecimiento significativo al tratarse de un ámbito emergente. Aun así, se requieren estudios descriptivos y experimentales capaces de definir nuevas formas de comunicación equilibradas y positivas, tanto para garantizar los derechos de las sociedades a expresar sus opiniones y críticas como de las empresas a cumplir sus legítimos objetivos.

Además, es importante generar material de carácter informativo y formativo para educar en los principios de autorregulación ética a la ciudadanía.

Finalmente, y no por ello menos importante, los medios de comunicación tienen que hacer un esfuerzo para garantizar, en consonancia con la iniciativa WAI (Web Accessibility Initiative) el acceso universal de las personas con discapacidad a todas las webs, para fomentar su participación y garantizar así una sociedad plenamente inclusiva.

Los resultados y conclusiones descritos en esta revisión preliminar requieren investigaciones exhaustivas e interdisciplinarias.

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INCLUSIVE COMPANIES, REINVENTING QUALITY OF LIFE: A THEORETICAL REVIEW

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Abstract

The global economy has suffered a serious and rapid slowdown that has led to unemployment and a shortage of decent work, fundamentally affecting the most vulnerable sectors of society. In order to overcome the inequality and exclusion inherent in the current economic system, companies that are termed 'inclusive' produce opportunities for development and aim to improve the quality of life of those who suffer social exclusion. This study aims to describe the main characteristics of inclusive companies based on four fundamental principles: values, team management, corporate social responsibility, and responsible marketing. This theoretical review of the most important studies concludes that there is a need for inclusive companies that contribute to the common good while generating profits. Such companies also have to be smart, championed by leaders who promote the use of information technologies and communication to improve citizens' quality of life. Likewise, companies have to be sustainable, balancing business development on the one hand with the environment and protection of the planet on the other. In essence, in order to move towards a new ethics and business policy, society needs companies that are committed to inclusive development.

Keywords: Inclusive Companies, Values, Team Management, Corporate Social Responsibility, Responsible Marketing

1. Introduction

The world economy has suffered a serious and rapid slowdown. The effects of the economic crisis and the recession are mainly felt in the social sectors. The destruction of thousands of jobs, a precarious labor market, and the lack of work are all factors of risk in social exclusion and marginalization. Resources, systems of protection and welfare state benefits have all shrunk. At the same time, access to the labor market has become more complicated for those with educational, social, economic and professional qualification shortcomings. This has resulted in a notable increase in repossessions and evictions, which have had a profound impact on the more disadvantaged groups of society (Hadad Hadad and Valdés Llanes, 2010).

According to the International Labour Office (2012, p. 9): "The world is facing a serious jobs challenge and widespread decent work deficits...there is a backlog of global unemployment of 200 million – an increase of 27 million since the start of the crisis... Hence, to generate sustainable growth while maintaining social cohesion, the world must rise to the urgent challenge of creating 600 million productive jobs over the next decade, which would still leave 900 million workers living with their families below the US\$2 a day poverty line, largely in developing countries".

At the same time, youth unemployment has risen, with rates three times higher than in the population in general, thus making them one of the groups most at risk and affected by the crisis (United Nations, 2015b).

While the world economy has seen a drastic fall in its ability to create new jobs, new technology enables companies to optimize the efficiency and effectiveness of their production processes and the provision of those services that improve the quality of their customers' lives (Seisdedos *et al.* 2015).

In order to overcome the inequality and exclusion inherent in the current economic system, the main aim of inclusive companies is to reinvent themselves and evolve towards a concept of business in which collaboration, participation and employee involvement is both indispensable and decisive.

Sustainable companies offer new forms of social inclusion, choosing to "respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity" (United Nations, 2015a, p. 21).

Strategic activities in smart business contexts are generally deemed to be healthcare, health, the environment, and education. Emphasis is also placed on participation and transparency in customer service and communication (Seisdedos *et al.* 2015). We should bear in mind that, on a general level, agriculture is still the greatest employer globally, and that recent years have seen the creation of over 2.3 million green jobs in the renewable energy sector (United Nations, 2015b).

As Eguiguren and Barroso (2011, p. 111) state, "the management of companies requires alternative economic and political models and corporate values, characteristic of a sustainable and inclusive business culture".

According to Klionsky *et al.* (2012), smart, sustainable and inclusive companies act in the market with a sense of responsibility, transparency, democracy, participation and ethics. This paper aims to show the result of a systematic process of selection and review of a number of proven research studies on inclusive companies, and thus provide the scientific community with a different perspective of the current business model; one that is more humane and sustainable.

2. Inclusive companies

As Fisac Garcia *et al.* (2011), research into inclusive business models aimed at promoting the generation of opportunities for development and improving the quality of life of people suffering from social exclusion is currently experiencing an upsurge in interest. There is great scope for social companies, meaning those organizations seeking to create social value through an economic activity, to become a reference model for the design of future sustainable organizations.

The digital revolution is a further fundamental factor in the current economic context. This facilitates the creation of the collaborative society, in which the productive system is developed through knowledge instead of physical strength. Training plays a vital role in this context, and needs to incorporate technology (connectivity, devices, multi-tactile solutions, adaptation for disabled people etc.) and facilitate and share access to information. As well as contributing to productivity, the collaborative society foments the appearance of business models that question traditional ones, thus forcing their transformation. According to Guttentag (2015) on a collaborative level, in December 2015, the Airbnb had 60 million guests, while over a million journeys a day are made using Uber. These experiences in the service sector are an example of the organizational and structural change that the business world is currently undergoing. Márquez

et al. (2010) state that inclusive companies are founded on four fundamental principles; values, team management, corporate social responsibility, and responsible marketing.

3. Values

Like collaborative societies, inclusive companies base their mission on covering the needs of society as included in the United Nations Development Programme, “to eradicate extreme poverty and hunger; achieve universal education; promote gender equality and empower women; reduce child mortality; improve health; and combat disease; ensure environmental sustainability; and develop a global partnership for development”. Not only is the mission of inclusive companies focused on the long-term future, but also furthers it. The mission should be worded simply, directly and clearly; and if, possible, should be ambitious, answering a social need and distinct to that of other companies (Foladori, 2014).

According to Pin *et al.* (2005), the start of the 20th century saw business introduce values that were linked to productivity and efficiency, seeing the worker as part of the productive mechanism. This changed in the mid-20th century, as business culture became more democratic, and an emphasis was placed on more psycho-social ideas of organizations. Greater importance was placed on a new set of values, such as team spirit, intrinsic motivation, and professional and organizational development.

García (2003) conclude that over the past three decades, the appearance of the new paradigm of management through values has made the concept of the individual integral. This focus places importance on all facets of the individual, not merely the professional. The value of the person as an individual is emphasized, while economic and psycho-social dimensions are also taken into account. The organization is seen as a group of people, each important themselves, and individually important as parts of the company. At the forefront of this new concept is the resulting balance between the individual and the organization, and between work, family and personal life.

In accordance with the concurrence of a complex series of factors, a company's values are formed and strengthened (Pin *et al.* 2005) in aspects such as: a) The beliefs and values of the founder. All companies have their origin in ideas and principles established by their founders; b) The beliefs and values of management that directors or managers aim to extend, confirm or modify, particularly at a time of generational change; c) The beliefs and values of employees. The employees contribute to the reshaping of the company's values. This is a system of constant feedback, management systems influence the values of employee, and, finally; d) The economic, legal-labor, and social habit framework. These are formed and developed at a specific historical moment, greatly influencing and conditioning the shaping and transmission of company values.

4. Team management

Pedraja-Rejas and Rodríguez-Ponce (2008) state that one of the most significant advances in the area of strategic management is the establishment of a relation between top level management when formulating the strategy and general efficiency of the company.

On the individual level, leadership is based on the influence a person has on their team or reference group. On the relational level, and thanks to the link established with their team, the leader affects others to carry out tasks that aim to develop collective efficiency and effectiveness. The main criterion by which the efficiency of leadership style can be measured is the success of the organization. The success of a work team will be measured on the basis of the organization's successes (satisfying clients' demands, giving a good impression to staff and suppliers, and ensuring profits for company owners).

Leaders have to overcome the problems that arise in the organization. They develop, initiate and assess potential solutions, and plan and implement future decisions that aim to solve these problems. It should be taken into account that the cognitive base and values of any leader limit selective perception, the interpretation of problems, definition and assessment of possible solutions and the choice and implementation of the strategy. Leadership style is clearly a variable that has direct consequences on an organization's processes and results.

According to Dolan and Garcia (2002), relevant studies have proved that leadership style influences the conduct of individuals in the company. According to the same authors, recent studies confirm that leadership style has a direct influence on teamwork processes, the work climate and company results. Other research concludes that leadership is the ability to exercise control optimally in order to meet the company's strategic goals, as well as to maximize profits and strengthen those groups that make this possible, fomenting the development of the right work climate (Elkington, 1994).

On the other hand, the leader acts as an inspiring and stimulating motor for the group to complete its work. The leader should generate consensus through forming a strong link of relation and trust, acting through values such as honesty, commitment, ethics, empathy, proximity, effectiveness, efficiency, leadership capacity and responsibility (Pin *et al.* 2005).

Consistent with García (2003), in order to achieve high quality professional performance in contexts that are changing as now, it is important to foment and nurture qualitative factors and intangible values such as imagination, trust, creativity, freedom, authenticity and beauty. These poetic and creative values are as important, or more so, than traditional quantitative economic concepts related to pragmatism, such as optimization, client orientation or productivity.

Work teams need emotional values such as happiness, solidarity and freedom to power creativity, talent and innovation, as well as to affect an improvement in the work climate, which, in turn, is directly linked to worker performance. Directors who manage work teams tend to rationalize processes and teams; they often fail to appreciate the company's values or take them seriously, neither do they tend to view the values as a real asset, one that, as such, should be correctly managed. What normally happens in these cases is that directors spend most of their time dealing with what they see as the truly important aspects of the company, such as accounts, profit and loss, budgets or taxes. Time will show the necessary cultural change that the current modern, globalized economic context demands. Various studies conclude that the formulation of the mission, vision and values through a participative process that can involve all a company's workforce improves performance, commitment and the work climate. This highlights the need for shared values in work teams and organizations (García & Dolan, 1997).

According to Seisdedos *et al.* (2015), the distribution of competences and responsibilities in organizations is vital in order for their management to receive the necessary dedication and focus; however, this in itself makes carrying this out complicated. As an alternative to these problems, and in order to form teams with shared values, capable of working productively and maximizing their abilities, it is necessary to open up in surroundings that are traditionally limited. There is evidence that current techniques of social intervention are no longer useful in a globalized society that is undergoing permanent change. It is often over a coffee when people interact independently from the organization, the independence implicit in such an interaction making it more fruitful. Simpler and more productive ways of organizing meetings and events are clearly needed.

This is confirmed by ethnographic research. Observation of the simple but effective methods that some ethnic groups with little contact with the outside world, such as indigenous peoples of Africa and North America, use to reach agreements and initiate work that benefits all, produces a range of intervention techniques that facilitate the involvement of all members of large groups, or simply the discussion of highly complex subjects. Numerous authors have studied and experimented with a range of methodologies that are particularly useful in complex, urgent situations, with diverse, multi-disciplinary groups that need to deal with a situation productively and innovatively (See Table 1).

Table 1. Intervention technologies in large groups

Open Space Technology: a way to facilitate productive meetings of between five and 2000-plus participants. The meeting is given a clear subject, the facilitator gives a brief introduction about the methodology, and participants create the agenda together, which is then discussed at different times and in different sub-spaces (Owen, 2008).
Future Search Conference: this lasts two and a half days, and permits the involvement of all key actors in planning the future of an organization. During the session, various activities are developed for participants to discover and recognize the past and define the present. Finally, they collectively construct an image of the future, producing common aims and a group action plan (Weisbord and Janoff, 1995).
Appreciative inquiry summit: a new intervention technique capable of initiating a process of profound change in complex systems, or when conflict arises. It is designed to make groups evolve, becoming more efficient and bringing out the best in people, organizations and the relevant context (Cooperrider and Whitney, 2011).
Circle or council: an ancestral form of meeting that facilitates conversation between key actors. Circles tend to transform arguments into respectful conversation and deep listening (MacDougall, 2005).
World Café: this takes its name from a typical café discussion. Participants number from 10 to 1,000; they meet in small groups (4-5 people) around tables and calmly discuss a subject or subjects that concern them all. Conversation produces ideas, and each circle has a host who serves to seed ideas and never changes tables (Brown <i>et al.</i> 2005).
Appreciative inquiry: is a technique of organizational development that aims to help groups renew themselves and focus. It is based on the principle that organizations change depending on the questions that are raised (Cooperrider and Whitney, 2011).

Source: Friedmann and Llorens (2002)

According to Cooperrider and Whitney (2011), there are further techniques that also produce significant results. These are: Generative dialogues; action learning; collective mind-mapping; collective story harvest; graphic facilitation; U theory; and dialogue.

5. Corporate social responsibility

It is now widely accepted that companies do not only fulfil their economic, ethical, social and legal obligations towards their shareholders, but also towards the planet, the environment, staff, suppliers and distributors (Lafuente *et al.* 2003). Corporate social responsibility can be defined as the recognition and integration by companies of social and environmental concerns (Cuesta González *et al.* 2003).

According to Parra Valcarce (2008), studies conclude that the public has a more positive perception of the image and reputation of a company when they see corporate social responsibility. To this end, consumers expect companies to act in coherence with social values. A study by Ernst and White (2000) on CSR showed that 70% of European consumers said that the commitment of companies to social responsibility was an important factor when buying a product or service.

Corporate social responsibility represents those companies that have sustainable values as their *raison d'être* on their founding. According to Felber (2012) a number of factors are necessary for this to occur (See Table 2):

Table 2. Vision of Economy for the Common Good

Economic sphere: an ever-larger number of consumers, clients and suppliers value those companies that direct their efforts towards the community and not towards financial success. Effort is also made to reduce the environmental footprint, thus making the world more sustainable and fairer.
Political sphere: legal changes are needed to encourage sustainable companies. New regulations are called for that aim to provide a better life for all life and the planet. The legal framework should promote a radical shift, favoring co-operation and sustainability instead of profits and GDP.
Social sphere: movements are needed that continue to raise awareness of the need for a transformation of the system. It calls for new companies, which co-operate with each other and practice solidarity, promoting fair trade. People with greater empathy, sensitivity, responsibility and social competence serve as an example.

Source: Felber (2012)

Following Eguiguren's work (2011), two distinct types of company or organization are established; those that carry out corporate social responsibility actions, and those that are founded with the guiding principle of becoming the axis of business sustainability and values. Companies can, therefore, have aims that go beyond making strictly financial profits. Regarding the differences in the activity to be carried out, corporate social responsibility selects criteria that are not necessarily linked to the company mission, while the activities of sustainable companies are based solely on the company mission (Miotto, 2010).

The structure and staff of corporate social responsibility companies fall outside the organigram and become external, voluntary, anecdotal or inexistent. On the other hand, part of the daily task of the sustainable company is an activity that makes a social contribution. On the economic level, companies that carry out corporate social responsibility tend to dedicate a part of their profits to such activities. According to the Fundación Seres, Sociedad y Empresa Responsable (2016), notable Spanish companies are Ilunion, Adecco and the Fundación Adecco, Vodafone, Meliá Hotels International, Orange, BBVA, Konecta, DKV Seguros, Indra, CaixaBank, ESADE, Fundación Repsol, and Ferrovial.

Furthermore, inclusive companies tend to dedicate part of their work, research and capital to set up initiatives that, over time, will become sustainable. In 2012, the G20 organized a "Challenge on Inclusive Business Innovation", a global competition managed by the International Finance Corporation that rewarded businesses with innovative, scalable, and commercially viable methods that provide economic opportunities for the poor, while improving access to drinking water, electricity, healthcare, education, housing, telecommunications and financial services. Among the winners were such business initiatives as: Apollo Hospitals Group of India, offering specialized medical services in rural areas; Ecofiltro of Guatemala, manufacturing very low cost water filters; Engro Foods Limited of Pakistan, helping small milk producers in rural areas; Jain Irrigation Systems Ltd. of India, providing irrigation systems to farmers; Manila Water Company of the Philippines, providing accessible drinking water; Reybanpac Unidad de Lácteos of Ecuador, helping fight malnutrition through providing milk product drinks; Sustainable Harvest Coffee Importers of the USA, helping small coffee growers in Central and South America, and East Africa, and; Vinte Viviendas Integrales of México, offering accessible, ecological housing to families with limited resources (Manchón, 2012).

Furthermore, while the aims of corporate social responsibility include improving the company's image and making tax savings, that of responsible and sustainable companies is to comply with their mission and aid the worse-off through paying the taxes due in each country, and not using certain countries to gain tax advantages. Finally, corporate social responsibility companies carry out little assessment and monitoring, while sustainable businesses measure social profitability and investment as well as quality, effectiveness of resources and efficiency.

The theoretical base of inclusive companies is an economic project that is open to companies and promotes a sustainable economy that is an alternative to the financial markets created by Felber (2012). His starting point is the concept of the Economy for the Common Good, the ideological components of which are far removed from those of capitalism and communism,

and promote a new way of creating a business based on values such as human dignity, solidarity, co-operation, environmental responsibility, and empathy.

6. Responsible marketing

In this context, responsible marketing aims to satisfy the rational, pondered and proportional needs of consumers through the manufacture and sale of products and services at a reasonable and fair price. Profits are sufficient to ensure the continuation of a contribution to social development, as well as for those who risk their capital and dedicate their efforts to receive fair compensation (Eguiguren, 2011).

In the terms of Palacios Alvarado (2015), responsible marketing is connected to strategic decisions that businesses take regarding their customers, and is linked to key factors such as the creation of a product or service, setting prices, distribution channels and fair communication strategies. Intelligent companies design responsible marketing strategies, showing their solidarity and fairness to the planet, the environment, and people. Competition with other companies is surmounted through the search for cooperation that ensures that the companies, suppliers and consumers with whom they work are also strong, competent and sustainable.

Unlike advertising practices based on subliminal perception, stereotypes or the target's prejudices or double standards, responsible marketing advocates the use of creativity based on ethical principles such as democracy, transparency, the verification of information, and truth. Eguiguren (2011) provides a series of principles for responsible marketing: a) Products answer a rational need in the society in which they are sold; b) They are designed so that their production causes minimal or no environmental impact; c) The services or products are coherent with the company's mission and values; d) All the company's products and services are sustainable; e) The use of those new products sold generates value for society; f) Innovation is focused on satisfying the already existing needs of the consumer; g) The products sold provide social value and sustainability, and; h) No products are sold that, while profitable, do not conform to the ethical principles of responsible marketing.

Regarding ecological marketing, intelligent companies have the responsibility to transmit the culture of permanence practically to consumers and society in general. Authorities are also obliged to favor actions that lead to sustainable development, with positive and coercive regulations and laws designed to meet environmental goals.

As noted by Schlottchauer (2014), greater internet connectivity and a mistrust of conventional advertising gives rise to a new kind of consumer. This consumer is active, and consults a range of sources of information when deciding whether or not to buy a product or acquire a service. The need of consumers to obtain real and not institutional information on brands has led to review-sites, websites that let consumers publish their opinions on their experience with specific products and services.

Schlottchauer (2014) analyzes TripAdvisor, the world's largest travel comment website, which houses user-generated content, experiences, growth, monetization, competition and risk factors. The study concludes that TripAdvisor is a space for companies to construct and manage their reputation; since it has been created by peers, the content generates trust in travelers around the world. The positive reputation the site has gained in the sector is its greatest intangible asset. Another company value is the constant innovation that allows the company to anticipate the changes and preferences of its users.

7. Conclusion

Having described and analyzed recent research into the concept of inclusive companies as a model of creation, management and business leadership, the conclusion is that it is one that, while diametrically opposed to the capitalist model, may be useful when facing the effects of the economic crisis and recession.

It has been shown that inclusive companies can help generate sustainable growth and, at the same time, maintain social cohesion, since they promote the generation of opportunities for development and aim to improve the living standards of people suffering from social exclusion.

The establishment of sustainable companies may benefit firstly, the social inclusion of disadvantaged groups, such as young people, women, migrants, the long-term unemployed, the disabled and people at risk. There is no doubt that the generation of social value for such groups aids in fighting poverty and exclusion.

Secondly, it could give rise to the strategic appearance of new business seams in areas such as healthcare, health, the environment and education. Sustainable companies incorporate new elements for the creation, management and administration of businesses that are connected to values, team management, corporate social responsibility and responsible marketing. As Fisac Garcia *et al.* (2011) point out, four factors help to resolve social problems and those related to poverty, as well as to transform or humanize the capitalist system. Thirdly, as described by Eguiguren (2011), smart, sustainable and inclusive companies encourage a sense of responsibility, transparency, democracy, participation and ethics in management.

This is a preliminary study, and aims to describe an approach to an alternative model of business creation, administration and management. The review of publications and other complementary research shows the need for an integrating model. Furthermore, descriptive and experimental studies are needed that define quantitative and qualitative indicators that can develop this new, inclusive model, as are posterior studies that can assess the results of the model developed.

The field of sustainable, inclusive companies is new, and the number of published writings has grown over recent years. The fact that the subject is so new means that there is a need for material that is essentially expository, didactic, informative and general in nature to teach and raise awareness of it. There is also a need for research that takes a more critical and analytical line and generates a standardized inclusive model that allows the system to be implemented and the overcoming of difficulties involved in scaling a global system of creation, management and administration to the specific conditions of each company or organization. Further studies are needed to confirm the results and conclusions. We conclude that faced with these new scenarios and challenges, research in this area should be systematic and multi-disciplinary.

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Smart Companies, Inspiring the Future: A Theoretical Review

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Abstract

The economic and financial global crises have accelerated the search for alternative business models. The aim of this article is to describe the main characteristics of smart companies capable of overcoming the shortcomings of the current economic system. After conducting a theoretical review of the main studies related to this area, we conclude that there is a need for smart companies championed by leaders who promote the use of information technologies and communication as means of improving citizens' quality of life. There is a need for corporate policies and values that fit with a sustainable social, economic and environmental corporate culture. Smart companies may be a useful alternative in overcoming the shortcomings of the current economic model that has triggered profound economic and financial crises. Society requires companies and customers to act in the free market in a fair, ethical, caring and responsible manner, as economic growth must be made compatible with the distribution of wealth.

Keywords: Smart companies, Leadership, Information technology, Communication

1. Search For Alternative Economic Models

In today's economic environment, companies are increasingly adopting competitive strategies to counter the growing threat of a new economic market based on emerging countries with low production costs. To this end, they are developing complex relocation and internationalization processes to combat effects on traditional local production (B. F. García, Mora, & Alés, 2009).

Economic and financial crises are becoming more frequent, profound and global and their impact is mainly in the social sphere. In this context, the economic slowdown has significantly increased the number of people in situations of poverty and exclusion, who have fewer resources available to them as they receive less social protection and fewer welfare benefits. The crisis has led to the destruction of thousands of jobs, a more precarious labour market and a significant increase in foreclosures and evictions: a social impact that directly affects the living conditions of the most disadvantaged (Hadad Hadad & Valdés Llanes, 2010).

According to Eguiguren (2011), this economic and social situation has accelerated the search for alternative economic models capable of minimizing the effects of the crisis and overcoming the gaps existing in the current capitalist system. This author states that in order to manage companies, there is a need for corporate policies and values that fit with a sustainable social, economic and environmental corporate culture. Companies whose mission is based on ideals and values committed to people and the planet contribute to the common good while generating similar profits to other companies.

In respect of this, the alternative model developed by Fisk (2010) - People, Planet and Profit (3P) - addresses the need to establish links between the social, environmental, corporate and economic spheres to overcome the shortcomings of the current model. Smart companies operate in the market with a sense of accountability, transparency, democracy, participation and ethics (Klionsky et al., 2012). The aim of this theoretical review is to present the results of a methodological, structured and systematic process for selecting a set of valid, useful and relevant articles on smart companies in order to lay the scientific foundations for the future creation of an alternative model for company creation, administration and management.

2. Smart Companies

According to Angel, Parent, Civco, Blei, and Potere (2011), 54% of the world population lives in industrialized urban areas, compared to 49% in 2005 and 33% in 1960. This is expected to grow to approximately 60% by 2030 and 75% by 2050, when it is estimated that cities and industries will be responsible for between 60% and 80% of global energy consumption and greenhouse gas emissions. Industrial environments need to address problems such as pollution, safety, transportation, waste management, employment, energy, urban planning and the supply of household amenities in general.

Smart companies are characterized by offering more efficient services to improve the quality of life and wellbeing of citizens. Their founding missions include such aims as overcoming the economic crisis, combating social inequality, eradicating climate change, counteracting population aging and slowing the rapid spread of urbanization. We live in an era of great technological innovations, which have the potential to resolve most of the problems facing companies (Dameri & Garelli, 2014). Kramers, Höjer, Lövehagen, and Wangel (2013) Define a smart company as one that takes advantage of ICT - information and communication technology - to provide products and services that meet their customers' needs and manage their own infrastructure. Within this environment, they highlight concepts such as **leadership and information technology and communication** as being key in quantifying and evaluating the degree of companies' intelligence or smartness.

2.1. Leadership

Castells and Pasola (2004) State that in an environment of crisis business leaders have discovered, in the concept of intelligent or smart business, a way of obtaining more with fewer resources thanks to information technology and communication.

According to Seisdedos et al. (2015), transforming a vision into reality in any organization requires strong leadership, inspiring change in people and mobilizing the right resources to carry out the project. Entrepreneurs have the ability to set the agenda and allocate resources, and are also responsible for driving organizations that implement and facilitate synergies among all departments through the use of information technology. Each individual company must define its vision and the pace of its transformation towards smart management and leadership. In addition to leaders with willpower and vision, there is also a need for employee consensus and involvement to achieve effective progress and ensure long-term survival (Hollands, 2008).

The current economic environment means leadership is essential in achieving effectiveness in work teams and the organizations of which they form a part. According to Seisdedos et al. (2015), technology is the means required to move towards the smart management of companies and improve citizens' quality of life. With this in mind, it is necessary to explore new forms of leadership which result in effective responses to new requirements in the workplace, such as design for change and innovation, cultural diversity, complexity, knowledge-based work and virtual organizations. Response to these demands has led to the development of new approaches, such as new leadership and authentic, cross-cultural, complex, shared and remote leadership (Review, 2011).

Within this context, it is worth highlighting the concept of "leadership by values" posited by García Sánchez and Dolan (2003), according to which management by values is a new way of understanding business management. It is management that relies on striking a balance between three types of values to achieve its vision and fulfil its mission: a) economic-pragmatic, control or praxis values, usually predominant and never sufficiently developed (efficiency or quality, for example); b) emotional, developmental, "poietic", creative or generative values (imagination or warmth, for example), abusively and wrongly denied or belittled on many occasions within the pragmatic efficiency-minded perspective; and c) ethical values (generosity, respect and honesty, for example), being integrated as the norm within economic and emotional values, and not locked inside codes or considered a separate category, and certainly not outside the core element of productive business.

The concept of authentic leadership developed by Walumbwa, Avolio, and Zhu (2008) also plays an important, if complementary, role. According to these authors, the emergence of this concept is mainly due to two factors which, for different reasons, call for the existence of a new kind of leadership: on the one hand, the disappointing response to the economic crisis by political leaders, and on the other the response of the financial sector in its attempts to address the situation.

From this point of view, the loss of trust towards leaders underscores the importance of ethical and moral aspects of leadership. Indeed, in recent years, positive psychology has proposed changing the approach to psychology away from a concern to treat negative aspects, such as deficiencies and pathologies, to encourage the development of positive qualities. These include, for example, creativity, integrity, ethics, leadership, wisdom, being a good citizen and satisfying work. Within such an environment, authentic leaders are profoundly conscious of their values and beliefs, how they behave and, in turn, how they are perceived by others (Walumbwa et al., 2008).

In this context, (Love, 2013) proposes the principles of authentic leadership be integrated within an organization based on the principles of management by values, and advocates:

- 1) Using social technologies and collective intelligence tools.
- 2) Creating spaces that facilitate the joint creation of innovative solutions.
- 3) Using the inspirational qualities of improvisation and play in promoting innovation and creativity.
- 4) Connecting with others through authenticity to catalyse the talent of the group and learn to work together.
- 5) Generating positive changes in the world through personal transformation.

Below, we highlight two methods for managing and achieving leadership aims:

- a) The **Search inside Yourself Leadership Institute** is a training programme designed by Google and comprising three stages: mindfulness training; self-knowledge and self-control; and creating mental habits. It is based on the scientific concepts of emotional intelligence and mindfulness. Thanks to this training program, emotional intelligence skills are developed while generating trust and better communication between employees and the company. Meditation helps to reduce stress, generates happiness and calm and clears the mind (Tan & Sullivan, 2012).
- b) The **Art of Hosting conversations that matter (AoH)** is a new approach to authentic and transformational leadership which scales up from the personal to the systemic using practices such as facilitation, dialogue and the co-creation of innovative solutions to complex challenges. Co-creation has been successfully implemented in organizations such as Apple and Google to achieve more creative, flexible and innovative outcomes than their competitors (Boyatzis & McKee, 2005).

In addition, and in line with the conclusions drawn by Seisdedos et al. (2015), for companies to move in a smart direction, leaders must implement actions in the following areas: 1) **vertical** - the company equips itself with the necessary technology to improve its management; 2) **horizontal** - a cross-departmental platform is developed to connect the different departments of the organization; 3) **connected** - different companies begin to share information and interoperate with each other via the management platform; and 4) **smart** - it becomes possible to conduct advanced, predictive and real-time management of the business and provide information and services with high added value to customers, employees and suppliers, creating an innovation ecosystem.

2.2. Information technology

Adapting the conclusions reached by Seisdedos et al. (2015), standard, open and interoperable platforms facilitate improvements in the management and development of a smart business ecosystem. Complementary to this, according to Guzmán and Palacios (2006), creative thinking strengthens and promotes productivity in business. To be competitive, as well as having high-quality technology, companies must be able to create and produce a product that favours its market penetration and customer loyalty. At the same time, they must have a management style capable of seizing opportunities and managing resources, especially human capital, to optimize results.

Similarly, according to Suárez (2003) specialist training should lead to changes in content and the training of future professionals to allow abilities and skills to flourish such as creativity, talent and innovation, facilitating the execution of certain tasks. It is important, above and beyond content, to facilitate personal development tools to ensure that trainees enhance their skills and abilities in relation to creativity, leadership, communication, etc. This will allow work teams to identify more with their duties, performance and responsibilities in the medium and long term (García Sánchez & Dolan, 2003).

Moreover, as Herzberg (2003) concludes, when a company manages to obtain high-performance teams the achieved result is generally significantly greater than the sum of individual results. One way to measure a company's creativity, although difficult to do, is to compare the number of products, services or processes it has before and after introducing innovation strategies.

According to Herzberg (2003), most executives do not consider the need for or importance of creativity in their teams, even though they do see the need to innovate. However, innovative companies have often emerged out of creative companies, and business creativity and innovation can be applied in various fields within the organization, above and beyond marketing: human resources, production, finance, etc.

In this environment of innovation and creativity, the concept of **collective intelligence** stands out. This refers to a way of maximizing the knowledge and cognitive abilities of a group, promoting collaboration and cooperation among its members. The term was first used to refer to the behaviour of certain species such as insects or ants that work together to function as a single organism. It is also used when the Net is used as a collaborative environment. Among the resources aimed at collaborative use for generating collective intelligence we find **TED, Technology, Entertainment, and Design**, a non-profit association which aims to share ideas in communities around the world. Ideas are spread through short talks which make a big impact. TED now covers a wide spectrum of topics ranging from science to business, in over a hundred languages. It is based on an understanding that ideas can change attitudes, lives and ultimately the world. It is, therefore, a place for the exchange of free knowledge, formed by thinkers, aimed at spreading great ideas and provoking debate. Many companies use it as a source of inspiration (Jacobson (2000)).

Other tools that facilitate knowledge-sharing and contribute to generating cooperation and collective intelligence are the so-called **MOOCs (Massive Online Open Courses)**, an open education programme on the Internet. If connections between nodes of content and people are promoted, this facilitates learning and consequently knowledge creation. Thus, MOOCs promote the democratization of learning while also opening up educational environments, allowing people around the world to follow different free educational initiatives provided by the most prestigious universities in the world, such as Harvard, Stanford and Massachusetts Institute of Technology. It is thought that the current growth in online collective creation applications may lead to a more efficient, fair and inclusive society (Kuklinski, 2007). The following table provides a definition of key concepts related to information technology being developed and applied in the field of intelligent or smart companies (Seisdedos et al., 2015):

Table 1: Concepts related to smart companies (Seisdedos et al., 2015)

<p>— Big data: Rapid processing and analysis of large volumes of data in real time from various sources, with a very short response time. The capacity to generate intelligence from stored information is being successfully applied in fields such as health services, disaster management and collaborative projects.</p> <p>— Cloud computing: Processing capability through scalable and flexible technology made available to customers using the Internet. Its use rationalizes investment, reduces obsolescence and provides instant scalability, due to the user paying by capacity used.</p> <p>— Cognitive computing: Systems based on big data, cloud computing, new security tools, etc. which are not programmed like current systems as they are able to understand the natural language people use, learn and answer complex questions in a few seconds due to their advanced capacity to analyse data (Paniagua, 2013).</p> <p>— Internet of Things (IoT): Different devices connected to the Internet via fixed and mobile networks represent a source for capturing highly relevant and useful information, which is filtered and interpreted to provide a suitable real time response.</p> <p>— Lean Start-up: System for introducing new products or services based on a validated learning market, whereby constant experimentation and iteration shorten development cycles, measure progress and constantly feedback to ensure their implementation (Ries, 2011).</p> <p>— Open Data: Making information available to third parties, enabling models based on the participatory economy and entrepreneurship.</p> <p>— Open technological solution: The use of standard, horizontal, interoperable and scalable technology allows the integration of all systems on a single management platform and ensures the development of an innovative ecosystem.</p>
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2.3. Communication

Seisdedos et al. (2015) state that “The outbreak of the digital revolution is creating a hyper connected and collaborative society that decisively transforms the relationships between citizens”. According to Contreras (2010), new technologies offer individuals the opportunity to engage in new forms of participation. Thanks to the Internet, users are able to develop, give opinions on, collaborate on and distribute content virally or in a personalized way, as well as customizing applications. Currently, content can be produced in different formats, including text; images, video and audio, and multiple platforms allow its production and distribution, principally via instant messaging, email, websites, blogs and social networks. Customers, employees and suppliers have ample opportunities to create and publish content and leave a testimony of their experiences with companies. This reality contrasts with the usual chain of publication in the traditional media and the processes of selecting and preparing publishable content. It is worth noting that the time needed for its creation and distribution has also been significantly reduced.

According to Kolbitsch and Maurer (2006), what the different communities of Internet users have in common is the possibility of participation and openness. In addition, another aspect of the Internet that directly affects democratization is that users have the power to pick and choose which content they want to read, view, consume and leave an opinion on. Historically, according to Parra Valcarce (2008), Internet 0 arrived in 1969 and comprised a communications infrastructure that allowed large computers to connect to one another. By 1993, Web 1.0 had turned the Net into a large information storage space in which the major search engines appeared as key figures. Shortly after that, there was the arrival of Web 2.0, with Internet users worldwide able to enter into dialogue and share content and opinions.

According to Ramonet and Moreno (2004), in democratic environments the press and media have become a resource for citizen protection against the abuse of legislative, executive and judicial powers. Numerous violations of citizens’ rights have been uncovered thanks to reports in the media. In this respect, the authors use the term “fourth power” to define the civic sense and loyalty shown towards citizens by journalists and the media, who have a duty to publish, challenge, and address democratically illegal decisions that would be unfair on innocent citizens. However, today the media are controlled by a set of economic groups and globalizing companies with more influence on business than some governments and states. Thanks to their economic power and the digital revolution, these worldwide media groups control the mass media, including radio, newspapers, television channels, news sites, etc.

With regard to the reach of social networks, according to Seisdedos et al. (2015), in the second quarter of 2015 Facebook had 1.49 billion active users, while every second 3,600 photos are shared on Instagram and 100,000 tweets are generated. As for mobile access via broadband, wifi and apps, in 2015 there were around 3.7 billion unique mobile subscribers worldwide. In this environment, customers and businesses are destined to interact virtually through social networks, resulting in organizations needing to manage and generate opinion in a new collaborative and participatory reality. This environment has given rise to citizen journalism, conceived by Gillmor (2006), which entails the socialization of information. In this context, society’s participation is essential in driving discourse and generating information.

Citizen journalism might be termed the fifth power, awarding citizens the democratic and civic strength to oppose the new dominant coalition of media groups, accomplices in their dissemination of liberal globalization. There is an urgent need for the mainstream media to act more ethically on behalf of citizens and with greater veracity of information. In this environment, the new democratic communication allowed by the Internet and the digital revolution can encourage citizen journalism to place conscience and values above the interests of groups, companies and employers. Given this new reality, we propose ecology of information be developed in order to separate significant and truthful information from that which is not.

Companies’ freedom of action cannot prevail over citizens’ rights to receive verified and accurate information. The strength of democratic communication lies in employees, customers and suppliers being able to evaluate the companies they interact with - whether working for them, buying from them or selling to them - and share their opinions with other citizens and Internet users in an open public environment of dissemination to create an economic environment which is more ethical, responsible, honest and democratic on both a micro and macro level.

Some authors are now referring to the Web 3.0, which is synonymous with a smart network and based on the application of expert artificial intelligence systems.

2. By Way of Conclusion

Having described and analysed the most relevant and recent research on different models of creation, management and leadership, we conclude that smart companies may be a useful alternative in overcoming the shortcomings of the current economic model that has triggered profound economic and financial crises. In this theoretical review, we have included models such as People, Planet, Profit, devised by Fisk (2010), some interesting research by Eguiguren (2011), managing by values by S. García and Dolan (1997) and Pin, Espinosa, and López (2005), and the principles of leadership and management based on Owen (2008) and Walumbwa et al. (2008). We have also referred to the digital transformation of cities by Seisdedos et al. (2015) to describe the characteristics of information technology and communication used in this environment.

Of the main elements highlighted here, communication is new to the field of business management models. The authors of this article believe that communication has become a cornerstone of business management, as the emergence of aspects such as citizen journalism, Internet 3.0 and social networks have socialized information and democratized its use, enabling customers, employees and suppliers to create content, give opinions and have an influence on any company. Our review highlights, firstly, the need for an in-depth analysis of companies based on factors such as sustainability and inclusiveness, necessary complements to intelligence or smartness. Secondly, it reveals the need for an integrative model, drawing on the results of this literature review, which bases its principles on three factors: intelligence, sustainability and inclusiveness, aimed at business creation, administration and management.

And thirdly, descriptive studies are needed to define quantitative and qualitative indicators for evaluating this new model. Subsequent to this, there will be the need for studies with experimental designs, capable of evaluating the results of the model. Finally, we recommend developing educational content and informative and training material for the new model, in order to raise awareness among the general population and train managers, employees, suppliers and customers in its use and thus contribute to business sustainability in the medium and long term. The present results and findings require confirmation in future studies. We conclude that, in the face of an uncertain future, research in this area should be constant and cover different disciplines.

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Amplifying Citizens' Voices in the Face of Media Globalization

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Abstract

Economic crises have mainly affected the more vulnerable social sectors and created losses of freedom and inequality. Currently, most media are controlled by a relatively small group of companies around the world. In the face of this situation, networked society has accelerated the development of alternative communication models, which act as loudspeakers for citizens' voices. The aim of this study is to describe the main features of the new forms of citizen expression, communication and cooperation, such as social networks, review sites, citizen journalism and the collaborative economy. It is concluded that in the face of these new challenges it is essential to continue to develop ethical principles of self-regulation to ensure the accuracy and thoroughness of new forms of communication on the Net.

Keywords: communication, social networks, review sites, citizen journalism and ethical principles for self-regulation

1. Introduction

In the current environment, the economic crisis has fundamentally affected the most vulnerable social sectors, generating unemployment and job insecurity. In addition, there have been losses of freedom, inequality and exclusion at all levels.

With regard to the media, although historically they had represented a resource for citizens against the abuse of powers, most media are now controlled by a relatively small group of global companies with a significant weight in the world's economy. These companies control media groups and often act as the ideological arm of globalization, diminishing popular demands, preventing changes to the social hierarchy and maintaining inequality in the distribution of wealth (Ramonet, 2016).

According to Herman and Chomsky (2010), one of the indicators for evaluating democracy in a State is the freedom of its media. In respect of this, the United Nations states: "Freedom of information is a fundamental right and [...] the cornerstone of all freedoms".

Therefore, in the current era of vulnerability, in which part of society is at the risk of exclusion, the media should make an effort to reconcile social profitability with economic efficiency and: a) Promote values such as freedom, equality, justice and ideological pluralism; b) Foster full respect for minorities through democratic debate, free, pluralistic, and objective information and freedom of expression; c) Implement actions to promote the rights of minors, equality between the sexes and non-discrimination; d) Offer content which is of high quality, innovative, diverse and ethically rigorous; and e) Ensure consumer rights are protected (Manfredi, 2004).

The globalization of the economy has undermined the power exercised by the media to defend people's fundamental right to be informed and the need for pluralistic and rigorous journalism. In this setting, organizations such as the IMF and the World Bank influence large economic events, protect governments and dictate the trends of the economy. In contrast to this, and acting as a vehicle that amplifies the voices of citizens, this article analyzes social networks, review websites, citizen journalism, the collaborative economy and ethical principles of self-regulation, opportunities which have been generated to guarantee individuals' right to inform and be informed.

2. Method

2.1 Social Networks. Citizens' Voices Go Viral

The exponential growth in social networks has set alarm bells ringing in the traditional media and they have come to be considered the main sources of entertainment and information, able to incorporate elements, resources and characteristics of the traditional media alongside new elements such as interactivity, videogames, audiovisual content and virtual reality, as well as offering an economically more austere cost model. According to Campos (2008), although the traditional media have the advantage of being more information- than entertainment-oriented, it requires an effort for them to regenerate themselves in the current media landscape.

In April 2016, Facebook had 1,650 million active users worldwide, of whom 934 million entered Facebook on a daily basis; 22 million were based in Spain. In July of the same year, Twitter had 310 million active monthly users, of whom 1.5 million were Spanish. According to Garca-Galera, Del Hoyo-Hurtado, and Fernandez-Munoz (2014) social networks are increasingly used to actively claim a space for citizens' voices.

In Spain, a profound transformation is taking place whereby journalism and the traditional media are moving progressively towards some Spanish cybermedia on social networks such as Facebook to locate and develop new journalistic products. However, results show that the majority do not take advantage of the Net to encourage participation, leading to the conclusion that spaces and resources are not optimized (Vivo, 2010).

Recent studies suggest that more than 95% of British university students think Facebook is more useful for socializing and talking with friends about work than actually doing work. They also believe that it is not a network used for purposes related to formal education, although it is sometimes used informally for the purpose of learning (Madge, Meek, Wellens, & Hooley, 2009).

Given their enormous influence, companies are now being forced to integrate social networks into their communication and marketing strategies. We analyzed Facebook and Twitter use by the three main commercial brands in 15 different sectors in Spain in order to offer an overview of and analyze the activity of those accounts most sensitive to criticism and identify and assess the communication strategy implemented by their respective managers. After analyzing 5,433 tweets and 3,000 posts, we were able to verify the companies' massive presence on social networks as well as companies' increasingly widespread use of them to communicate with their customers (Dasilva, 2013).

The results of an investigation by Aced Toledano and Lalueza Bosch (2016) showed that, general speaking, there is no significant difference between the use of social media by American and Spanish companies. A statistically significant difference is observed in customer service via Twitter, which is more widespread among IBEX 35 than Fortune 500 companies. A further significant difference is that IBEX 35 companies publish more audiovisual content in blogs and receive twice as many likes on Facebook as Fortune 500 companies. In both cases, there is a strategic use of social media by professionals from both countries. In fact, according to the results of the investigations by Islas, Arribas, Piscitelli, Adaime, and Binder (2010), companies must make an effort to "Understand social networks as media environments" as it is observed that citizens make an exponential use of social networks to report business malpractice.

A recent study on Starbucks by Chua and Banerjee (2013a) exhaustively analyzed the chain's communication in newspapers, magazines, articles, books and social networks, emphasizing the extent to which the latter means of on-line communication can help obtain more knowledge about customers so as to better manage their needs. The study concludes that, due to their interactivity characteristics, social networks are the best means of finding out more about consumers and managing the organization's online reputation. Starbucks is redefining customer relations, going from being passive recipients to key active collaborators in the company's innovation. Finally, the company also uses social networks to build customer loyalty.

2.2 Review Websites. Users who Share Their Experience on the Net

A study conducted by the ITB-Berlin (2014), which analyzed data from a survey of around a thousand Internet users who had reviewed 17 pages of comments, revealed that 96% of travelers consult review websites and 82% trust published opinions. Furthermore, 30% think that a high percentage of criticisms are false, while website managers stated that fake reviews make up between 1% and 5% of the total. To evaluate the authenticity of comments, users rated the content that seemed genuine, and statistically 70% stated that the establishment was as good as the comments indicated, while 20% described it as even better. In the same study, 1,500 questionnaires were administered to hotel managers. The results indicated that 94% thought review websites have a great influence on consumers when choosing accommodation, while 81% believed comments had a direct impact on the image of the hotel.

With 350 million unique visitors per month and over 320 million reviews and comments, Tripadvisor was considered the largest travel website in the world in 2016. According to Horner and Swarbrooke (2016), the site has introduced a series of interesting developments that have made a significant contribution to the Net: An accreditation program for hotels and their environmental policies, called Green Leaders; A travel forum where travelers can pose questions and other travelers can post responses; Apps for smartphones and tablets that make it easier to consult information during a trip; A link to Facebook that makes it easy for our friends to see what content we have been reviewing on Tripadvisor; and its own awards for, among others, hotels, destinations, and tourist attractions.

In light of the growth in content generated on the Internet, research carried out by Chua and Banerjee (2013b) focused on analyzing the reliability of reviews appearing on TripAdvisor. The results suggested that such reviews could largely be considered reliable.

In contrast, according to Cánovas, García, and María-Dolores (2015), the reliability of the more than 170 million reviews published on the site is continuously questioned. Although TripAdvisor or Booking.com advise establishments to encourage customers to participate by giving their opinion, they explicitly prohibit anything being offered in return. The study detects a significant number of cases where draws are held, observing that these condition participants by biasing their responses towards positive scores.

Furthermore, a study carried out by Tuominen (2011) on 1,752 opinions of 77 hotels in 6 different cities concluded that there is a correlation between the average ratings awarded to hotels and the number of ratings obtained. It is suggested that previous opinions of other users influence subsequent ones. Although many consumers consult online reviews before booking trips, research on the impact of user ratings and comments on tourist accommodation is insufficient. The results showed a positive correlation between the performance of the hotels and the scores and reviews obtained. The research suggests the need to take into account and correctly manage reviews as well as the quality described and perceived through the scores awarded in them.

Among the many review websites in existence, Booking.com stands out. In July 2016, it operated in 224 countries and had 990,369 accommodation establishments worldwide and 98,780,000 verified reviews. A study by Sparks and Browning (2011) explored four factors considered to be key when influencing consumers' perception of truthfulness when assessing reviews of establishments on Booking.com, as well as the subsequent choices they make. An experimental design was used to investigate four independent variables: the aim of the comment or review (personal or professional); the overall balance of opinions (positive or negative); the formulation of opinions (whether negative or positive comments come first); and numerical score accompanying the text.

The results of the study indicated that consumers are more influenced by early negative information, especially when the overall set of comments is negative. However, positively framed information accompanied by numerical scores generates confidence in the consumer and influences intention to book. The results suggest that consumers tend to trust comments that are clearly worded and easy to process. Comments that focus on interpersonal customer service also generate high attributions of truthfulness.

After analyzing the results of the aforementioned studies, the authors concluded that more and more users trust opinions generated on the Net compared with other sources of information when deciding on their travel option (Sparks & Browning, 2011).

2.3 Citizen Journalism. A Social Loudspeaker for Complaints Managed by Users

Processes such as digitization and the appearance of the Internet are the main factors that have revolutionized communication. The new formats present special and particular characteristics at narrative of discourse level. (Seisdedos et al., 2015).

Citizens have the fundamental right to receive information and express themselves. In the current media landscape, there is a certain information overload due to the sheer number of media outlets, and although it should be guaranteed that their content is of public interest and the information they disseminate is true, this is not always the case. The rights of citizens must be guaranteed as, despite the volume of messages they receive, they may be uninformed or receive contaminated information. It is necessary to guarantee the right ethical attitudes of communication professionals so that they work with the right goals in mind (Alonso González, 2015).

According to Bowman and Willis (2003), citizen journalism is considered to be that which takes an active role in the process of collecting, analyzing and disseminating information in the community, making contact with its needs.

The mass media should be the real power behind the voice of the people. In some authoritarian and dictatorial countries, however, the State uses the mass media to its own ends. In other countries, despite being democratic, there are also abuses and errors in the handling of information to ensure power is exercised through control.

In this context, public opinion, an indispensable element of political and social pluralism, has found a new means of expression in citizen journalism (Pavlik, 2005).

The birth of social networks and citizen journalism represents the emergence of a fifth power that allows citizens to denounce media control by the financial giants and ensure that the information that reaches us is at least contrasted and refuted. Receivers have become specialized and demanding issuers with a voice, who have the ability to choose and participate in a different way to that traditionally allowed them (Carballido, 2008).

Furthermore, faced with this new media landscape, the genres representative of quality journalism, such as reports, chronicles or analyses, are threatened due to their making production routines more expensive and slower, while readers increasingly want the greater speed, interactivity, emotionality, and hypertextual superficiality of online journalism (Parratt, 2012).

One of the ways to develop new journalistic products for the Internet is using different social networks as a platform for publishing the contents of citizen journalism. Furthermore, in this environment, formats such as blogs or video blogs have become widespread with content generated exclusively by users, including the magazine “Qué!”, the first Spanish medium to be produced by its own readers (Ayerdi, 2005).

Sometimes it is also referred to as social journalism, when it assumes responsibility, reflection and a search for solutions in the social sphere. According to Merritt (1998), who coined the term, “the contemporary press needs to be able to transcend the limited mission of telling the news, to achieve a broader mission, to help public life function correctly and to act based on this imperative”.

According to Meso (2005): “Citizen journalism is that which allows the active participation of social actors in all the processing of information of public interest. Therefore, its essential characteristics are forming public opinion through the creation of deliberative audiences and promoting citizen participation.”

2.4 Collaborative Economy. Disruptive Economic Models Based on Sharing over the Internet

According to Hadad Hadad and Valdés Llanes (2010), economic and financial crises are increasingly more frequent, profound and global. At the same time, economic slowdowns have an acute impact on the disadvantaged classes. This situation accelerates the appearance of alternative economic models for the production and commercialization of goods. In this environment, the collaborative economy represents a significant change from the capitalist model, since it is founded on a market based around collaboration and the exchange of goods and services between individuals.

According to Rosa (2014), disruptive models, and especially technological ones, are generating significant changes in markets and interpersonal relationships. In addition, this author emphasizes that civic technologies generated via the collaborative model allow for a more in-depth understanding of citizen participation mechanisms that contribute solutions to common problems characteristic of governance. They provide a basis for the opportunities generated by movements such as free software, open source, common creative licenses or open data, and are characterized by their enormous potential growth, which has a significant economic, environmental and social impact. Platforms are created for: the rental of products between private individuals - cars, caravans, vans, boats and homes; booking office and warehouse space for work purposes; sharing taxis between individuals; formalizing loans between individuals; putting teachers and students in contact for online courses, etc.

Contrasting with the advantages of the collaborative model, Pascual (2015) analyzes “some of the innumerable and important legal problems posed by these systems, taking as an illustrative example one of the sectors that has generated the most controversy in this regard: that of the taxi”. This means of transport has been shown to suffer from disproportionately limiting regulations compared to others, a variable that has probably accelerated the rise of the collaborative economy in this sector in a way that raises relevant legal dilemmas. Furthermore, there has been an emergence of social and business movements contrary to the development of collaborative economies, including taxi drivers against Uber, professional drivers against Blablacar and the hotel industry against Airbnb or HomeAway. The author points out the need to establish a specific legal system that contemplates optimal limitations for guaranteeing the security and quality of services rendered while at the same time protecting the legitimate development of other economic activities.

3. Results

3.1 Ethical Principles. Self-regulation for New Formats and New Products

The Internet poses a new scenario for communication, in which companies can choose from a wide range of digital devices to provide content to reach the user anywhere and at any time. The use, consumption and production of information have been transformed. In transmedia production, new guidelines for multi-platform regulation and multimedia recommendations are also required as consumers go to playing an active and key role in the design and architecture of new platforms. In these new communicative narratives, the public must act with ethical principles as they participate actively in the production and consumption of audiovisual content over the Net. It is important to educate new generations with the skills to differentiate reality from fiction (Jenkins, 2009).

In order to assess what society thinks about certain content broadcast in the media, a series of concepts such as audiences, critics, opinion polls, television viewers' associations and information and communication councils are used. Legal regulations are required that guarantee certain fundamental principles in any media and transmedia content broadcast (Van Dijk, 2016).

According to Kolbitsch and Maurer (2006), the information that is emitted or published on a medium must be truthful, rigorous, impartial, and respect human rights. It is necessary to act with responsibility and rigor when obtaining information in the case of information or opinions with content that may lead to discrimination, avoiding expressions or witnesses that may be offensive or harmful. A necessary but not sufficient condition for information to be more objective and fair is that it be complete, in the sense that it include all relevant points of view and also maintain a reasonable balance between all parties in the conflict, a fact that guarantees greater objectivity.

According to Kramers, Höjer, Lövehagen, and Wangel (2013), the principles of the deontological code of journalism are applicable to the new realities of communication. Therefore, information should be presented in accordance with regulatory mechanisms, respecting the principle of impartiality and neutrality. It must be narrated with precision and accuracy, in context and in depth. If there are contradictory sources on the issue, the different versions should be presented. Information needs to be contrasted in order to ensure it is not false or misleading. At the same time, it must be taken into account that certain aspects are emphasized depending on the chosen frame, shot, and camera movement in the recording, etc. Another aspect to take into account is the position of the camera with respect to the object. Equally, special care must be taken in selecting and arranging the image and sound, since editing and staging are a key phase in the development of the audiovisual product for it to be faithful, as a whole, to the truth.

In light of the deontological problems constantly posed in social media, self-regulation is necessary to guarantee that the principles of truth, freedom, justice and responsibility are observed. In line with this, a systematic study of cases published on social networks has revealed best practices and negative aspects to be improved. The data observed allow us to list a guide of 15 ethical principles to be used in the sphere of digital media (Bowen, 2013).

Furthermore, the use of audiovisual elements on social networks should give greater consistency to information, and in no case contribute to sensationalization per se. Obviously, the use of fictitious or archive images to exemplify or reconstruct facts must be made explicit.

The digital revolution has crossed the frontiers of traditional forms and genres of communication. In this environment, another important aspect when correctly presenting information is choosing the appropriate journalistic genre. According to Parratt (2012), in current times the traditionally used classificatory theory of journalistic genres "is insufficient to accommodate the enormous number of variants that continually appear as a result of the evolution of the journalistic profession, heading towards the proliferation of mixed genres and influenced by audiovisual media." While it is true that this classification must evolve and be completed in accordance with the times, it is no less true that classifying a publication as news, report, chronicle, commentary, criticism, etc. greatly facilitates its reception by the reader. It is important to continue developing ethical principles of self-regulation to be able to find one's way on the Net.

Table 1. 15 Ethical guidelines for social media use

Adapted from Bowen (2013)

Guideline	Justification and application
#Analysis Analyze the situation	<i>Examine messages rationally from all points of view. How could it be misinterpreted?</i>
#Good Encourage the good	<i>Does your message help build connectivity, commitment, and community?</i>
#Clarity Emphasize clarity	<i>Special attention must be paid to stating the source of the information and sponsorship, if it exists.</i>
#Consistency Consistency generates trust	<i>Consistency allows audiences to better know and understand you, and you can identify their expectations.</i>
#Dignity Maintain dignity and respect	<i>Ensure that the publication maintains dignity and respect towards the publics involved.</i>
#Deceit Avoid deceit	<i>If the news item may be misleading, even if only possibly, simply do not publish it.</i>
#Identification Identify clearly	<i>Information and personal opinion should be clearly differentiated for publications representing an organization.</i>
#Intention Examine intention	<i>Did you take your decision only out of goodwill?</i>
#Prudence Be fair and prudent	<i>Consider fairness, justice and citizens' right to be informed.</i>
#Responsibility Establish your responsibility	<i>Is your publication fulfilling its responsibility to do what is right?</i>
#Revelation Reveal	<i>Be transparent with the date the message was created and the date of the events.</i>
#Reversibility Is it reversible?	<i>How would you feel if you were at the receiving end of the message? Is it still ethical then?</i>
#Secret Avoid publishing secrets	<i>These could be trade secrets or other secrets protected by law.</i>
#Transparency Be transparent	<i>Clearly identify who finances the publication.</i>
#Verification Verify sources and data	<i>Always remain credible, do not use rumors or speculation.</i>

4. Discussion

Our analysis of recent research in the current media landscape has shown that large financial groups exert an enormous influence on the media. Economic globalization has generated large media groups that subordinate the political power of states to the interests of the financial market.

To ensure that the media are plural, can freely emit content and are representative of modern democracy, the interventionism of the big financial giants must be prevented by introducing regulation and self-regulation mechanisms, which are the only guarantee to preserve transparency and defend open societies characterized by communication professionals that display ethical attitudes.

Information professionals are required to ensure the correct management of user generated content; professionals who act with professional rigor and are not swayed by economic criteria and interests related only to audiences.

Given this situation, in first place social networks have become a tool at the service of citizens in the face of media globalization; a counter-power to the large communication groups, and an opportunity for societies to express themselves and make themselves freely heard.

Secondly, in an environment dominated by global economic groups, review websites force companies to optimize their services and improve their relationship with the customer, placing customers' comments at the epicenter of this dynamic.

In third place, citizen journalism represents a fifth power for citizens that guarantees them the right to expression and to receive correct and truthful information, uncontaminated by economic interests.

Fourthly, the collaborative economy is a radical change with respect to the current economic model, since it places collaboration and exchange before possession thanks to the Net.

Therefore, faced with these new challenges, it is essential to continue developing ethical self-regulation principles to guarantee the veracity and rigor of new forms of communication.

At the same time, it is essential to create impartial, credible and independent bodies that help amplify the voice of citizens in the face of corporate and media globalization.

Vusiness [from business, but with “V” for values] was born with this objective in mind. It is an observatory that promotes open, democratic, sustainable and inclusive companies that are to inspire the future. The observatory was created out of the Arpa research group (Audiovisual Screen Reception Analysis Group), which belongs to the University of Girona’s Philology and Communication Department. Vusiness represents a proposal for companies to move towards a new business ethics and policy.

This study is considered preliminary and has the aim of describing an approach to the revolution and opportunity the Internet represents for society in the face of economic globalization.

The results of this bibliographical review highlight the enormous challenge involved in continuing to move towards new integrative models capable of amplifying the voice of citizens in an ethically regulated way, particularly in an environment changing so rapidly due to the Internet.

The literature in the field of media globalization and new forms of communication in society via the Internet is undergoing significant growth due to it being an emerging field. Even so, descriptive and experimental studies capable of defining new forms of balanced and positive communication are required, to guarantee both the rights of societies to express their opinions and criticisms and of companies to fulfill their legitimate objectives.

In addition, it is important to generate informative and formative material to educate citizens on the principles of ethical self-regulation.

Last but not least, in line with the WAI (Web Accessibility Initiative), the media must make an effort to guarantee universal access to all websites for people with disabilities, to encourage their participation and guarantee a fully inclusive society.

The results and conclusions described in this preliminary review require thorough and interdisciplinary research.

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Empresas Inclusivas, Reinventando la Calidad de Vida. Una Revisión Teórica Inclusive Companies, Reinventing Quality of Life. A Theoretical Review

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Abstract- The global economy has suffered a serious and rapid slowdown that has led to unemployment and a shortage of decent work, fundamentally affecting the most vulnerable sectors of society. In order to overcome the inequality and exclusion inherent in the current economic system, companies that are termed 'inclusive' produce opportunities for development and aim to improve the quality of life of those who suffer social exclusion. This study aims to describe the main characteristics of inclusive companies based on four fundamental principles: values, team management, corporate social responsibility, and responsible marketing. This theoretical review of the most important studies concludes that there is a need for inclusive companies that contribute to the common good while generating profits. Such companies also have to be smart, championed by leaders who promote the use of information technologies and communication to improve citizens' quality of life. Likewise, companies have to be sustainable, balancing business development on the one hand with the environment and protection of the planet on the other. In essence, in order to move towards a new ethics and business policy, society needs companies that are committed to inclusive development.

Keywords: *inclusive companies, values, team management, corporate social responsibility, responsible marketing.*

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Empresas Inclusivas, Reinventando la Calidad de Vida. Una Revisión Teórica Inclusive Companies, Reinventing Quality of Life. A Theoretical Review

Carmen Echazarreta Soler ^α & Albert Costa Marcé ^ο

Resumen- En el entorno actual la economía mundial ha sufrido una grave y rápida desaceleración que afecta fundamentalmente a los sectores sociales más vulnerables, generando desempleo y déficit de trabajo decente. Para superar el actual sistema económico fuente de desigualdad y exclusión, las empresas inclusivas generan oportunidades para el desarrollo y tienen por objetivo mejorar la calidad de vida de las personas que sufren exclusión social. El objetivo de este estudio es describir las principales características de las empresas inclusivas que se basan en cuatro principios fundamentales como son los valores, la gestión de equipos, la responsabilidad social corporativa y el marketing responsable. A través de la revisión teórica de los principales estudios relacionados, se concluye la necesidad de empresas inclusivas que contribuyan al bien común y a la vez generen beneficios económicos. Al mismo tiempo, las empresas deben ser inteligentes, abanderadas por líderes que promuevan el uso de la tecnología de la información y la comunicación como medio para mejorar la calidad de vida de los ciudadanos. Asimismo, las empresas deben ser sostenibles, compatibilizando el desarrollo empresarial con el medio ambiente y la protección del planeta. En definitiva, la sociedad requiere de empresas que apuesten por el desarrollo inclusivo para avanzar hacia una nueva ética y política empresarial.

Palabras clave: *empresas inclusivas, valores, gestión de equipos, responsabilidad social corporativa y marketing responsable.*

Abstract- The global economy has suffered a serious and rapid slowdown that has led to unemployment and a shortage of decent work, fundamentally affecting the most vulnerable sectors of society. In order to overcome the inequality and exclusion inherent in the current economic system, companies that are termed 'inclusive' produce opportunities for development and aim to improve the quality of life of those who suffer social exclusion. This study aims to describe the main characteristics of inclusive companies based on four fundamental principles: values, team management, corporate social responsibility, and responsible marketing. This theoretical review of the most important studies concludes that there is a need for inclusive companies that contribute to the common good while generating profits. Such companies also have to be smart, championed by leaders who promote the use of information technologies and communication to improve citizens' quality of life. Likewise, companies have to be sustainable, balancing business development on the one hand with the environment and protection of the planet on the other. In essence, in order to move towards a new ethics and

business policy, society needs companies that are committed to inclusive development.

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I. INTRODUCCIÓN

La economía mundial ha sufrido una grave y rápida desaceleración. Los efectos de la crisis y la recesión ocurren fundamentalmente en los sectores sociales. La destrucción de miles de empleos, la precarización del mercado laboral y la falta de trabajo constituyen factores de riesgo en entornos de exclusión y marginación social. Han disminuido los recursos, los sistemas de protección, así como las prestaciones propias del estado de bienestar. Simultáneamente, han aumentado las dificultades de acceso al empleo para las personas que presentan carencias educativas, sociales, económicas y de calificación laboral. En consecuencia, se ha generado un incremento notable de embargos y desahucios, generando un impacto profundo en las capas sociales más desfavorecidas (Hadad Hadad y Valdés Llanes, 2010).

Según la (International-Labour-Office, 2012): "El mundo se encuentra ante un grave problema de desempleo y déficits generalizados de trabajo decente. Hay un retraso en el empleo mundial equivalente a 200 millones de puestos de trabajo, incrementados en 27 millones desde el inicio de la crisis. Para generar un crecimiento sostenible y al mismo tiempo mantener la cohesión social, se tienen que crear 600 millones de puestos de trabajo productivos en el próximo decenio. Aun así, quedarán 900 millones de trabajadores que viven con sus familias con unos ingresos inferiores al umbral de pobreza de los 2 dólares de los Estados Unidos por día, sobre todo en los países en desarrollo".

Al mismo tiempo, la tasa de empleo juvenil se ha incrementado, convirtiéndose en uno de los colectivos más vulnerables y castigados por la crisis, con tasas de paro que triplican la población activa en general (United-Nations, 2015b).

La economía mundial ha reducido drásticamente su capacidad para crear nuevos empleos. Por el contrario, en este entorno, gracias a las nuevas tecnologías las empresas pueden optimizar la eficiencia y la eficacia de los procesos productivos y de

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la prestación de servicios para mejorar la calidad de vida de sus clientes (Seisdedos et al., 2015).

Para superar el actual sistema económico fuente de desigualdad y exclusión, las empresas denominadas inclusivas tienen como principal objetivo reinventarse y evolucionar hacia un concepto de negocios en los que la colaboración, la participación y la implicación de los empleados sean indispensables y determinantes.

Las empresas sostenibles ofrecen nuevas formas de inclusión social, apostando por "respetar, promover y tomar en consideración los derechos humanos, el derecho a la salud, los derechos de los pueblos indígenas, las comunidades locales, los migrantes, los niños, las personas con discapacidad y las personas en situaciones de vulnerabilidad y el derecho al desarrollo, así como la igualdad de género, el empoderamiento de la mujer y la equidad intergeneracional" (United-Nations, 2015a).

Las actividades que se consideran estratégicas en entornos empresariales inteligentes o smart, sostenibles e inclusivos, son: la sanidad, la salud, el medio ambiente y la educación. También se hace hincapié en las áreas de atención y comunicación con el cliente exigiendo participación y transparencia (Seisdedos et al., 2015). Cabe tener en cuenta que, a nivel general, la agricultura sigue siendo el mayor empleador del mundo y en los últimos años se han creado más de 2,3 millones de empleos verdes en el sector de las energías renovables (United-Nations, 2015b).

En términos de Eguiguren (2011) "para gestionar las empresas se requieren modelos económicos, políticos y valores corporativos alternativos, propios de una cultura empresarial sostenible e inclusiva".

Según (Klionsky et al., 2012) las empresas inteligentes o smart, sostenibles e inclusivas, actúan en el mercado con sentido de responsabilidad, transparencia, democracia, participación y ética. En este contexto, la presente revisión teórica pretende exponer el resultado de un proceso sistemático de selección y revisión de un conjunto de investigaciones contrastadas sobre empresas inclusivas. Se pretende sentar las bases científicas para la concreción futura de un modelo alternativo al actual de creación, administración y dirección de empresas basado en la inteligencia, la sostenibilidad y la inclusión.

II. EMPRESAS INCLUSIVAS

En términos de Fisac Garcia et al. (2011): "Actualmente, se observa un creciente interés en el estudio de modelos empresariales inclusivos que promueven la generación de oportunidades para el desarrollo y que tienen por objetivo la mejora del nivel de vida de las personas que sufren exclusión social. La

empresa social, entendida en sentido amplio como una organización que busca la creación de valor social a través de la realización de una actividad económica, puede tener un amplio potencial demostrador y erigirse en un modelo que sirva de referencia para diseñar las organizaciones sostenibles del futuro".

En el actual entorno económico, otro factor fundamental es la revolución digital, que facilita la generación de la sociedad colaborativa, en la que el desarrollo del sistema productivo cambia la fuerza física por el conocimiento. En este ámbito la formación tiene un papel crucial y necesita por un lado incorporar tecnología (conectividad, dispositivos, soluciones multitáctiles, adaptación a personas con discapacidad, etc.) y por el otro facilitar y compartir el acceso a información. Además de incidir en la productividad, la sociedad colaborativa facilita la aparición de modelos de negocio que irrumpen con fuerza y cuestionan los modelos tradicionales forzando su transformación. A nivel colaborativo, Airbnb cuenta según su web con 60 millones de huéspedes en diciembre de 2015 y por su parte Uber afirma realizar más de un millón de viajes al día. Así pues, las reglas del juego han cambiado de manera radical (Seisdedos et al., 2015).

Según Márquez, Reficco, y Berger (2010) las empresas inclusivas se fundamentan en cuatro principios fundamentales como son los Valores; la Gestión de Equipos, la Responsabilidad Social Corporativa y el Marketing Responsable.

a) Valores

Las empresas inclusivas, propias de las sociedades colaborativas, orientan su misión a cubrir necesidades de la sociedad cómo las que recoge el Programa de las Naciones Unidas para el Desarrollo: "erradicar la pobreza extrema y el hambre; lograr la enseñanza universal; promover la igualdad de género y el papel de la mujer; reducir la mortalidad de los niños; mejorar la salud y combatir enfermedades, garantizar la sostenibilidad medioambiental o fomentar la asociación mundial para el desarrollo", La misión de las empresas inclusivas no sólo orienta al futuro y a largo plazo, sino que lo promueve. Se recomienda que se formulen de forma simple, directa y clara y a poder ser ambiciosa, y que responda a una necesidad social y diferenciada de las demás (Foladori, 2014).

Según Pin, Espinosa, y López (2005) a principios del siglo XX las empresas introducen valores relacionados con la productividad y la eficiencia porque se concibe el empleado como una pieza del mecanismo productivo. Posteriormente, es a mediados del siglo XX cuando la cultura más democrática y el énfasis en concepciones más psicosociales de las organizaciones, elevan la importancia de otro tipo de valores tales como el espíritu de equipo, la motivación intrínseca, el desarrollo profesional y el organizativo.

García Sánchez y Dolan (2003) concluyen que, en las tres últimas décadas, gracias a la aparición del nuevo paradigma de la dirección por valores, la concepción de la persona es más integral. Gracias a este enfoque, adquiere relevancia la dimensión más completa de la persona, y no sólo la profesional. Se resalta el valor de la persona como individuo singular, sin olvidar la dimensión económica y psicosocial. La organización es concebida como un conjunto de personas, importantes una a una, e importantes como componentes de la empresa. De ahí que los temas de equilibrio individuo-organización, trabajo-familia-vida personal, sean las ideas de vanguardia de esta nueva concepción.

En función de la concurrencia de una serie compleja de factores se crean y consolidan los valores en una empresa (Pin et al., 2005) en aspectos tales como: a) Creencias y valores del fundador. Todas las empresas tienen su origen en ideas y principios que son introducidos por los fundadores de las mismas; b) Creencias y valores de la dirección que los directivos o gerentes tratan de extender, confirmar o modificar especialmente cuando se produce un relevo generacional; c) Creencias y valores de los empleados. Los empleados contribuyen a la reformulación de los valores de la empresa. En un sistema de retroalimentación constante, los valores de los empleados son influidos por los sistemas de dirección y finalmente d) Marco económico, legal-laboral y los hábitos sociales. Se configuran y se desarrollan en un país en un momento histórico determinado, aspecto que influye y condiciona en gran medida la configuración y transmisión de los valores de las empresas.

b) *Gestión de equipos*

Según Pedraja-Rejas y Rodríguez-Ponce (2008) en el ámbito de la dirección estratégica uno de los avances más significativos ha sido el hecho de establecer una relación entre el equipo de alta dirección en la formulación de la estrategia y la eficacia o desempeño general de la empresa.

A nivel individual, el liderazgo se fundamenta en la influencia que ejerce una persona sobre su equipo o grupo de referencia. A nivel relacional, gracias al vínculo que establece con su equipo, el líder logra que otros lleven a cabo las tareas que se pretenden desarrollar al servicio de la eficacia y eficiencia colectiva. El principal criterio para medir la eficacia del estilo de liderazgo es el éxito de la organización. El éxito de un equipo de trabajo se medirá en base a los éxitos de la organización (satisfacer la demanda de los clientes, buena percepción por parte de los trabajadores y proveedores, y beneficios para los empresarios).

Los jefes-líderes tienen que superar los problemas que surgen en la organización, desarrollando, poniendo en marcha y valorando las soluciones potenciales, y planeando e implementando

en un futuro las decisiones tendientes a resolver dichas problemáticas. Cabe tener en cuenta, que la base cognitiva y los valores de cada uno de los líderes limitan el campo de la percepción selectiva, la interpretación de los problemas y resolución de conflictos, la definición y valoración de las soluciones posibles y la selección e implementación de la estrategia. Es evidente, pues, que el estilo de liderazgo es una variable que tiene efectos directos sobre los procesos y los resultados en las organizaciones.

Según Dolan y Garcia (2002) estudios relevantes han probado que el estilo de liderazgo influye sobre las conductas de los individuos en la empresa. Según los mismos autores, estudios recientes ratifican que el estilo de liderazgo tiene influencia directa en los procesos de trabajo grupal, sobre el clima laboral y sobre los resultados empresariales.

Otros estudios de investigación concluyen que el liderazgo es la capacidad de ejercer el mando óptimo para cumplir los objetivos estratégicos de la empresa, así como los máximos beneficios y a la vez afianzar los grupos de trabajo que lo hacen posible, potenciando el desarrollo de un adecuado clima laboral (Elkington, 1994).

Por otro lado, el líder actúa de motor inspirador y estimulador para que el grupo cumpla con el trabajo. El líder debe de generar consenso a través de establecer un buen vínculo de relación y confianza actuando a partir de valores como: honestidad, compromiso, ética, empatía, proximidad, eficacia, eficiencia, capacidad de liderazgo, transparencia y responsabilidad (Pin et al., 2005).

En coherencia con García Sánchez y Dolan (2003), para conseguir un rendimiento profesional de alta calidad en entornos cambiantes como son los actuales, cabe potenciar y cuidar factores cualitativos y valores intangibles tales como la imaginación, la confianza, la sensibilidad, la creatividad, la libertad, la autenticidad o la belleza. Estos valores poéticos y creativos son tan importantes o más que los conceptos cuantitativos económicos tradicionales que tienen que ver con el pragmatismo, como son la optimización, la orientación al cliente o la productividad.

Los equipos de trabajo requieren valores emocionales como la alegría, la solidaridad y la libertad para potenciar la creatividad, el talento y la innovación, así como para incidir en la mejora del clima laboral la cual cosa tiene traducción directa en el rendimiento de los trabajadores. Mayoritariamente, los directivos que gestionan equipos de trabajo acostumbran a racionalizar los procesos y los equipos y nunca se toman en serio ni aprecian los valores de la empresa ni los perciben como un verdadero activo que como tal debe ser correctamente gestionado. Lo habitual en estos casos es que las direcciones se tomen la mayor parte del tiempo a atender a lo que ellos denominan los aspectos realmente importantes de las empresas como

son los balances, la cuenta de resultados, los presupuestos o los impuestos. Es cuestión de tiempo parar ir percibiendo el cambio cultural i necesario que implica el actual entorno económico moderno y globalizado.

Diversos estudios concluyen que la formulación de la misión, visión y valores a través de un proceso participativo en el que se puedan implicar los trabajadores de la empresa, mejora el rendimiento, la implicación y el clima laboral de los mismos. Por lo tanto, se pone de relieve para los equipos de trabajo y las organizaciones, la necesidad de la existencia de valores compartidos (García y Dolan, 1997).

Según Seisdedos et al. (2015) es imprescindible la distribución de competencias y responsabilidades en las organizaciones para abordar su gestión con la dedicación y el foco necesarios; pero a la vez esta dificulta la propia ejecución.

Como alternativa a estas dificultades, para obtener equipos con valores compartidos, capaces de funcionar de forma productiva y potenciando al máximo sus capacidades, es necesario abrir el espacio en entornos que habitualmente son limitados. Se constata que las técnicas de intervención social vigentes ya no

son útiles en el contexto de una sociedad globalizada que está en permanente cambio. Se percibe que a menudo, las pausas para el café son los momentos en los que los participantes interactúan de forma independiente a la organización por lo que resultan ser más fructíferos. Así pues, se requieren formas más sencillas y productivas de organizar las reuniones y eventos.

La investigación etnográfica ratifica el aserto anterior. A través de la observación de los sencillos pero efectivos métodos que sirven a distintas etnias distantes del mundo como los indígenas de África y Norteamérica para ponerse de acuerdo y emprender obras que benefician a todos, se crean distintas técnicas de intervención para facilitar la implicación de los participantes en grandes grupos o simplemente en la discusión de temas altamente complejos.

Diversos autores han estudiado y experimentado diversas metodologías especialmente útiles ante situaciones complejas, urgentes, con grupos diversos y multidisciplinarios y cuando se requiere abordar la situación de manera productiva e innovadora (Ver tabla 1):

Tabla 1: Tecnologías de intervención en grandes grupos

(Friedmann y Llorens, 2002)

Tecnología del Espacio Abierto (Open SpaceTechnology) es una manera de facilitar reuniones productivas con un volumen de entre cinco y más de dos mil personas. El desarrollo consiste en partir de un tema claro de reunión y después de una introducción breve acerca de la metodología para abrir el espacio a cargo del facilitador, las personas participantes, crean conjuntamente la agenda, a partir de la cual conversan en distintas franjas horarias y subespacios (Owen, 2008).

Conferencia para la búsqueda del futuro (FutureSearchConference) tiene una duración de dos días y medio. Permite implicar a todos los actores clave en la planificación del futuro de una organización. Durante la sesión se desarrollan actividades pensadas para que los participantes descubran y reconozcan el pasado y definan el presente. Finalmente, construyen colectivamente una imagen de futuro, a partir de la cual derivan objetivos comunes y un plan de acción coral (Weisbord y Janoff, 1995).

Cumbre de indagación apreciativa (ia) es una nueva técnica de intervención capaz poner en marcha un proceso de cambio profundo en sistemas complejos o cuando aparecen conflictos. Está pensado para hacer evolucionar los grupos para que sean más eficientes y permitan surgir lo mejor de las personas, las organizaciones y su entorno relevante (Cooperrider y Whitney, 2011).

Círculo o consejo es una forma ancestral de reunión que facilita a los actores clave la conversación. En los círculos, las discusiones se suelen convertir en actitud respetuosa de conversación y escucha profunda (MacDougall, 2005).

World Café toma el nombre porqué la técnica imita la distribución habitual de una cafetería en la que entre 10 y 1.000 participantes se reúnen en grupos pequeños (4-5 personas) alrededor de mesas, para conversar airosamente sobre un asunto o asuntos que les involucra a todos. Las ideas se van generando a partir de conversaciones que importan, en los distintos círculos de conversación en los que hay un anfitrión que ayuda a polinizar y nunca cambia de mesa (Brown y Isaacs, 2005).

Indagación apreciativa (Appreciativeinquiry) es una técnica de desarrollo organizativo que tiene por objetivo ayudar a los grupos a renovarse y focalizarse. Se basa en el principio que las organizaciones cambian en función de las preguntas que se hacen (Cooperrider y Whitney, 2011).

Según Cooperrider y Whitney (2011) existen otras técnicas que también obtienen resultados significativos como son: los Diálogos generativos, el Aprendizaje en acción (Action Learning), la Técnica de

Recopilación de Ideas Colectivas (CollectiveMind-Mapping), Técnica de Recopilación de Historias (CollectiveStoryHarvest), el Facilitador Visual (Graphic Facilitation), Teoría U y Diálogo.

c) *Responsabilidad Social Corporativa*

En la actualidad, se asume que las empresas no sólo cumplen sus obligaciones económicas, éticas, sociales y legales con respecto a sus accionistas sino también hacia el planeta y el medioambiente, los empleados, los proveedores y los distribuidores (Lafuente, Viñuales, Pueyo, y Llaría, 2003). La responsabilidad social corporativa se puede definir como el reconocimiento e integración de las preocupaciones sociales y medioambientales por parte de las empresas (Cuesta González, Valor Martínez, y Kreisler Merino, 2003).

De acuerdo con Parra Valcarce (2008) los estudios concluyen que la percepción de las empresas por parte de los consumidores es más positiva a la hora

de valorar su imagen y reputación si perciben prácticas de RSC. En este sentido, los consumidores esperan que las organizaciones sean coherentes con los valores sociales.

Según un estudio de Ernst y White (2000) sobre la RSC, el 70% de los consumidores europeos indica que el compromiso que las empresas tienen respecto la responsabilidad social es importante cuando adquieren un producto o un servicio.

La Responsabilidad social corporativa representa las empresas que en el momento de su creación tienen los valores de la sostenibilidad como razón de ser. Para que esto se produzca, son necesarios una serie de factores (Felber, 2012) (Ver tabla 2):

Tabla 2: Visión de la Economía del Bien Común (Felber, 2012)	
Ámbito económico:	cada vez son más los consumidores, clientes y proveedores que valoran las empresas que orientan sus valores hacia la comunidad y no hacia el éxito empresarial financiero. Además, se perseguirá reducir la huella ecológica hacia un mundo globalmente más sostenible y justo.
Ámbito político:	se requieren cambios en el marco legal para fomentar las empresas sostenibles. Se necesitan normativas que persigan una vida mejor para todos los seres vivos y para el planeta. El marco legal debe promover un giro radical, pasando de favorecer el beneficio financiero y el PIB a la cooperación y la sostenibilidad.
Ámbito social:	se requieren movimientos que continúen concienciando sobre la necesidad de una transformación del sistema. Se pretende que nazcan empresas que cooperen entre sí y practiquen la solidaridad, promoviendo el comercio justo. Se seguirán como ejemplo las personas más empáticas, sensibles, responsables y socialmente competentes.

Siguiendo los trabajos de Eguiguren (2011), se establecen dos tipos diferenciados de empresas u organizaciones. Por un lado se identifican las que realizan acciones de Responsabilidad Social Corporativa (RSC) y por el otro las que nacen y fundamentan su razón de ser justamente en el eje de la sostenibilidad empresarial y en los valores. Así pues, los objetivos de las empresas pueden superar las ganancias estrictamente económicas.

En lo que se refiere a las diferencias respecto de la actividad a realizar, en las de RSC se seleccionan criterios que no necesariamente están vinculados a la misión de la empresa, en cambio en las Empresas Sostenibles las actividades se fundamentan exclusivamente en la misión de la empresa (Miotto, 2010).

Por lo que hace referencia a la estructura y a los trabajadores, en el caso de las empresas de RSC están fuera del organigrama y suponen una parte externa, voluntaria, anecdótica o inexistente. Por otro lado, en las Empresas Sostenibles forma parte de su trabajo diario como una actividad de contribución social.

A nivel económico, las empresas que realizan RSC suelen dedicar un porcentaje de sus beneficios a realizar este tipo de actuaciones. Según la Fundación Seres, Sociedad y Empresa Responsable, en España destacan empresas como Ilunion, Adecco y Fundación Adecco, Vodafone, Meliá Hotels International, Orange, BBVA, Konecna, DKV Seguros, Indra, CaixaBank, ESADE, Fundación Repsol y Ferrovial.

Por otro lado, las empresas inclusivas suelen aportar parte de su trabajo, investigación y capital para poner en marcha iniciativas que sean sostenibles con el tiempo. En 2012 el G20 organiza el Desafío en la Innovación de Negocios Inclusivos, un concurso global gestionado por la Corporación Financiera Internacional (IFC) que premia las empresas con métodos innovadores, escalables y comercialmente viables que proporcionan oportunidades económicas para personas pobres, mejorando además el acceso a agua potable, electricidad, salud, educación, vivienda, telecomunicaciones o servicios financieros. Entre las premiadas destacan iniciativas empresariales como: a) Apollo Hospitals Group de India que ofrece servicios médicos especializados en zonas rurales; b) Ecofiltro de Guatemala fabrica a muy bajo costo filtros de agua; c) Engro Foods Limited de Pakistán ayuda a pequeños productores de leche en zonas rurales; d) Jain Irrigation Systems Ltd. de India proporciona sistemas de riego a agricultores; e) Manila Water Company de Filipinas proporciona agua potable y aséptico; f) Reybanpac Unidad de Lácteos de Ecuador ayuda a combatir la desnutrición al proporcionar bebidas lácteas; g) Sustainable Harvest Coffee Importers de Estados Unidos ayuda a los pequeños agricultores de café en América Central, América del Sur y el Este de África, y h) Vinte Viviendas Integrales de México ofrece vivienda asequible y ecológica a las familias con pocos recursos (Manchón, 2012).

Además, si en las de RSC uno de los objetivos es mejorar la imagen y ahorrar impuestos deducibles fiscalmente, en las empresas responsables y sostenibles la finalidad es cumplir con su misión como empresa así como contribuir socialmente a las clases más desfavorecidas pagando los impuestos pertinentes en cada país, sin recurrir a determinados países para obtener beneficios fiscales.

Finalmente, en las empresas de RSC se realizan pocas acciones de evaluación y seguimiento, mientras que en las empresas sostenibles se mide la rendibilidad social y la inversión, así como la calidad, la eficacia de recursos y la eficiencia.

Las empresas inclusivas se fundamentan teóricamente con un proyecto económico abierto a las empresas para promover una economía sostenible y alternativa a los mercados financieros creado por Felber (2012):

Economía del bien común. Pretende sentar las bases para un sistema económico alternativo hacia el bien común, que pretende escapar del capitalismo y del comunismo y ofrecer una alternativa viable. Se trata de un sistema de mercado en el que se cambian las aspiraciones de las empresas, sustituyendo el afán de lucro y competencia por el bien común y la cooperación. Pretende generar cambio a nivel económico, político y social, por esto es un movimiento que se define como un proceso participativo, abierto y local con un alcance global.

La economía del bien común se construye en base a valores como la dignidad humana, la solidaridad, la cooperación, la responsabilidad ecológica y la empatía. Se considera que el objetivo de las actuaciones económicas son las relaciones personales y ecológicas. Existe un nuevo significado de éxito empresarial, el indicador Balance del Bien Común 4.0 que sirve para medir los comportamientos humanos y sostenibles. En este entorno, una empresa será considerada exitosa no con criterios de ganancia financiera sino de acuerdo con el indicador de Balance del Bien Común para garantizar el bien a los seres humanos y seres vivos.

d) *Marketing responsable*

En este entorno, el marketing responsable tiene como finalidad satisfacer las necesidades racionales, ponderadas y proporcionales de consumidores a partir de la fabricación y comercialización de productos y servicios, por los que obtiene como contrapartida un precio razonable y justo y aspira a obtener un beneficio suficiente para continuar contribuyendo al desarrollo social y para procurar la lícita compensación de quienes arriesgan su capital y dedican su trabajo (Eguiguren, 2011).

En términos de Palacios Alvarado (2015) el marketing responsable tiene que ver con las decisiones estratégicas que las empresas toman sobre sus clientes

consumidores y que vinculan con factores clave como la creación de producto o servicio, fijación de precios, canales de distribución y estrategias de comunicación justas.

Las empresas inteligentes diseñan estrategias de marketing responsable, mostrándose solidarias y justas con el planeta, el medio ambiente y las personas. Superan el objetivo de competir con las demás empresas ya que buscan cooperar, para facilitar que el resto de empresas con las que trabajan, proveedoras y clientes, sean también fuertes, competentes y sostenibles.

A diferencia de prácticas publicitarias basadas en la percepción subliminal, los estereotipos o prejuicios del target o la doble moral, el marketing responsable aboga por un ejercicio de creatividad basado en principios éticos como la democracia, la transparencia, el contraste de la información y la veracidad.

Eguiguren (2011) dota al marketing responsable de sigue una serie de principios: a) Los productos obedecen a necesidades racionales en la sociedad en que se comercializan; b) Se conciben para que el impacto medioambiental en el momento de su fabricación sea reducido o nulo; c) Los servicios o productos están acorde a la misión y valores que persigue la empresa; d) Todos los productos y servicios de la empresa pueden ser considerados sostenibles; e) Los nuevos productos comercializados generan valor para la sociedad a través de su consumo; f) La innovación está destinada a satisfacer necesidades ya existentes en los consumidores; g) Los productos comercializados aportan valor social y sostenibilidad i h) No se comercializan aquellos productos que, aunque siendo rentables, no encajan con los principios éticos del marketing responsable.

En lo referente al marketing ecológico, las empresas inteligentes tienen la responsabilidad de transmitir la cultura de la permanencia de forma práctica a los consumidores y al conjunto de la sociedad. Las autoridades también están obligadas a favorecer las actuaciones en la dirección del desarrollo sostenible, con normativas y leyes positivas y coercitivas para conseguir los objetivos medioambientales.

En términos de Schlottchauer (2014) surge un nuevo perfil de consumidor gracias a la mayor conectividad a Internet y a una desconfianza ante la publicidad convencional. Se trata de un consumidor activo que consulta diversas fuentes de información para decidir si compra un producto o adquiere un servicio.

Ante la necesidad de los consumidores por obtener información auténtica y no institucional de las marcas, surgen los review-sites, webs que permiten a los consumidores publicar reseñas sobre sus experiencias con determinados productos y servicios.

Schlottchauer (2014) analiza el negocio de Trip Advisor, la web de reseñas de viajes más grande del mundo, y que alberga contenido generado por usuarios, experiencias, crecimiento, monetización, competencia y factores de riesgo. Según concluye el estudio, Trip Advisor es un espacio para construir y gestionar la reputación de las empresas, el contenido y marcas del cual genera confianza en los viajeros de todo el mundo porque han sido generados por iguales. Con el tiempo, el portal dispone de una gran reputación dentro del sector que es su mayor activo intangible. Otro valor de la compañía es la innovación constante que le permite anticiparse a los cambios y preferencias de los usuarios.

III. A MODO DE CONCLUSIÓN

Descritas y analizadas las investigaciones recientes sobre el concepto de empresa inclusiva como modelo de creación, gestión y dirección empresarial se concluye que pueden ser una alternativa útil ante los efectos de la crisis y de la recesión económica. Se ha evidenciado que las empresas inclusivas pueden ayudar a generar un crecimiento sostenible y al mismo tiempo a mantener la cohesión social, ya que promueven la generación de oportunidades para el desarrollo y tienen por objetivo la mejora del nivel de vida de las personas que sufren exclusión social.

La implantación de empresas sostenibles puede beneficiar, en primer lugar, la inclusión social de colectivos desfavorecidos como jóvenes, mujeres, migrantes, desempleados de larga duración, personas con discapacidad y personas en situación de vulnerabilidad. El hecho de generar valor social para los colectivos en riesgo de exclusión, sin duda ayuda a combatir la pobreza y la marginación.

En segundo lugar, puede suponer la aparición estratégica de nuevos filones empresariales en sectores como la sanidad, la salud, el medio ambiente y la educación. Además, incorporan elementos novedosos para la creación, gestión y administración de empresas que tienen que ver con los valores, la gestión de equipos, la responsabilidad social corporativa y el marketing responsable. En términos de Fisac Garcia et al. (2011) los cuatro factores ayudan a resolver problemas sociales, de pobreza y a transformar o humanizar el sistema capitalista.

En tercer lugar, las empresas smart, sostenibles e inclusivas propician la gestión con sentido de responsabilidad, transparencia, democracia, participación y ética, tal y como describe Eguiguren (2011).

El presente estudio se considera preliminar y pretende describir una aproximación a un modelo de creación, administración y gestión empresarial alternativo al actual. Se pone de manifiesto la necesidad de disponer de un modelo integrador, basado en los resultados de la presente revisión bibliográfica así como

en otras investigaciones complementarias. Además, se requieren estudios descriptivos y experimentales capaces de definir indicadores cuantitativos y cualitativos para poder desarrollar dicho nuevo modelo inclusivo, así como estudios posteriores capaces de evaluar los resultados del modelo desarrollado.



La literatura en el ámbito de las empresas sostenibles e inclusivas ha presentado un crecimiento notable ya que se trata de un campo emergente. En este sentido cabe desarrollar por un lado, material con carácter esencialmente divulgativo, didáctico, informativo y general, para enseñar y sensibilizar y, por otro lado, investigaciones con enfoque más crítico y analítico para generar un modelo inclusivo estandarizado que permita la implementación del sistema y superar las dificultades que implica escalar un sistema global de creación, gestión y administración a las condiciones particulares de cada empresa u organización.

Los resultados y conclusiones requieren ser confirmados en estudios posteriores. Se concluye que, ante estos nuevos escenarios y retos, la investigación en este campo debe ser sistemática y multidisciplinar.

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Empresas Inteligentes, Inspirando el Futuro. Una Revisión Teórica Smart Companies, Inspiring the Future. A Theoretical Review

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Resumen: Las crisis económicas y financieras globales han acelerado la búsqueda de modelos empresariales alternativos. El objetivo de este estudio es describir las principales características de las *smart companies* o empresas inteligentes, capaces de superar las carencias que presenta el actual sistema económico. A través de la revisión teórica de los principales estudios relacionados, se concluye la necesidad de **empresas inteligentes abanderadas por líderes que promuevan el uso de la tecnología de la información y la comunicación como medio para mejorar la calidad de vida de los ciudadanos**. En definitiva, la sociedad requiere de empresas y consumidores que actúen en el libre mercado de forma responsable, ética, solidaria y justa. Deben hacer compatible su crecimiento económico con la distribución de la riqueza.

Palabras clave: Empresas inteligentes, Liderazgo, Tecnología de la información, Comunicación.

Abstract: The economic and financial global crises have accelerated the search for alternative business models. The aim of this article is to describe the main characteristics of smart companies, which are able to overcome the shortcomings of the current economic system. After conducting a theoretical review of the main studies related to this area, we conclude that there is a need for **smart companies championed by leaders who promote the use of information technologies and communication as means of improving citizens' quality of life**. Society requires companies and consumers to act in the free market in a fair, ethical, caring and responsible manner, as economic growth must be made compatible with the distribution of wealth.

Keywords: Smart companies, Leadership, Information technology, Communication.

INTRODUCCIÓN

En el entorno actual las empresas están adoptando cada vez más estrategias competitivas ante la creciente amenaza de un nuevo mercado económico, debido a la aparición de países con bajos costes de producción. Las empresas desarrollan complejos procesos de deslocalización e internacionalización para combatir la afectación del patrón tradicional de producción local (B. F. García, Mora, y Alés, 2009).

Las crisis económicas y financieras se hacen cada vez más frecuentes, profundas y globales y su repercusión ocurre fundamentalmente en los sectores sociales. En este contexto, la desaceleración económica ha aumentado significativamente el número de personas en situación de pobreza y exclusión; han disminuido los recursos, los sistemas de protección social así como determinadas prestaciones propias del estado de bienestar. La crisis ha generado la destrucción de miles de empleos, ha precarizado el mercado laboral y ha causado un incremento notable de embargos y desahucios, generando un impacto social que repercute directamente en las condiciones de vida de los más desfavorecidos (Hadad Hadad y Valdés Llanes, 2010).

Según Eguiguren (2011), la coyuntura económica y social ha acelerado la búsqueda de modelos económicos alternativos, capaces de minimizar los efectos de las crisis y superar las carencias que presenta el actual sistema capitalista. Según el autor, para gestionar empresas se requieren políticas y valores corporativos propios de una cultura empresarial sostenible a nivel social, económico y medioambiental. Las empresas cuya misión se sustenta en

ideales y valores comprometidos con las personas y el planeta contribuyen al bien común y a la vez pueden generar un volumen de beneficios económicos similar al resto de las empresas.

En la misma línea, el modelo alternativo al actual denominado People, Planet y Profit (3P), desarrollado por Fisk (2010), plantea la necesidad de establecer vínculos entre las esferas sociales, medioambientales, corporativas y económicas para superar las carencias del modelo actual.

Las *smart companies* o empresas inteligentes, actúan en el mercado con sentido de responsabilidad, transparencia, democracia, participación y ética (Klionsky et al., 2012). En consonancia, la presente revisión teórica pretende exponer el resultado de un proceso metodológico, estructurado y sistemático de selección de un conjunto de artículos válidos, útiles y relevantes sobre empresas inteligentes, con el objetivo de sentar las bases científicas para la concreción futura de un modelo alternativo de creación, administración y dirección de empresas.

SMART COMPANIES O EMPRESAS INTELIGENTES

Según Angel, Parent, Civco, Blei, y Potere (2011) el 54% de la población mundial vive en zonas urbanas industrializadas, frente al 49% en 2005 y al 33% en 1960. Se espera un crecimiento aproximado de hasta el 60% en 2030 y el 75% en 2050. Se estima que las ciudades e industrias serán las responsables de entre el 60 y el 80% del consumo energético mundial, y de las emisiones de gas invernadero. Los entornos industriales deberán afrontar problemas como la

polución, la seguridad, el transporte, la gestión de residuos, el empleo, la energía, la planificación urbana y los suministros en general.

Las empresas inteligentes se caracterizan por ofrecer servicios más eficientes para mejorar la calidad de vida y el bienestar de la ciudadanía. Se proponen misiones fundacionales tales como superar la crisis económica, combatir la desigualdad social, erradicar el cambio climático, contrarrestar el envejecimiento de la población o frenar la rápida urbanización. Vivimos en una era de grandes innovaciones tecnológicas que tienen el potencial ayudar a dar respuesta a la mayoría de problemas que retan a las empresas (Dameri y Garelli, 2014).

Kramers, Höjer, Lövehagen, y Wangel (2013) Definen una empresa inteligente como la que aprovecha la tecnología de la información y la comunicación (ICT *Information & Communicationstechnology*) para proveer de productos y servicios que satisfagan a sus clientes y gestionar su propia infraestructura. En este entorno destacan conceptos como **el liderazgo, la tecnología de la información y la comunicación**, como claves para cuantificar y valorar el grado de inteligencia o *Smart* de las empresas.

Liderazgo:

Castells y Pasola (2004) afirman que en un entorno de crisis, el liderazgo empresarial ha encontrado, en el concepto de empresa inteligente o *smart*, la manera de conseguir más, con menos recursos, gracias a la tecnología de la información y la comunicación.

Según Seisdedos et al. (2015) transformar una visión en realidad en cualquier organización exige un liderazgo fuerte, fuente de inspiración del cambio en las personas y de movilización de los recursos adecuados para llevar a cabo el proyecto. Los empresarios tienen la capacidad de marcar la agenda y asignar los recursos, y son también los responsables de impulsar organizaciones transversales que implementen y faciliten las sinergias entre los distintos departamentos, gracias al uso de la tecnología de la información.

Cada empresa debe definir su visión y ritmo de transformación hacia la gestión y dirección inteligente. Además de un liderazgo con voluntad y dirección es necesario el consenso y la implicación de los empleados para conseguir un avance efectivo, así como para asegurar la pervivencia en el largo plazo (Hollands, 2008).

El entorno económico hace que el liderazgo resulte fundamental para la eficacia de los equipos de trabajo y las organizaciones de las que forman parte. Según Seisdedos et al. (2015) la tecnología es el medio que necesitamos para avanzar hacia la gestión inteligente de las empresas para mejorar la calidad de vida de los ciudadanos.

Con este propósito, es preciso explorar nuevas modalidades de liderazgo, que permitan responder eficazmente a nuevas necesidades de trabajo, como el diseño para el cambio y la innovación, la diversidad cultural, la complejidad, el trabajo basado en el conocimiento y las organizaciones virtuales. La respuesta a estas demandas ha motivado el desarrollo de nuevos enfoques, como el nuevo liderazgo, el liderazgo

auténtico, transcultural, complejo, compartido y remoto (Review, 2011).

En este contexto, destacamos el concepto de liderazgo por valores de García Sánchez y Dolan (2003) según los cuales la Dirección por Valores es una nueva manera de entender la dirección de empresas, basada en un buen equilibrio entre tres clases de valores, para alcanzar su visión y cumplir su misión: a) Valores económico-pragmáticos, de control o “práxicos” por lo general predominantes y nunca suficientemente desarrollados (por ejemplo, la eficiencia o la calidad); b) Valores emocionales, de desarrollo, “poiéticos”, creativos o generativos (por ejemplo, la imaginación o la calidez), abusiva y erróneamente negados o menospreciados en muchas ocasiones desde la perspectiva pragmática eficientista y c) Los valores éticos (por ejemplo, la generosidad, el respeto o la honestidad), integrándolos con toda normalidad en los valores económicos y emocionales, sin encerrarlos en códigos ni considerarlos una categoría, y mucho menos ajena al núcleo del negocio productivo.

También tiene un papel relevante, en un sentido complementario, el concepto de liderazgo auténtico desarrollado por Walumbwa, Avolio, y Zhu (2008). Según los autores, el auge de este concepto se debe principalmente a dos razones que, por motivos diferentes, reclaman la existencia de un nuevo tipo de liderazgo: por un lado, la situación de crisis económica y el comportamiento decepcionante de los líderes políticos, y por otro del sector financiero a la hora de afrontar la situación.

Desde este punto de vista, la pérdida de confianza en los dirigentes pone de manifiesto la importancia de los aspectos éticos y morales del liderazgo. En efecto, en los últimos años, la psicología positiva ha propuesto cambiar el enfoque de la psicología desde la preocupación en tratar los aspectos negativos, como las deficiencias y las patologías, a fomentar el desarrollo de las cualidades positivas. Entre dichas cualidades destacan, por ejemplo, la creatividad, la integridad, la ética, el liderazgo, la sabiduría, el ser un buen ciudadano y el trabajo satisfactorio. En este entorno los líderes auténticos son individuos profundamente conscientes de sus valores y creencias, de cómo se comportan y, a su vez, de cómo son percibidos por los demás (Walumbwa et al., 2008).

En este contexto, se propone integrar los principios del liderazgo auténtico para la organización fundamentado en los principios de la dirección por valores, y aboga por (Love, 2013):

- 1) Utilizar tecnologías sociales y herramientas de inteligencia colectiva.
- 2) Generar espacios para facilitar la co-creación de soluciones innovadoras.
- 3) Utilizar las cualidades inspiradoras de la improvisación y el juego para promover la innovación y la creatividad.
- 4) Conectar desde la autenticidad con otras personas para catalizar el talento del grupo y aprender a colaborar juntos.
- 5) Generar cambios positivos en el mundo a partir de la transformación personal.

A continuación destacamos dos métodos para gestionar y conseguir los objetivos del liderazgo:

- a) *Instituto de Liderazgo Busca dentro de ti (SearchInsideYourselfLeadership Institute)* se trata de un programa formativo diseñado en Google que se constituye en tres etapas: entrenamiento de la atención; autoconocimiento y autodominio, y la creación de hábitos mentales. Se basa en los conceptos científicos de inteligencia emocional y Mindfulness. Gracias a este programa formativo se desarrollan habilidades de inteligencia emocional a la vez que genera confianza y una mejor comunicación entre los empleados y la empresa. La meditación ayuda a reducir el estrés, genera felicidad y calma y despeja la mente (Tan y Sullivan, 2012).
- b) *El Arte de facilitar conversaciones transformadoras (The Art of Hosting conversations that matter (AoH))* también se denomina Arte del Liderazgo Participativo. Se trata de un nuevo enfoque de liderazgo auténtico y transformador que consiste en partir del individuo para incidir en los sistemas utilizando prácticas como son la facilitación, el dialogo y la co-creación de soluciones innovadoras para resolver retos complejos. La co-creación se ha implementado con éxito en organizaciones como Apple y Google que consiguen resultados más creativos, flexibles e innovadores que sus competidores (Boyatzis y McKee, 2005).

Según concluye Seisdedos et al. (2015) para que las empresas avancen en un sentido *smart*, el líder debe fomentar los siguientes ámbitos: 1) **Vertical**: la empresa se dota de la tecnología necesaria para mejorar su gestión; 2) **Horizontal**: se desarrolla una plataforma de gestión transversal que conecta los distintos departamentos de la organización; 3) **Conectada**: las distintas empresas comienzan a compartir información y a interoperar entre sí a través de la plataforma de gestión, y 4) **Inteligente**: se logra gestionar de forma avanzada, predictiva y en tiempo real la empresa y ofrecer información y servicios de alto valor añadido a los clientes, trabajadores y proveedores, creando un ecosistema de innovación.

Tecnología de la información (Information technology):

Adaptando las conclusiones de Seisdedos et al. (2015) las plataformas estándar, abiertas e interoperables facilitan la consecución de mejoras en la gestión y el desarrollo del ecosistema en una empresa *Smart*.

De forma complementaria, según Guzmán y Palacios (2006) el pensamiento creativo fortalece y promueve la productividad en el ámbito empresarial. Las empresas, para ser competitivas, además de contar con una buena tecnología, tienen que ser capaces de crear y producir un producto que le favorezca en la penetración y fidelización de mercados. A la vez, tienen que estar dotados por una gerencia capaz de aprovechar las oportunidades, manejar sus recursos, especialmente el capital humano, para optimizar resultados en la dirección adecuada.

En el mismo sentido, según Suárez (2003) la formación de especialización debe generar cambios en los contenidos y en

la capacitación de los futuros profesionales a fin de dar paso a que afloren habilidades y destrezas tales como la creatividad, el talento o la innovación, facilitando la ejecución de determinadas tareas. Es importante, por encima de los contenidos, facilitar herramientas de desarrollo personal para garantizar que el alumnado potencie sus habilidades y capacidades en relación con la creatividad, el liderazgo, la comunicación, etc. De esta forma, a medio y largo plazo, los equipos de trabajo se identifican más con sus labores, desempeño y responsabilidades (García Sánchez y Dolan, 2003).

Además, en general, según concluye Herzberg (2003) Está demostrado que cuando una empresa consigue tener equipos de alto rendimiento, el resultado conseguido es significativamente mayor que la suma de resultados individuales. Una forma de medir la creatividad de una empresa, aunque es realmente una tarea difícil, es comparar la cantidad de productos, servicios o procesos que tiene antes de introducir estrategias de innovación y después de introducirlas.

Según Herzberg (2003) la mayoría de ejecutivos no se plantean la necesidad o importancia de la creatividad en sus equipos aunque sí la necesidad de innovar. Las empresas innovadoras a menudo se han generado a través de las compañías creativas. La creatividad e innovación empresarial se pueden aplicar en distintos ámbitos más allá del marketing en el sí de la organización: recursos humanos, producción, finanzas, etc.

En este entorno de innovación y creatividad destaca el concepto de **inteligencia colectiva**. Es una forma de maximizar el conocimiento y las capacidades cognitivas de un grupo, promoviendo la colaboración y cooperación entre sus componentes. Inicialmente, el término se usaba para referirse al comportamiento de determinadas especies como los insectos o las hormigas que colaboran entre sí funcionar como un único organismo. También se utiliza el término cuando se utiliza la red como entorno colaborativo.

A nivel de uso colaborativo para generar inteligencia colectiva destacan recursos como **TED, Tecnología, Entretenimiento y Diseño (Technology, Entertainment, Design)**, una asociación sin ánimo de lucro que tiene como finalidad compartir ideas en las comunidades de todo el mundo. La difusión de ideas se produce a través de conferencias cortas e impactantes. Actualmente abarca un espectro amplio de temas que van desde ciencia a negocios en más de cien idiomas. Entienden que las ideas pueden cambiar actitudes, vidas y en última instancia el mundo. Se trata, pues, de un centro de intercambio de conocimiento libre, formado por pensadores, para difundir grandes ideas y provocar conversaciones. Numerosas empresas la utilizan como fuente de inspiración Jacobson (2000).

Otra herramienta que puede facilitar compartir conocimiento contribuyendo a generar cooperación e inteligencia colectiva son los denominados **Mooc, Cursos online masivos y abiertos (Massive Online Open Courses)**. Es decir, se trata de educación abierta en Internet. Si se promueven las conexiones entre nodos de contenidos y personas, se facilita su aprendizaje y en consecuencia la

creación de conocimiento. Por lo tanto, los Mooc promueven la democratización del aprendizaje en el momento que facilitan la abertura de entornos educativos, permitiendo que personas de todo el mundo puedan seguir distintas iniciativas educativas gratuitas de las Universidades más prestigiosas del planeta como Harvard, Stanford o Massachusetts Institute of Technology.

Actualmente, el crecimiento de aplicaciones de creación colectiva en línea puede favorecer una sociedad más eficiente, justa e inclusiva (Kuklinski, 2007).

A continuación se definen una serie de conceptos clave relacionados con la tecnología de la información que se desarrollan y aplican en el ámbito de las empresas inteligentes o *Smart* (Seisdedos et al., 2015):

TABLA 1. Conceptos relacionados con las *smart companies* o empresas inteligentes (Seisdedos et al., 2015)

<ul style="list-style-type: none"> — Big data: Procesamiento y análisis de grandes volúmenes de datos en tiempo real, provenientes de diversas fuentes, de forma rápida y con tiempos de respuesta muy reducidos. La capacidad de generar inteligencia a partir de la información almacenada se está aplicando con éxito en campos como los servicios a la salud, en gestión de desastres y en proyectos colaborativos. — Cloud Computing: Capacidad de procesamiento mediante tecnología escalable y flexible al facilitarse a los clientes utilizando internet. Su utilización racionaliza la inversión, reduce la obsolescencia y proporciona escalabilidad inmediata gracias a que el usuario paga por capacidad utilizada. — Computación cognitiva. Sistemas basados en los Big data, Cloud Computing, las nuevas herramientas de seguridad, etc. que no se programan como los actuales ya que son capaces de entender el lenguaje natural de las personas, aprenden y pueden responder a preguntas complejas en pocos segundos a partir de su avanzada capacidad para analizar datos (Paniagua, 2013). — Internet of Things (IoT): Los distintos dispositivos conectados a internet a través de redes fijas y móviles representan una fuente de captación de información muy relevante y útil para poder ser filtrada e interpretarla para poder ofrecer una respuesta adecuada en tiempo real. — Lean Startup: Sistema para introducir nuevos productos o servicios en un mercado basado en el aprendizaje validado, en el que se experimenta y se itera constantemente para acortar los ciclos de desarrollo, medir el progreso y conocer retroalimentación constantemente y así asegurar su implantación (Ries, 2011). — Open Data: Puesta a disposición de terceros de la información de la que disponemos, posibilitando modelos basados en la economía participativa y el emprendimiento. — Solución tecnológica abierta: Utilización de tecnología estándar, horizontal, interoperable y escalable permite integrar el conjunto de sistemas en una misma plataforma de gestión y asegura que se desarrolle un ecosistema innovador.

Comunicación:

Seisdedos et al. (2015) Dicen literalmente que “El estallido de la revolución digital está creando una sociedad hiperconectada y colaborativa que transforma de forma decisiva las relaciones entre los ciudadanos.”

Según Contreras (2010) las nuevas tecnologías ofrecen a los individuos la posibilidad de emprender nuevas formas de participación. Gracias a Internet, los usuarios pueden desarrollar, calificar, colaborar y distribuir contenidos de forma personalizada o viral así como personalizar aplicaciones. Actualmente el contenido puede ser elaborado en distintos formatos tales como texto, imágenes, video y audio y son varias las plataformas que permiten su producción y distribución, principalmente la mensajería instantánea, el correo electrónico, las webs, los blogs y las redes sociales.

Los clientes, trabajadores y proveedores de las empresas tienen amplias posibilidades de crear, publicar contenido y dejar su testimonio sobre sus experiencias con las empresas con suma facilidad. Esta realidad se opone a la cadena de publicación habitual de los medios de comunicación tradicionales y a su proceso de selección y elaboración de contenido publicable. También cabe destacar que se ha reducido de forma significativa el tiempo necesario para su creación y distribución.

Según Kolbitsch y Maurer (2006) las distintas comunidades de usuarios que participan en Internet tienen en común la posibilidad de participación y apertura. Además, otro aspecto que incide de forma directa en la democratización es

que los usuarios tienen el poder de elegir y seleccionar contenido que desean leer, ver, consumir y opinar.

Históricamente, según Parra Valcarce (2008), Internet 0 nace en 1969 y supone una infraestructura de comunicaciones que permite interconectar grandes ordenadores. En 1993 la web 1.0 convierte la red en un gran almacén de información en el que aparecen como figuras claves para la localización los grandes buscadores. Poco después aparece la web 2.0 en el que todos los internautas del mundo pueden dialogar y compartir contenidos e opiniones entre sí.

En el ámbito de los medios de comunicación, según Ramonet y Moreno (2004) en los entornos democráticos la prensa y los medios han sido un recurso de defensa de los ciudadanos contra el abuso de los poderes legislativo, ejecutivo y judicial.

Gracias a las denuncias de los medios de comunicación, se han puesto de manifiesto numerosas violaciones de los derechos sobre los ciudadanos. En este sentido el autor define el término de cuarto poder como el sentido cívico y de lealtad de los periodistas y medios de comunicación a los ciudadanos con el deber de publicar, rechazar, enfrentar, democráticamente, decisiones ilegales que pudieran ser injustas contra ciudadanos inocentes.

No obstante, en la actualidad los medios de comunicación están controlados por un conjunto de grupos económicos y empresas globalizadoras con un peso en los negocios superior a algunos gobiernos y estados. Estos grupos

mediáticos de vocación mundial, gracias a su poder económico y a la revolución digital, agrupan medios masivos de comunicación como son emisoras de radio, prensa escrita, canales de televisión, webs de información, etc.).

A nivel de implantación de las redes sociales, según Seisdedos et al. (2015) Facebook cuenta en el segundo trimestre de 2015 con 1.490 millones de usuarios activos; y en un solo segundo se comparten 3.600 fotos en Instagram y se generan 100.000 tweets. A nivel acceso al móvil gracias a la banda ancha y al wifi y a las apps, en septiembre de 2015 hay alrededor de 3.700 millones de suscriptores móviles únicos a escala mundial. En este entorno los clientes y las empresas se han visto abocados a interactuar de forma virtual a través de las redes sociales. Esta nueva realidad genera a las organizaciones la necesidad de gestionar y generar opinión, creando una nueva realidad colaborativa i participativa.

En este entorno, nace el concepto de Periodismo Ciudadano generado por Gillmor (2006) que implica la socialización de la información. En este contexto la participación por parte de la sociedad es fundamental para conducir el discurso y generar información.

El *Periodismo Ciudadano* supone un quinto poder que permite oponer una fuerza democrática y cívica ciudadana ante la nueva coalición dominante de los grupos mediáticos, cómplices y difusores de la globalización liberal.

Urge que los grandes medios de comunicación actúen en beneficio de los ciudadanos con mayor ética y veracidad de la información. En este entorno la Comunicación Democrática que permite internet y la revolución digital pueden alentar el periodismo ciudadano para que se sobreponga la conciencia y los valores por encima de los intereses de grupos, empresas y patrones. Ante esta nueva realidad se propone elaborar una ecología de la información con la voluntad separar la información significativa y veraz de la que no lo es.

La libertad de las empresas no puede prevalecer sobre los derechos de los ciudadanos a obtener una información verificada y rigurosa. La fuerza de la comunicación democrática permite que los trabajadores, clientes y proveedores valoren las empresas en las que trabajan, compran o venden y puedan compartirlo con otros ciudadanos e internautas en un entorno abierto, público y de difusión, para crear un entorno micro y macroeconómico más ético, responsable, honesto y democrático.

Actualmente, algunos autores ya se refieren a la web 3.0, sinónimo de red inteligente, que se fundamenta en la aplicación de sistemas expertos de inteligencia artificial.

A MODO DE CONCLUSIÓN

Descritas y analizadas las investigaciones más relevantes y recientes sobre distintos modelos de creación, gestión y dirección se concluye que las *smart companies* o empresas inteligentes puede ser una alternativa útil para superar las insuficiencias que presenta el actual modelo económico que

ha desencadenado crisis económicas y financieras profundas.

En la presente revisión teórica se integran y complementan modelos como People, Planet Profit de Fisk (2010), los interesantes estudios de Eguiguren (2011), la dirección por valores de S. García y Dolan (1997) y Pin, Espinosa, y López (2005), así como los principios de liderazgo y gestión de equipos basados en Owen (2008) y Walumbwa et al. (2008). En segundo lugar, se apoya en la transformación digital de las ciudades de Seisdedos et al. (2015) para describir las características de la tecnología de la información y comunicación utilizadas en este entorno.

De los distintos ejes en que se enfatiza, la comunicación supone una novedad en el ámbito de los modelos de gestión empresarial pues suele estar ausente de sus postulados iniciales. Los autores del artículo consideran que la comunicación es un eje fundamental ya que la aparición de aspectos como el periodismo ciudadano, Internet 3.0 y las redes sociales han sociabilizado la información y democratizado su uso, permitiendo a clientes, trabajadores y proveedores crear contenidos, opinar e influir, en cualquier empresa.

En primer lugar se pone de relieve la necesidad de disponer de un análisis en profundidad de empresas que se fundamenten en factores como la sostenibilidad y la inclusividad, complementos necesarios a la inteligencia.

En segundo lugar se requiere de un modelo integrador, basado en los resultados de la presente revisión bibliográfica, y que funde sus principios en tres factores: inteligencia, sostenibilidad e inclusividad, orientadas a la creación, administración y dirección empresarial.

En tercer lugar, se necesitan estudios descriptivos que definan indicadores cuantitativos y cualitativos para poder evaluar dicho nuevo modelo.

Posteriormente, se necesitan estudios con diseños experimentales, capaces de valorar los resultados del modelo. Finalmente, se recomienda desarrollar contenidos didácticos y material informativo y formativo del nuevo modelo, con el fin de sensibilizar la población general y formar a directivos, trabajadores, proveedores y clientes para favorecer el uso del modelo y contribuir así a la sostenibilidad empresarial a medio y largo plazo.

Los presentes resultados y conclusiones requieren ser confirmados en estudios posteriores. Se concluye que, ante un futuro incierto, la investigación en este ámbito debería ser constante y pluridisciplinar.

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Sustainable Companies, Addressing the Climate Change: A Theoretical Review

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Summary- Climate change is an unavoidable threat with potentially irreversible effects. In the current economic context, globalization significantly increases the unbalanced use of finite, non-renewable sources of energy. This study aims to describe the main characteristics of sustainable companies, based on ideals and values that are committed to the development of the planet, consuming fewer resources than those that they create. Sustainable companies are based on fundamental principles such as the environment (renewable energy resources, sustainable development, preservation of the environment, responsible energy use, minimization of emissions, eco-efficiency, and the circular economy) and mobility (collective public transport, electric vehicles, clean non-motorized mobility systems). In light of this situation, a number of improvement actions have been proposed aimed at sustainable business development (smart environmental sensor networks, energy efficiency, integrated water cycle management, efficient lighting, smart metering, smart irrigation, environmental protection, smart waste management, smart public transport, monitoring of tolls and access to restricted areas, traffic management, fleet management, smart parking, and electric vehicles). Following a theoretical review of the main related studies, it is concluded that there are gaps in information and research related to climate change. At the same time, a further conclusion is that the instruments currently used to mitigate its effects are insufficient and inadequate.

Keywords: *sustainable companies, environment, climate change, environmental degradation, waste generation, sustainable development, mobility.*

GJMBR-A Classification: *JEL Code: M10*



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Sustainable Companies, Addressing the Climate Change: A Theoretical Review

Empresas Sostenibles, Afrontando El Cambio Climático: Una Revisión Teórica *

Carmen Echazarreta Soler ^α & Albert Costa Marcé ^ο

Resumen- El cambio climático representa una amenaza apremiante y con efectos potencialmente irreversibles. En el entorno económico actual, la globalización incrementa de forma significativa el uso no equilibrado de recursos energéticos finitos no renovables. El objetivo de este estudio es describir las principales características de las empresas sostenibles, sustentadas en ideales y valores comprometidos con el desarrollo del planeta, consumiendo menos recursos de los que generan. Las empresas sostenibles se basan en dos principios fundamentales como son el medio ambiente (recursos energéticos renovables, desarrollo sostenible, preservación del medio ambiente, consumo responsable de energía, minimización de emisiones, ecoeficiencia, economía circular) y la movilidad (transporte público colectivo, vehículo eléctrico, sistemas de movilidad limpios y no motorizados). Ante esta situación se plantean una serie de acciones de mejora para el desarrollo empresarial sostenible (redes de sensores ambientales inteligentes, eficiencia energética, gestión del ciclo integral del agua, alumbrado eficiente, smart metering, riego inteligente, protección medioambiental, gestión inteligente de residuos, transporte público inteligente, control de peajes, acceso a zonas restringidas, gestión de tráfico, gestión de flotas, parking inteligente, y vehículo eléctrico). A través de la revisión teórica de los principales estudios relacionados, se concluye que existen lagunas de información e investigación en relación con el cambio climático. A la vez se concluye que los instrumentos utilizados actualmente para la mitigación de sus efectos son insuficientes e inadecuados. Se requiere con urgencia mayores índices de gobernanza y estrategia transnacional. Finalmente, surge la necesidad de empresas sostenibles que compatibilicen el desarrollo empresarial con el medio ambiente y la protección del planeta.

Palabras Clave: *empresas sostenibles, medio ambiente, cambio climático, degradación ambiental, recursos energéticos, generación de residuos, desarrollo sostenible, movilidad.*

Summary- Climate change is an unavoidable threat with potentially irreversible effects. In the current economic context, globalization significantly increases the unbalanced use of

finite, non-renewable sources of energy. This study aims to describe the main characteristics of sustainable companies, based on ideals and values that are committed to the development of the planet, consuming fewer resources than those that they create. Sustainable companies are based on fundamental principles such as the environment (renewable energy resources, sustainable development, preservation of the environment, responsible energy use, minimization of emissions, eco-efficiency, and the circular economy) and mobility (collective public transport, electric vehicles, clean non-motorized mobility systems). In light of this situation, a number of improvement actions have been proposed aimed at sustainable business development (smart environmental sensor networks, energy efficiency, integrated water cycle management, efficient lighting, smart metering, smart irrigation, environmental protection, smart waste management, smart public transport, monitoring of tolls and access to restricted areas, traffic management, fleet management, smart parking, and electric vehicles). Following a theoretical review of the main related studies, it is concluded that there are gaps in information and research related to climate change. At the same time, a further conclusion is that the instruments currently used to mitigate its effects are insufficient and inadequate. Greater indexes of governance and transnational strategy are urgently needed. Finally, there is also a need for sustainable companies that combine business development with the environment and the protection of the planet.

Keywords: *sustainable companies, environment, climate change, environmental degradation, waste generation, sustainable development, mobility.*

1. INTRODUCCIÓN

Según el Acuerdo de París en virtud de la Convención marco sobre el cambio climático organizado por Naciones Unidas, “El cambio climático representa una amenaza apremiante y con efectos potencialmente irreversibles para las sociedades humanas y el planeta y, por lo tanto, exige de la cooperación más amplia posible de todos los países y su participación en una respuesta internacional efectiva y apropiada, con miras a acelerar la reducción de las emisiones mundiales de gases de efecto invernadero. Las emisiones de gases de efecto invernadero siguen aumentando y, al ritmo actual, la temperatura media global este siglo aumentará más de tres grados centígrados. El mundo ya sufre los efectos del cambio climático tales como el aumento del nivel del mar, el deshielo de los glaciares y otros fenómenos más extremos.” (United-Nations, 2015).

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En este sentido, según Kramers, Höjer, Lövehagen, y Wangel (2013) la variabilidad de las precipitaciones puede poner en riesgo el suministro de agua dulce que afecta a más de un 40% de la población mundial. Asimismo, el incremento de las emisiones de dióxido de carbono tiene efectos nocivos sobre todos los ecosistemas del planeta. Según Eguiguren (2011), para combatir los efectos del cambio climático a través del desarrollo sostenible de las empresas, "Se requiere un sistema o comportamiento humano sostenible, comprometido con el desarrollo armónico del planeta y de la humanidad cuando, actuando desde una plena libertad responsable, contribuya a la riqueza y al bien común y no consume más recursos de los que genera".

En el entorno actual las empresas están adoptando cada vez más estrategias competitivas ante la creciente amenaza de un nuevo mercado económico, debido a la aparición de países con bajos costes de producción. Las empresas desarrollan procesos de deslocalización para conseguir abaratar los costes de producción, a pesar del aumento de consumos energéticos debido a los costes de transporte y del uso de tecnología menos eficiente (García, Mora, & Alés, 2009). En contraposición a este modelo de crecimiento se requerirán fuertes reducciones de las emisiones mundiales para hacer frente al cambio climático con urgencia.

Las crisis económicas y financieras se hacen cada vez más frecuentes, profundas y globales y su repercusión ocurre fundamentalmente en los sectores sociales (Hadad Hadad & Valdés Llanes, 2010). De forma adicional, el cambio climático es un problema común de la humanidad, por lo que en ambos casos, se precisa adoptar medidas que respeten, promuevan y tomen en consideración sus obligaciones con respecto a "los derechos humanos, el derecho a la salud, los derechos de los pueblos indígenas, las comunidades locales, los inmigrantes, los niños, las personas con discapacidad y las personas en situaciones de vulnerabilidad y el derecho al desarrollo, así como la igualdad de género, el empoderamiento de la mujer y la equidad intergeneracional" (United-Nations, 2015).

Para hacer frente al cambio climático cabe adoptar medidas de respuesta desde el sector privado. Para gestionar empresas se requieren políticas y valores corporativos propios de una cultura empresarial sostenible a nivel medioambiental. Las empresas cuya misión se sustenta en ideales y valores comprometidos con el planeta contribuyen al bien común y a la vez pueden generar un volumen de beneficios económicos similar al resto de las empresas (Eguiguren, 2011).

Observando la importancia de garantizar la integridad de todos los ecosistemas y la protección de la biodiversidad, surgen modelos empresariales alternativos al capitalista como el denominado People, Planet y Profit (3P), desarrollado por Fisk (2010), que

plantea la necesidad de establecer vínculos entre las esferas sociales, medioambientales, corporativas y económicas para superar las carencias del modelo actual.

Según Klionsky et al. (2012) las empresas sostenibles actúan en el mercado con sentido de responsabilidad, transparencia, democracia, participación y ética. Asimismo, se crean en entornos en los que se reconoce la necesidad de promover las energías sostenibles.

La presente revisión teórica pretende exponer el resultado de un proceso sistemático de selección de estudios relevantes sobre conceptos relacionados con las empresas y la sostenibilidad, con el objetivo de sentar las bases científicas para la definición de un modelo alternativo de creación, dirección y gestión de empresas.

II. EMPRESAS SOSTENIBLES

En 2012 las Naciones Unidas ponen en marcha una encuesta global para conocer la opinión de la ciudadanía respecto los retos de la humanidad. A partir de ahí los líderes mundiales acuerdan los Objetivos de Desarrollo Sostenible (ODS), agenda conformada por 17 objetivos y 169 hitos que se proponen lograr para el año 2030. A nivel medioambiental destacan los siguientes ámbitos: a) Agua limpia y saneamiento; b) Energía asequible y no contaminante; c) Ciudades y comunidades sostenibles; d) Producción y consumo responsables; e) Acción para el clima; f) Vida submarina, y g) Vida de ecosistemas terrestres.

En coherencia con tales objetivos, Kramers et al. (2013) plantean que las empresas sostenibles se basan en dos principios fundamentales como son el medio ambiente, definiéndolo como el control de la huella del carbono o gases de efecto invernadero (GEI); monitorización y control de la polución y mejora de la calidad del aire; generación de residuos y contaminación; sostenibilidad medioambiental; eficiencia, reutilización y reciclaje de recursos; impulso de las energías renovables y mejora de las convencionales; reducción del consumo de agua; mejoras de la climatización y promoción de zonas verdes y la movilidad, en el sentido de la disminución de las emisiones de gases contaminantes, transporte eficiente, limpio y multimodal.

a) Medio Ambiente

Los primeros signos de degradación ambiental aparecen en Europa a finales de los años sesenta, situación que precipita que la comunidad internacional empiece a cuestionarse el actual modelo de apropiación industrial de la naturaleza, basado en la sobreexplotación de los recursos naturales no renovables, generador de la situación actual del medio ambiente (Kramers et al., 2013).

La globalización incrementa de forma significativa el uso no equilibrado de recursos energéticos finitos no renovables (combustibles fósiles como el petróleo, el carbón y el gas natural e isótopos radioactivos como los de uranio y plutonio). Según concluyen distintos estudios, si el consumo continuara con índices similares al actual, los recursos energéticos finitos se terminarían en el año 2050. Ante esta situación se propone la sostenibilidad ambiental desarrollada como eje de contra-globalización y alma del Foro Social Mundial, encuentro anual que llevan a cabo varios movimientos sociales, con el objetivo de celebrar la diversidad, discutir temas relevantes y buscar alternativas en las problemáticas sociales derivadas del neoliberalismo y la globalización económica (Kuklinski, 2007).

En segundo lugar, de acuerdo con Quesada (2009), el cambio climático es actualmente otro de los factores que pone en riesgo la sostenibilidad del planeta. El autor analiza los principales efectos del cambio climático y enumera aspectos como el aumento del nivel del mar, las olas de calor, las tormentas violentas, la sequía, las especies en extinción, las enfermedades, la desaparición de glaciares, etc. De igual forma, destaca medidas impulsadas por los gobiernos para favorecer el desarrollo sostenible como son el Protocolo de Kioto contra el cambio climático a fin de aumentar la ambición en el período anterior a 2020, el Plan Nacional de Asignación de Emisiones y muy especialmente el Acuerdo de París del 11 de diciembre de 2015 en el Marco de la Convención sobre el Cambio Climático.

En tercer lugar, otro tema que cabe abordar según Arroyave Rojas y Garcés Giraldo (2012) es la generación de residuos (waste generation) especialmente las emisiones de gases con efecto invernadero, destacando los incrementos producidos de óxidos de nitrógeno, dióxido de carbono y metano, sumados a aspectos que agravan como la deforestación. Durante el proceso productivo, los residuos representan un coste adicional al proceso productivo ya que implica un mal aprovechamiento de la materia prima a la vez que origina impactos económicos, ambientales y sociales importantes asociados a los costos de tratamiento y al deterioro de la calidad de vida. Las principales técnicas de minimización de residuos para la prevención de la contaminación se pueden dividir en cuatro categorías como son el manejo más estricto del inventario de productos, la modificación de los procesos de producción, la reducción del volumen de residuos y la recuperación de residuos.

En cuarto lugar, según la OMS la contaminación atmosférica es el principal factor ambiental de riesgo de mortalidad evitable. El aire que respiramos debe ser lo más limpio posible, lo cual significa que es necesario un esfuerzo para controlar los

umbrales máximos de dióxido de sulfuro, dióxido de nitrógeno, partículas, plomo, benceno y monóxido de carbono.

Al principio los gobiernos proponían medidas decrecimiento cero, basadas en contaminar y reciclar con el mismo volumen, para contribuir a equilibrar la ecología. En este sentido se pusieron en marcha numerosas políticas de creación de sistemas para reciclar financiados por los que contaminaban. Se buscaba sensibilizar a la población en general ya que debían contribuir al coste del reciclado para financiar el eco-equilibrio.

El problema está en que técnicamente se trata de una propuesta utópica ya que en la actualidad muchos de los recursos existentes no son renovables ni reciclables. Por lo tanto, teniendo en cuenta que tecnológicamente hay muchos recursos que no se pueden reciclar o regenerar, igualmente el medio ambiente se degradaría con este modelo, aunque fuera de forma más lenta. En consecuencia, se descarta esta vía para valorar los recursos naturales y mantener un desarrollo sostenible (Calomarde José, 2000).

La World Commission on Environment and Development genera el concepto de Desarrollo sostenible, según el cual el progreso económico debe satisfacer sus necesidades energéticas presentes sin comprometer las futuras. Se trata, pues, de hacer compatible la gestión de los recursos naturales, el impacto positivo sobre el medio ambiente y la promoción y cuidado de la naturaleza con el desarrollo económico.

En un entorno natural estabilizado y equilibrado debe ser compatible el desarrollo empresarial con el medio ambiente y la protección del planeta a través del desarrollo sostenible.

Las empresas sostenibles, siguiendo las pautas de Eguiguren (2011), deben afrontar con rigor temas amplios que van desde la optimización de los recursos naturales, al manejo de residuos o a la capacitación y concienciación de sus trabajadores, clientes y proveedores. Por este motivo, aunque está normatizado en la mayoría de los países, la organización debe evaluar continuamente el impacto medio ambiental que tienen sus acciones.

Tan sólo se podrá considerar una organización como sostenible si es capaz de comprometerse con el desarrollo equilibrado del planeta, generando una actividad neutra, es decir, respetuosa con los ecosistemas y no consumiendo más recursos de los estrictamente necesarios para su actividad y nunca superiores a los que genera. Se recomienda la utilización de las tres R: reducción de emisiones de CO² y otros gases que producen efecto invernadero, reciclaje de los residuos que genera para su posterior utilización en otras actividades o procesos productivos y recuperación de otros recursos potenciando el uso de las energías renovables.

Las acciones de preservación del medio ambiente también serán muy importantes en dos ámbitos como son el consumo de agua (water consumption) y de alimentos. Es importante investigar y promover técnicas de cultivo de productos vegetales con necesidades inferiores de agua así como del uso de abonos químicos y pesticidas. De este modo se podría promover el desarrollo de la producción agrícola en sitios del planeta caracterizados por la falta de agua y fertilizantes. Al mismo tiempo se tienen que cambiar los hábitos de demanda de alimentos basados en dietas hipocalóricas excedentarias en grasas animales y proteínas por otras equilibradas con proteínas vegetales, que consumen menos recursos naturales y son en general más accesibles.

En este contexto, la Huella Ecológica es el indicador del impacto ambiental generado por la demanda humana que se hace de los recursos existentes en los distintos ecosistemas de la Tierra, relacionándola con la capacidad ecológica del planeta para regenerar sus recursos. Las empresas cada vez fabrican los productos con mayor número de componentes que se puedan reutilizar con la finalidad de reducir el consumo de materiales y energías de origen no renovable. En este sentido se están incrementando la proliferación de materiales vegetales renovables que permiten la reducción de la utilización de combustibles fósiles para su producción.

Siguiendo, la Huella Ecológica Corporativa es un indicador aplicable a las empresas y a las organizaciones, capaz de proporcionar un marco de referencia para el análisis de la demanda de bioproductividad. Estos indicadores fundamentan la recogida de datos para su análisis posterior en variables como los a) Consumos e intensidad energética; b) Productividad natural c) Capacidad de productividad energética; d) Factor de equivalencia; e) Consumo eléctrico; f) Consumo de combustibles; g) Consumo de materiales (generales, de construcción y amortizables); h) Consumo de servicios, residuos emisiones y vertidos; i) Residuos sólidos; j) Emisiones a la atmósfera y de los vertidos; k) Consumo de recursos agropecuarios; l) Alimentos; m) Consumo de recursos forestales; n) Uso del suelo; ñ) Emisiones de CO₂, la huella del carbono (carbon foot print); o) Ecoeficiencia, y p) Huella social y cultural.

De forma complementaria, proliferan las industrias orientadas a la minimización de emisiones, que emplean como materias primas los desechos de otras empresas y ciudades a través de la puesta en marcha de industrias simbióticas. En particular el agua es de los recursos naturales que se han visto más afectados en las últimas décadas, en la que debido a una sobreexplotación indiscriminada y a una contaminación gradual, demanda una gran cantidad de recursos para mitigar los devastadores impactos generados.

A raíz de la Convención Marco sobre el Cambio Climático impulsado por Naciones Unidas en París, 114 multinacionales como Dell, Enel, Sony, Procter & Gamble, Thalys, Ikea, Carrefour, Kellogg o Wal-Mart se han comprometido conjuntamente a adoptar objetivos de reducción de sus emisiones de gases de efecto invernadero en un plazo de dos años, para mantener en 2 grados C el calentamiento global.

La apuesta de presente y futuro por el desarrollo sostenible permite avanzar hacia una nueva ética política y empresarial. En este entorno, la Ecoeficiencia, que consiste en generar más bienes de consumo y servicios utilizando menos recursos y creando menos basura, contaminación y polución, es un recurso útil para combatir la escasez de recursos. La Ecoeficiencia se puede aplicar en el uso de energías convencionales como la eléctrica o en el uso de energías alternativas, equivalentes a las energías renovables o energía verde e incluso se podrían aceptar todas aquellas que no implican la quema de combustibles fósiles como el carbón, el gas y el petróleo. En esta definición amplia se incluyen la energía nuclear e incluso la hidroeléctrica.

Las empresas sostenibles aumentan el uso de energías naturales renovables o alternativas que se caracterizan por ser inagotables o por regenerarse por medios naturales. En contraposición a las no renovables como la energía fósil o nuclear, entre las renovables o verdes se enumeran la hidráulica, la solar térmica, la biomasa, la solar, la eólica, la geotérmica y la marina.

También en este entorno surge con fuerza la Ecoeficiencia en el uso de combustibles tales como la biomasa (de la madera, residuos agrícolas y estiércol) capaz de proporcionar energías sustitutivas a los combustibles fósiles. En este sentido, se requieren políticas para reequilibrar las áreas rurales y las ciudades ya que el consumo de combustibles fósiles debido al transporte y a la logística son altamente contaminantes. Con el objetivo de reducir las emisiones de CO₂ se hace imprescindible su transformación en sistemas ecológicamente más equilibrados (Kramers et al., 2013).

En la categoría de biomasa se pueden influir desde agrocombustibles líquidos como el biodiesel o el bioetanol, a gaseosos como el metano o sólidos como la leña. En la búsqueda de equilibrio, evidentemente se trata de no emplear más biomasa que la producida de forma neta por el ecosistema explotado. Las tecnologías desarrolladas y los materiales reciclables deben evitar la desertización y contaminación de extensiones y superficies del planeta.

Otro aspecto que cabe destacar es el consumo de materiales ecoeficientes. Por ejemplo en el caso de la construcción cada vez aparecen más materiales como cementos descontaminantes, cales hidráulicas naturales, cementos transparentes, etc. que se utilizan

de forma prioritaria en la construcción o rehabilitación. Habitualmente, los materiales ecoeficientes tienen la característica que presentan mayor resistencia a las inclemencias del tiempo, son más baratas en términos logísticos y respetan el aspecto natural del entorno. En el momento de compra de materiales es necesario identificar y valorar las etiquetas ecológicas y priorizar el nivel de consumo en la compra de vehículos y ordenadores.

Durante la ejecución de los servicios, las empresas deben enfatizar la Ecoeficiencia en aspectos como la reducción de desechos, el uso del suelo, el consumo de recursos agropecuarios y pesqueros, el consumo de recursos forestales y agua, análisis de las posibles pérdidas de agua y pérdidas por rotura así como el fomento de la utilización de aguas pluviales para el riego.

Una variable destacada es la del capital natural que según Fisk (2010) se refiere a los recursos naturales del planeta y de la biosfera tales como las plantas, el aire, el petróleo, los animales o los minerales que actúan como medios naturales de producción de bienes ecosistémicos ya que producen oxígeno, depuran el agua de forma natural y previenen la erosión y la polinización. El capital natural es el que una empresa o institución puede invertir es por ejemplo en a) capital forestal (Los bosques con la consecuente reducción de CO²); b) capital agrícola (granja sostenible, agricultura ecológica y cultivos energéticos); c) capital marino y capital pesquero. A nivel general, en la línea de United-Nations (2015) "se recomienda el uso de incentivos positivos para reducir las emisiones debidas a la deforestación y la degradación de los bosques, además de la promoción de la conservación, gestión sostenible de los bosques, y el aumento de las reservas forestales de carbono, así como de los enfoques de política alternativos, así como promover la mitigación de las emisiones de gases de efecto invernadero, fomentando al mismo tiempo el desarrollo sostenible".

En lo que se refiere al mar, se considera también un capital natural en el que se podría intervenir para un desarrollo marino y de pesca sostenible para combatir el declive general del sector pesquero.

En el entorno actual, el modelo económico lineal de "tomar, hacer, desechar" requiere grandes cantidades de energía y otros recursos baratos y de fácil acceso en nuestro planeta, pero está llegando al límite de su capacidad. En contraposición, la economía circular, modelo desarrollado por MacArthur (2013), es una alternativa basada en los principios de "reparación y regeneración", y que pretende conseguir que los productos, componentes y recursos en general mantengan su utilidad y valor en todo momento.

Por ejemplo, según la economía lineal, las empresas compran maquinaria que se amortiza con

una vida útil de entre cuatro y cinco años, generando un residuo difícil de reutilizar y reciclar. Según la economía circular, las empresas compran el uso de la maquinaria. Este cambio de paradigma implica que la empresa proveedora de dicho servicio es la responsable y primera interesada de alargar la vida útil de la maquinaria durante el ciclo técnico, reparándola y usando los componentes más duraderos para ofrecer las mejores prestaciones.

La economía circular propone un ciclo continuo de desarrollo positivo que conserve y mejore el capital natural, optimizando el uso de recursos y minimizando los riesgos del sistema al gestionar una cantidad finita de existencias y flujos no renovables.

La economía circular se fundamenta sobre tres principios clave: preservar y mejorar el capital natural, optimizar el uso de los recursos y fomentar la eficacia del sistema. Los productos se diseñan para su posterior desmontaje y readaptación. Los materiales utilizados no son tóxicos cosa que permite su compostaje con facilidad. En el caso de materiales artificiales, polímeros o aleaciones, están diseñados para poder utilizarse de nuevo con la mínima energía y la máxima calidad. La economía circular restaurativa implica una reducción significativa de la energía necesaria para su funcionamiento, la cual cosa permitiría el uso exclusivo de energías renovables. Entre las empresas que están investigando y empezando a aplicar sistemas de economía circular destacan Cisco, Google, H&M, King Fisher, Philips, Renault y Unilever. A continuación se proponen una serie de medidas relacionadas con conceptos clave para el medio ambiente que se desarrollan y aplican en las empresas sostenibles (Kramers et al., 2013):

Tabla 1: Acciones propias de las empresas sostenibles respecto a distintos conceptos relacionados con el medio ambiente (Adaptado de Barcelona-City-Council (2012))

- Corresponsabilidad (*Joint responsibility*): Consumo de bienes y servicios de forma responsable (comercio justo, comercio de proximidad, productos ecológicos, etc.)
- Energía verde (*Green energy*): Ahorro de recursos naturales y logro de la máxima eficiencia en su producción, distribución y uso, en especial de agua y energía.
- Mitigación del cambio climático (*Climate change mitigation*): Evolución hacia una economía baja en emisiones, priorizando la reducción del consumo de energía e impulsando el uso de energías renovables con menos impacto.
- Reducción de emisiones (*Emission reduction*): Prevención y minimización de las emisiones de efecto invernadero, reduciéndolas a cero o en caso de imposibilidad tendencia a la compensación y autosuficiencia energética.
- Reducción de residuos (*Waste reduction*): Mejora de la gestión de los residuos priorizando por este orden la reducción, la reutilización y el reciclaje. Incrementar el compostaje.
- Reducción de ruido (*Noise reduction*): Mejora del confort acústico. Disminución de los niveles de ruido, especialmente en la circulación de vehículos con motor de combustión.
- Turismo sostenible (*Sustainable tourism*): Avance hacia un turismo sostenible en equilibrio con el territorio y que revierta positivamente en la comunidad local.
- Uso eficiente del agua (*Efficient water use*): Ahorro de recursos naturales y logro de la máxima eficiencia en su producción, distribución y uso.
- Verde urbano (*Urban green*): Ampliación del verde urbano en polígonos y otras zonas.

Adaptado de Barcelona-City-Council (2012)

b) Movilidad

A nivel de movilidad, para avanzar hacia un sistema logístico y de transporte eficaz, seguro, sostenible, interconectado, integrado y de bajo impacto medioambiental las empresas tienen que prescindir progresivamente de los vehículos contaminantes de su flota para contribuir a la reducción de la contaminación industrial del entorno (Seisdedos et al., 2015a).

Globalmente, se requiere la implantación estratégica de zonas industriales con bajas emisiones, la aprobación de medidas de fiscalidad ambiental y la distinción de distintos niveles de peajes en función de la contaminación de cada vehículo. De este modo, se fomenta que se incorporen en las flotas vehículos eléctricos y de muy bajas emisiones, además de contribuir a generalizar el uso de medios de transporte alternativos al vehículo como la bicicleta o el transporte público para ir al trabajo (Kramers et al., 2013).

Mejorar el aire que respiramos es una oportunidad para reindustrializar el país con las mejores tecnologías disponibles, la reducción de la dependencia del petróleo, el empujón a la electrificación del parque de vehículos y el paso definitivo a un transporte público de calidad y competitivo.

El transporte rodado es la principal fuente de contaminación, tanto por lo que se refiere a los óxidos de nitrógeno como a las partículas en suspensión. El volumen creciente de tráfico, el aumento de la flota de vehículos y la dieselización son las principales causas. En este sentido, un ejemplo de amplia repercusión mediática se produce en septiembre de 2015 cuando la Agencia de Medio Ambiente de Estados Unidos

(EPA) emite una notificación de violación de la Ley de Aire Limpio a Volkswagen. Se acusa al fabricante alemán de incluir en sus vehículos diésel de cuatro cilindros un software que permite eludir las normas de emisiones de ciertos contaminantes del aire, como las emisiones de dióxido de carbono. Según distintas pruebas se ha determinado que los vehículos emiten hasta 40 veces más de contaminación que lo permitido.

Según Mollinedo (2014) las zonas industriales tienen que apostar por mejorar las condiciones de movilidad urbana y favorecer la movilidad racional. El transporte público colectivo (metro, autobús, ferrocarril, tranvía, etc.) debe ser cómodo, interconectado con la red urbana, con buena frecuencia de paso y económicamente competitivo. También se recomienda el uso de tarifas especiales para incrementar el uso del transporte y disminuir la contaminación. En este sentido es importante que los usuarios reciban información útil y en tiempo real para que se puedan ahorrar tiempo, hacer los transbordos con mayor agilidad y contribuir a reducir la huella de carbono. A la vez, es importante que los sistemas públicos de transporte reciban el feedback de los usuarios la cual permite planificar con mejoras los viajes posteriores.

Para contribuir a la mejora de la calidad del aire, es necesario reducir el parque de vehículos circulante y conseguir la transformación de los vehículos restantes hacia un modelo de movilidad de bajas emisiones, priorizando el vehículo eléctrico, que es el único sistema en la actualidad que emite cero emisiones. Se proponen medidas para este tipo de vehículos como la bonificación positiva de tasas municipales de estacionamiento en zonas reguladas,

exención del incremento de tarifas de peajes, bonificación de la tasa de contaminación atmosférica, etc.

Según los estudios de Buehler y Pucher (2012) es necesario recuperar la importancia que tenían para la movilidad urbana la utilización de sistemas de movilidad limpios y no motorizados para ir al trabajo, como son ir a pie y en bicicleta. Los autores proponen a las empresas apostar por zonas industriales en las que se creen infraestructuras sin discontinuidad para la movilidad cotidiana y segura a pie y en bicicleta.

La zona portuaria y aeroportuaria son infraestructuras logísticas básicas para las empresas gracias a sus funciones comerciales, de pasajeros, logísticas y energéticas. En estos entornos es necesario promover el uso del gas natural licuado (GNL) y otros combustibles alternativos a los hidrocarburos en

barcos, camiones de alto tonelaje y maquinarias de trabajo (Dameri & Garelli, 2014).

Un ejemplo de buenas praxis es la empresa de aparcamientos Saba, uno de los grandes operadores de Europa. La empresa sitúa la RSC como un elemento central de su gestión apostando por: a) movilidad sostenible (implantación del VIA T en entrada y salida) y modelo de gestión de la movilidad en los centros urbanos; b) eficiencia energética y huella de carbono; c) sistema integrado de gestión de residuos y reducción de consumos; d) apuesta del parque de vehículos eléctricos y e) integración laboral de personas con discapacidad.

A continuación se definen una serie de conceptos clave relacionados con la movilidad que se desarrollan y aplican en el ámbito de las empresas sostenibles (Kramers et al., 2013):

Tabla 2: Acciones propias de las empresas sostenibles respecto a distintos conceptos relacionados con la movilidad

- Aire más limpio (*Cleaner air*): Mejora de la calidad del aire, especialmente respecto a los óxidos de nitrógeno, las partículas en suspensión y los alérgenos. Disminución del tráfico motorizado, fomentando los combustibles menos contaminantes y el vehículo eléctrico. Potenciación del uso y la seguridad en la bicicleta. Acceso al transporte público, aumentando su flota. Implantación del vehículo eléctrico, priorizando las fuentes de energía renovable.
- Movilidad equitativa (*Equitable mobility*): Mejora de la accesibilidad universal al transporte público, a los edificios y los espacios de concurrencia, evitando obstáculos innecesarios y ordenando el aparcamiento. Promoción de los desplazamientos no motorizados. Mejora de la superficie destinada a los peatones.
- Movilidad sostenible (*Sustainable mobility*): Promoción de estrategias disuasorias del uso del vehículo privado motorizado. Promoción de la conducción eficiente.

Adaptado de Barcelona-City-Council (2012)

c) *Acciones para la sostenibilidad en las empresas*

Según Passetti y Tenucci (2016) el apoyo presente y futuro para un desarrollo sostenible abre la vía de una nueva política y ética empresarial. En este contexto, la escasez de recursos puede ser combatida a través de la eco-eficiencia, que implica la producción de bienes y servicios que usan menos recursos y generan menos residuos y contaminación. La eco-eficiencia puede ser aplicada en el uso de energía convencional, como la electricidad, o en alternativas, renovables o verdes; de hecho se puede usar sobre todas las energías que no implican la quema de combustibles fósiles como el carbón o el gas. Esta definición amplia incluso incluye las nucleares y las hidro-eléctricas.

A continuación se detalla una propuesta de acciones de mejora relacionadas con una gestión empresarial sostenible (Seisdedos et al., 2015b). (Ver tabla 3):



Tabla 3: Acciones para la sostenibilidad en las empresas

- Redes de sensores ambientales inteligentes (detección automática de niveles de ruidos y contaminación acústica)
- Eficiencia energética (empleo de equipos de alta eficiencia energética -cogeneración, calderas de alta eficiencia, domótica) y soluciones que promueven la gestión del consumo energético en climatización, iluminación o ascensores...
- Gestión del ciclo integral del agua (empleo de la tecnología para que el agua sea un ciclo cerrado: captación, transporte, distribución, alcantarillado, lectura de consumos, facturación, cobro, depuración y potabilización,...)
- Alumbrado eficiente (uso de tecnología led, sistemas de iluminación inteligentes y bajo demanda o mediante sensores de presencia)
- Smart metering (tele medición de consumos de agua, gas, electricidad proporcionando una mejor información que favorece ahorro y eficiencia en el consumo)
- Riego inteligente (automatización del riego y redes de sensores para medir cuándo y cuánto es necesario regar)
- Protección medioambiental (detección y reacción ante emergencias medioambientales: escapes, incendios, etc.)
- Gestión inteligente de residuos (información en tiempo real sobre el llenado de los contenedores; programación dinámica en función de las rutas de los camiones de recogida de basuras, etc.)
- Transporte público inteligente (prioridad semafórica para transporte público, gestión integrada de tarifas entre bus, metro, cercanías, información en tiempo real de incidencias y frecuencias, servicios de asesoramiento digital al viajero, etc.)
- Control de peajes / acceso a zonas restringidas (identificación automática de vehículos autorizados, cobro automatizado por uso de carreteras de peajes,...)
- Gestión de tráfico (predicción del tráfico, semáforos inteligentes, información al conductor en tiempo real, avisos sobre incidencias, servicios de asesoramiento digital al conductor, etc.)
- Gestión de flotas (vehículos de propulsión ecológica, localización en tiempo real mediante GPS, gestión y seguimiento digital de consumos, informes de desempeño, gestión del mantenimiento, etc.)
- Parking inteligente (información en tiempo real sobre disponibilidad de plazas de aparcamiento, reserva de plazas online, tarifas de estacionamiento variables, etc.)
- Vehículo eléctrico (despliegue de redes de puntos de carga, sistemas de información sobre ubicación y disponibilidad, sistemas de alquiler público de vehículos eléctricos, etc.)

Adaptado de Barcelona-City-Council (2012); Seisdedos et al. (2015b)

III. A MODO DE CONCLUSIÓN

Tras analizar distintos estudios recientes sobre las empresas sostenibles se concluye que pueden ser una alternativa útil para superar las insuficiencias que presenta el actual modelo energético. Las empresas sostenibles pueden dar una respuesta progresiva y eficaz a la amenaza apremiante del cambio climático, sustentándose en las conclusiones de los principales estudios recientes disponibles.

En la presente revisión teórica se integran y complementan los compromisos a nivel mundial de la Convención Marco sobre el Cambio Climático impulsado por Naciones Unidas en París (United-Nations, 2015); el Protocolo de Kyoto: Convenio internacional para la prevención del cambio climático; modelos como *People, Planet Profit* de Fisk (2010) y los interesantes estudios de Eguiguren (2011).

Los estudios analizados más relevantes destacan en primer lugar la necesidad de un análisis exhaustivo sobre las empresas que basan su gestión en un uso inteligente de la tecnología y la inclusividad, factores clave necesarios para complementar la sostenibilidad. Según (Seisdedos et al., 2015b), "El reto de las empresas es hacer compatible el desarrollo económico, el respeto al planeta y una mejor calidad de vida. Como en otros sectores, las tecnologías de la información y las comunicaciones están dando lugar a una gestión inteligente. Como las ciudades, las empresas son responsables de la mayor parte del

impacto medioambiental del ser humano. Son grandes consumidoras de recursos naturales (agua, energía, materias primas,...) y generan enormes cantidades de residuos."

En el estudio se valora la aprobación del Acuerdo de la Cumbre de París entre 195 países contra el cambio climático, que fija el techo a las emisiones de gases de efecto invernadero, establece un sistema de financiación así como medidas para combatirlo. En la línea de las conclusiones de la Cumbre, los distintos ejes en que se enfatiza tales como el medio ambiente y la movilidad son determinantes para: "a) Mantener el aumento de la temperatura media mundial muy por debajo de 2 °C con respecto a los niveles preindustriales, y proseguir los esfuerzos para limitar ese aumento de la temperatura a 1,5 °C con respecto a los niveles preindustriales; y b) Aumentar la capacidad de adaptación a los efectos adversos del cambio climático y promover la resiliencia al clima y un desarrollo con bajas emisiones de gases de efecto invernadero".

A raíz de los estudios analizados, en primer lugar se pone de relieve la necesidad de disponer de un análisis en profundidad de empresas que se fundamenten en factores como la inteligencia (*smart*) y la inclusividad, complementos necesarios a la sostenibilidad.

En segundo lugar se requiere de un modelo integrador basado en los resultados de la presente revisión bibliográfica, y que funda sus principios en tres

factores: inteligencia, sostenibilidad e inclusividad para poder generar, dirigir y gestionar empresas con valor.

En tercer lugar, se necesitan estudios científicos que definan indicadores cuantitativos y cualitativos para poder evaluar dicho nuevo modelo cuando nuevas tecnologías que según concluyen Seisdedos et al. (2015b) se pueden resumir en: a) Redes de sensores ambientales inteligentes; b) Eficiencia energética; c) Gestión del ciclo integral del agua; d) Alumbrado eficiente; e) Smart metering; f) Riego inteligente; g) Protección medioambiental; h) Gestión inteligente de residuos; i) Transporte público inteligente; j) Control de peajes / acceso a zonas restringidas; k) Gestión de tráfico; l) Gestión de flotas; m) Parking inteligente, y n) Vehículo eléctrico.

Finalmente, se requieren estudios experimentales, capaces de valorar los resultados fruto de la aplicación del modelo. Además, se recomienda desarrollar contenidos didácticos y material informativo y formativo del nuevo modelo para sensibilizar y formar la población general así como trabajadores, proveedores y clientes.

Los resultados del presente estudio deben ser considerados como preliminares y tienen que ser confirmados en análisis posteriores. La investigación en este ámbito debería ser continua y pluridisciplinar.

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FORO DE REFLEXIÓN Y DEBATE: EMPRESAS INTELIGENTES, GENERANDO FUTURO

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Resumen

Se establece un foro de reflexión y debate multidisciplinar y multiprofesional para debatir y definir indicadores relevantes y significativos que faciliten la identificación, diferenciación y promoción de las empresas smart-inteligentes, que promueven el uso de las tecnologías de la información y la comunicación como medio para mejorar la calidad de vida de los ciudadanos. En coherencia con una revisión bibliográfica exhaustiva previa, se enfoca el debate a través de cuatro ejes: tecnología, innovación y calidad de vida; comunicación; liderazgo y dirección de personas, y empresas inteligentes. En las conclusiones se destacan una serie de características diferenciales de las empresa Smart-inteligentes en cinco ámbitos: **Tecnología:** Humanización y generación de trabajos con valor frente a la robotización y la digitalización; ciberseguridad y protección de datos. **Administración y gestión:** Conciliación de la actividad económica y generación de valor en sus stakeholders; dirección de personas y liderazgo con valores; optimización del clima laboral; fomento del trabajo colaborativo; cuidado y gestión adecuada del personal; generación de orgullo de pertinencia retorno a la sociedad; respeto a la diversidad en general, generacional y multicultural, y promoción del voluntariado. **Investigación:** Innovación; investigación dirigida y aplicada transferencia de conocimiento entre universidad y empresa, y generación de conocimiento. **Educación y formación:** En valores ante los retos que plantea la tecnología, formación y reciclaje ante el cambio y **Comunicación:** Transparencia; comunicación dirigida a los clientes; periodismo social democratizador, webs de opiniones y testimonios que fomentan la mejora empresarial y brecha digital. La definición de indicadores cuantitativos y cualitativos permitirá disponer de una herramienta de dirección empresarial entorno a la gestión de las tecnologías en las organizaciones, en un momento de grandes retos sociales y de transformación debidos a la digitalización y a la robotización. La reflexión, el debate y el conocimiento generado en este foro de personas expertas persigue la transferencia sobre cuatro ámbitos: investigación, educación, emprendimiento y empresa.

Palabras clave

Foro de reflexión y debate, empresas con valores, empresas smart-inteligentes, tecnología, robotización, digitalización, calidad de vida, liderazgo, dirección de personas.

1. Introducción

La Universitat de Girona promueve un Foro de reflexión alrededor de las empresas smart (inteligentes), que utilizan la tecnología, para mejorar la calidad de vida de las personas.

El Foro de debate, que se celebra el 22 de noviembre de 2016, es un espacio de encuentro pensado para reflexionar en el marco del proyecto Vusiness [del inglés Business, negocios, con “V” de valores] que pretende promover las empresas inteligentes, abiertas, democráticas, sostenibles e inclusivas, que tienen que inspirar el futuro, impulsado por la PhD. Carmen Echazarreta Soler y PhD. student, Albert Costa Marcé, miembros del Grupo de investigación ARPA (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales) del Departamento de Filología y Comunicación de la Universitat de Girona.

La recesión económica y financiera ha tenido un fuerte impacto negativo en la actividad económica de los países de la Unión Europea que ha causado la destrucción de empleo y el aumento de paro provocando un deterioro de las condiciones de vida de una amplia parte de la población.

En Europa, entre 2008 y 2012 se han destruido 7,2 millones de puestos de trabajo y tan solo se han creado 2,4 millones, con un saldo negativo de casi 4,8 millones de empleos. En el caso de España, la especialización productiva en la última fase expansiva del ciclo económico basada en la construcción, la posterior burbuja inmobiliaria, así como la política de recortes, ha agravado la situación de grupos sociales específicos que han quedado sin trabajo (Rocha y Aragon, 2012).

Mendizabal y Errasti (2006) afirman que la globalización facilita a las empresas la deslocalización de los procesos productivos, generalizando los procesos de subcontratación y externalización con decisivas consecuencias en los países industrializados, afectando directamente al tejido productivo y a los derechos sociales de los trabajadores, repercutiendo de forma relevante y negativa sobre sus condiciones de empleo.

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En este sentido afirman Echazarreta y Costa (2017a) que: “La destrucción de miles de empleos, la precarización del mercado laboral y la falta de trabajo constituyen factores de riesgo en entornos de exclusión y marginación social. Las víctimas en las sociedades industrializadas suelen ser los trabajadores menos calificados.”

Según Merino et al. (2012) en España se ha llegado a una tasa de paro del 22% en 2012. Para promover la recuperación económica y hacer frente a la destrucción de empleo el gobierno se ha encaminado a la generación de empleo incidiendo en la cantidad y no en la calidad laboral.

En segundo lugar, otro factor actualmente alarmante es el cambio climático, que representa una amenaza apremiante y con efectos potencialmente irreversibles. En el entorno económico actual, la globalización incrementa de forma significativa el uso no equilibrado de recursos energéticos finitos no renovables. Surge la necesidad de empresas sostenibles que compatibilicen el desarrollo empresarial con el medio ambiente y la protección del planeta (Echazarreta y Costa, 2018).

Un tercer factor clave que está empezando a provocar cambios substanciales en la economía global y concretamente en el mercado de trabajo es la Industria 4.0. Según Ceballos (2016): “La confluencia de tecnologías posibilita a la industria inimaginables oportunidades, definiéndose a sí un nuevo modelo industrial, a partir de la digitalización. El efecto de la digitalización se produce en todos los ámbitos de la empresa, en la estrategia, en la oferta de productos y servicios, en el modelo de negocio, en las operaciones y en la organización y cultura. Este cambio implica un nuevo modelo de empresa y perfil industrial, los cuales deberán afrontar esta oportunidad de reindustrialización.” Probablemente el nuevo modelo implicará la desaparición progresiva de la producción en masa tal y como la conocemos hoy, ya que Internet facilita el contacto directo entre consumo y producción facilitando la costumización del producto gracias a la automatización que permiten los avances tecnológicos.

Según Lasi et al. (2014), la convergencia de diversas tecnologías tiene un potencial disruptivo que transformará empresas, sectores y mercados. Además, el coste accesible de las últimas tecnologías para la mayoría de empresas independientemente de su tamaño y su volumen de facturación, incide en la democratización de la digitalización de la industria.

Lombardero (2015) afirma que la cuarta revolución industrial implicará la digitalización del 90% del empleo relacionado con la industria y los servicios. La combinación de los avances en la digitalización y la robotización pueden suponer oportunidades de innovación, crecimiento y generación de ocupación. El modelo resultante puede suponer una oportunidad para desarrollar modelos empresariales que requieran de nuevas ocupaciones que faciliten la salida de la crisis.

Afirma Seghezzi (2016) que en la nueva organización productiva, los trabajadores incidirán en nuevas ocupaciones como son el diseño del proceso productivo, la determinación de los objetivos, la programación de la maquinaria así como la supervisión y mantenimiento.

La red también posibilita la creación de un mercado virtual que facilita la economía colaborativa, es decir, la posibilidad

de acceder a bienes y servicios sin intermediación de empresas (Todolí-Signes, 2017).

A la vez, Echazarreta y Costa (2016) : “la sociedad conectada en red ha acelerado el desarrollo de modelos de comunicación alternativos, que actúan como altavoces para los ciudadanos. Gracias a las nuevas formas de expresión, comunicación y colaboración ciudadana como son las redes sociales, las webs de opiniones, el periodismo ciudadano y la economía colaborativa se incide en la democratización de la sociedad y la libertad de comunicación”.

En contraposición, según Goerlich (2016) , la automatización de los procesos productivos y la digitalización de los servicios implica un fuerte impacto negativo en el mercado laboral, causando la destrucción significativa de empleo. En un trabajo científico desarrollado por Frey y Osborne (2017) , se examinaron con detalle 702 ocupaciones en el mercado de Estados Unidos con el objetivo de determinar cuáles estaban en riesgo ante la digitalización. Se concluye que, en las dos próximas décadas, un 47% los trabajos presentan un riesgo elevado de desaparecer como consecuencia de las innovaciones tecnológicas y su aplicación en industria y en los servicios.

Arntz et al. (2016) estiman una pérdida media de puestos de trabajo de entre el 6 y el 12% entre los estados miembros de la OECD, con una media entorno al 9% en los próximos años. En el mismo informe cifran un impacto sobre la configuración de los puestos de trabajo de entre el 25 y el 45%.

Concluye Torrent-Sellens (2017) cada vez que se produce un cambio disruptivo en la tecnología se constata una preocupación fehaciente en la sociedad por el trabajo. Datos concluyentes de análisis económicos indican que la tecnología no destruye el trabajo, sino que sesga habilidades, tareas y destrezas, y desplaza empleos, ocupaciones y personas.

Según Echazarreta y Costa (2017b) : “Para superar las carencias del actual sistema económico, se requieren las smart companies o empresas inteligentes, abanderadas por líderes que promuevan el uso de la tecnología de la información y la comunicación como medio para mejorar la calidad de vida de los ciudadanos. En definitiva, la sociedad requiere de empresas y consumidores que actúen en el libre mercado de forma responsable, ética, solidaria y justa. Deben hacer compatible su crecimiento económico con la distribución de la riqueza.”

Eguiguren (2011), director ejecutivo de The Global Alliance for Banking on Values (GABV), concluye que los fenómenos anteriormente descritos como la globalización, la deslocalización, el cambio climático y la robotización aceleran la búsqueda de modelos económicos alternativos, capaces de superar las carencias del actual modelo capitalista. Se requieren empresas que actúen con valores corporativos propios de una cultura empresarial sabia a nivel del uso de la tecnología pro la calidad de vida, inclusiva a nivel de las personas y sostenible desde un punto de vista ambiental.

Ante estos retos, desde el Grupo de Investigación ARPA (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales) del Departamento de Filología i Comunicación de la Universitat de Girona, se impulsa el proyecto **Vusiness [del inglés “Business”, negocios,**

con “V” de valores] que promueve las empresas abiertas, democráticas, sostenibles, inclusivas y que hacen un uso inteligente de la tecnología con el reto de ser un modelo transferible en los ámbitos de investigación, educación, emprendimiento y empresa.

A partir de 2015 se ha llevado a cabo una exhaustiva revisión bibliográfica para sentar la ases científicas de un modelo alternativo basado en las empresas con valores.

Para complementar y contrastar la información recabada en la fase de revisión bibliográfica se llevan a cabo tres foros con el fin de flexionar, debatir y detectar las características diferenciales que presentan las empresas inclusivas, sostenibles y tecnológicamente inteligentes. El primero lleva por título: “Las personas, el centro de las empresas”, el segundo: “Empresas inteligentes, generando futuro” y el tercero: “Empresas sostenibles, afrontando al cambio climático”. En total unos treinta profesionales han participado activamente en los tres foros.

El modelo Vusiness se presenta en distintas universidades americanas como Harvard University, MIT-Massachusetts Institute of Technology, Emerson College, Boston College y Suffolk University de Boston.

Actualmente 50 profesionales están creando de forma colectiva el “Valómetro”, una herramienta para medir 50 valores empresariales vinculados a la identidad, la administración y gestión, las personas, la sostenibilidad y la tecnología inteligente en las empresas con el reto de transferir el conocimiento a la esfera empresarial. A la vez, un grupo de técnicos en emprendimiento y en asesoramiento y desarrollo empresarial están desarrollando el “Vusiness Plan” un modelo de plan de empresa con valores para guiar a futuros emprendedores.

2. Metodología

El II Foro “Empresas inteligentes, generando futuro” se lleva a cabo el 22 de noviembre de 2016 en la Sala de Reuniones SD2 de la Facultad de Turismo. La reflexión del foro gira alrededor de los aspectos singulares que configuran las empresas smart-inteligentes, abanderadas por líderes que promuevan el uso de la tecnología de la información y la comunicación como medio para mejorar la calidad de vida de los ciudadanos.

Participan en el foro Antoni Sudrià, profesor emérito en la Universitat Politècnica de Catalunya y exdirector del Centro de Innovación y Tecnología CITCEA; Carlos Grau, desarrollador de talento y socio de tecnología e innovación en el grupo Konsac; Gema Guzmán, responsable de proyectos de desarrollo profesional en la Fundación Princesa de Girona; Isabel Godoy, responsable de turismo inclusivo en el Patronat de Turisme Costa Brava - Pirineu de Girona; Ioanna Alsasua Pastrana, directora de operaciones en SIMBIM Solutions; Joan Batlle Grabulosa, exrector de la Universitat de Girona entre 2002 y 2005 y catedrático del Departamento de Arquitectura y Tecnología de Computadores; Joan Duran, área de estrategia de la Secretaría de Telecomunicaciones, Ciberseguridad y Sociedad Digital de la Generalitat de Catalunya; Marc Teixidor, PIMEC Jóvenes Empresarios de Girona; Mariona Serra, cofundadora y directora general en GoodGut, y

Meius Ferrés, responsable de protocolo y seguimiento de la estrategia digital de la Universitat de Girona.

La Dra. Carmen Echazarreta, directora del Grupo de Investigación Arpa, experta en temas de género y profesora agregada de comunicación audiovisual y publicidad y Albert Costa, Doctorando de la Universitat de Girona organizan y dinamizan la sesión.

3. El debate

El foro de reflexión tiene como principal misión la identificación de aquellos elementos diferenciales que caracterizan las empresas que hacen un uso inteligente de la tecnología, a favor de mejorar la calidad de vida de las personas. Además, la reflexión y el debate sirven para generar conocimiento cualitativo que complementa las revisiones bibliográficas.

A nivel de **tecnología inteligente**, en coherencia con las conclusiones de Echazarreta y Costa (2017b) se proponen específicamente los siguientes objetivos específicos:

- Disponer de un análisis
- Elaborar un modelo integrador, basado en el uso inteligente de la tecnología, la sostenibilidad y la inclusividad, orientadas a la creación, administración y dirección empresarial.
- Definir indicadores cuantitativos y cualitativos para poder evaluar dicho nuevo modelo.
- Desarrollar contenidos didácticos y material informativo y formativo del nuevo modelo, con el fin de sensibilizar la población general y formar a directivos, trabajadores, proveedores y clientes para favorecer el uso del modelo y contribuir así a la sostenibilidad empresarial a medio y largo plazo.

Las empresas tecnológicamente inteligentes pueden mejorar la calidad de vida de las personas que sufren exclusión social. En consonancia con el Programa de las Naciones Unidas para el Desarrollo, las empresas smart orientan su misión a construir infraestructuras inteligentes, promover la industrialización inclusiva y sostenible, fomentar la innovación, promover el crecimiento económico sostenido, inclusivo y sostenible, el empleo pleno y productivo y el trabajo decente para todos.

El debate sobre el uso inteligente de las tecnologías se organiza alrededor de cuatro aspectos que según Echazarreta y Costa (2017b) destacan en los estudios previos relacionados: tecnología, innovación y calidad de vida; comunicación; liderazgo y gestión de recursos humanos, y empresas inteligentes.

4. Tecnología, innovación y calidad de vida

¿Cómo puede incidir la tecnología en la mejora de la calidad de vida de las personas? ¿Depende de los adelantos tecnológicos o de la voluntad empresarial? ¿Hay limitaciones en las herramientas? La innovación está de moda porque es estratégica para muchas empresas, pero ¿Cómo se tiene que aplicar para que sea mucho más que una estrategia?

Empieza el debate Mariona Serra, cofundadora y directora general en GoodGut: “La **innovación es una**

prioridad, no tiene que ser una moda sino un valor implícito en todas las empresas. Por este motivo es necesario establecer una estrecha relación de **transferencia entre las universidades, generadoras de innovación y conocimiento y las empresas, que lo desarrollan y comercializan**. Las universidades deben hacer una **investigación más dirigida y aplicada.**"

Carmen Echazarreta, de la Universitat de Girona añade que aunque es necesario y evidente que debe haber un acercamiento entre la universidad y la empresa para transferir conocimiento, a la vez esto genera división y debate en el sí de la universidad: **"¿La generación de conocimiento tiene que estar en consonancia con las pretensiones de la empresa? O tiene que ser un conocimiento en estado puro que no esté condicionado por las mismas?"** En determinadas áreas como son las ingenierías, economías o el derecho la aplicabilidad es más directa y elevada.

Joan Batlle Grabulosa, catedrático del Departamento de Arquitectura y Tecnología de Computadores argumenta alrededor de la incidencia de la tecnología sobre la calidad de vida. **"La tecnología mejora la calidad de vida del mundo físico**. Ayer cortaba leña en el bosque con una sierra mecánica, la llevaba en un remolque con el coche... Nuestro día a día es muy físico: En casa cocinas, utilizas la lavadora... Cuando se termina este mundo físico **uno se tiene que plantear si la tecnología mejora la calidad de vida mental**, y esto es lo que me lleva dudas. Correos, mensajes... **Hay parte de la tecnología que está fuera de mis necesidades fundamentales y que genera necesidades que no tenía**. La nueva tecnología: redes sociales, smartphones... tiene pros y contras."

Meius Ferrés, responsable de protocolo y seguimiento de la estrategia digital de la Universitat de Girona sigue comenta: **"Hay que acompañar a los adolescentes que empiezan a entrar en la tecnología y enseñarles valores**. Siempre repito una frase en los cursos que dice: Les enseñamos a ponerse el mundo en el bolsillo y no les enseñamos como utilizarlo. Es un problema enorme porque están solos, sin profesores ni padres. Los padres han perdido la batalla, y los profesores aún más. Hemos descubierto que las relaciones personales entre parejas han perdido mucha calidad, vamos atrás por culpa de la tecnología ya que aparecen los controles y el acoso. Por esta razón, **desde la Universidad tenemos que educar, enseñar y advertir en temas relacionados con la ciberseguridad y el ciberacoso. Tenemos que dar más valor añadido a la formación, fomentando competencias que perduren.**"

Retomando el tema de valores, Gema Guzmán, responsable de proyectos de desarrollo profesional en la Fundación Princesa de Girona afirma: **"Detrás de toda mejora de la calidad de vida o repercusión positiva de las tecnologías, hay una voluntad y una serie de valores, que hacen que se produzcan cambios en positivo."** Pone el ejemplo de Luz Rello, una de las últimas premiadas por parte de la Fundación Princesa de Girona, que padece dislexia y ha desarrollado un sistema tecnológico para la detección precoz de discapacidad específica del aprendizaje así como para su mejora y tratamiento.

Marc Teixidor, PIMEC Jóvenes Empresarios de Girona afirma: **"Innovar es lo que te permite mejorar la**

propuesta de valor para solucionar las necesidades del cliente."

Antoni Sudrià, profesor emérito en la Universitat Politècnica de Catalunya y exdirector del Centro de Innovación y Tecnología CITCEA continua alrededor de la transferencia de conocimiento y de los valores asentando: **"La transferencia de conocimiento es bidireccional**. La Universidad transfiere un determinado tipo de conocimiento y a la vez recibe por parte de las empresas otro tipo de conocimiento muy enriquecedor que le permite avanzar.

Por otra parte existe una contradicción entre desarrollo tecnológico y calidad de vida o sostenibilidad. **Lo que está de moda y se vende en los medios de comunicación es insostenible**. En la sociedad actual el valor que prima es el económico. Esta innovación tecnológica, la nueva esclavitud de las redes sociales, la dependencia de la gente joven... **Es una sociedad menos autónoma**. Cuando un chico tiene que hacer una llamada telefónica no se ve capaz: **Se le está simplificando su capacidad de razonar y aprender**. **La tecnología provoca una pérdida de habilidades humanas** ya que antes éramos capaces de diseñar herramientas, incidir sobre el medio, ser autónomos y sobrevivir a la naturaleza.

Finalmente **hay un interés económico evidente en poner productos al mercado para que se consuman**. En contraposición al despilfarro y al consumismo existen movimientos minoritarios que apuestan por tecnologías duraderas, por ejemplo, por móviles que duran 5 o 6 años y no por el último que marca la moda que acaba de salir. A la vez, determinados fabricantes apuestan por bajar el ritmo de producción de determinados productos tecnológicos, ya que se percatan del hecho que el gasto energético es significativamente menor, no malbaratando recursos naturales finitos. **Falta innovación social y educación en valores**.

Joan Batlle continua su intervención alrededor de la tecnología reprobando las denominadas tecnologías emergentes: "Las impresoras 3D son los antiguos tornos que toda la vida han existido, siempre se ha dibujado en AutoCAD y todas las piezas de los coches se han hecho en 3D. La realidad aumentada, los coches conectados, la robótica con drones, los smartphones, los clouds, el big data, la moneda digital... **El riesgo principal de todo ello son los grandes servidores que almacenan toda la información que generan, controlado por multinacionales que ejercen un control brutal y desmesurado sobre la sociedad.**"

Por otra parte, "la tecnología emergente genera gastos y necesidades sobre la sociedad actual en ámbitos que antes no existían. Por ejemplo la compra por internet y la necesidad que te lleven todos los productos adquiridos de comida, ropa, etc. rápido y en casa. Los servicios que implican transporte, peso, consumo y energía, son los principales generadores de consumo por parte de los ciudadanos. Siempre hay un impacto energético importante. Ya hace años que **la energía eólica y solar tendrían que ser el futuro**. En cinco años los alemanes no tendrán ni nucleares." A nivel ambiental el excretor denuncia la **falta de compromiso y la indiferencia que genera la sostenibilidad en la sociedad**.

Mariona Serra muestra su discrepancia. "Justamente, **las tecnologías permiten el desarrollo y la aparición de modelos de negocio que están avanzando hacia plataformas y comunidades que priman la sostenibilidad**

gracias a la economía colaborativa” con ejemplos como el *carsharing* coche multiusuario o el coworking espacio de trabajo compartido; la domótica también permite ahorrar energía a nivel doméstico.

Gema Guzmán complementa: “Estamos hablando de un salto cualitativo gracias a la economía colaborativa, como es el caso de la cooperativa de consumo de energía verde sin ánimo de lucro Som Energia.”

Antoni Sudrià complementa: **“En ocasiones hay un sobre abuso de la tecnología, la sociedad te impulsa a adquirir bienes que no necesitas para nada y terminas haciendo un mimetismo social. ¿Calidad de vida es poder gastar más o es poder vivir igual de bien gastando menos? La tecnología permite ser más sostenible, dar más calidad de vida, però es importante no hacer un uso perverso de la misma.**

También cabe resaltar las **resistencias que muestran las empresas a los procesos de digitalización**. El problema recae en el hecho que las empresas que ahora obtienen beneficios sin hacer cambios, en diez años pueden haber desaparecido sino incorporan la tecnología. En este punto, se destacan ámbitos en los que en las últimas décadas se ha innovado profundamente como es el caso de la gastronomía con Ferran Adrià.

Joan Duran, área de estrategia de la Secretaría de Telecomunicaciones, Ciberseguridad y Sociedad Digital de la Generalitat de Catalunya: **“Yo pienso que lo realmente importante es la aplicación de la tecnología. Si entras en una plataforma que es un terreno desconocido para ti y no sabes qué quieres sacar, es mejor que no entres.”**

Meius Ferrés, en la misma línea expone: “Soy fan de los TED (Tecnología, Entretenimiento, Diseño; en inglés: *Technology, Entertainment, Design*, una organización sin fines de lucro estadounidense dedicada a las “Ideas dignas de difundir”). En ellos, participa gente muy joven que explica acciones reales a través de estos canales innovadores de comunicación. Por ejemplo, un grupo de jóvenes explica que llevan vacunas a la india con GPS, es decir, juntan innovación y sostenibilidad. El peligro reside en los que se resisten al cambio. **Tenemos que evolucionar la comunicación con los jóvenes**, ya que no leen el correo electrónico. No es su medio de comunicación. Al mismo tiempo, los tenemos que concienciar de la necesidad de estar en LinkedIn, no para buscar trabajo, sino como cambio de mentalidad, para mostrar su biografía. **Las redes son para hablar de vuestra vida profesional y social**. Cuando las utilizas para uso personal es cuando se generan problemas. Cuando vas a buscar trabajo, la obligación de los reclutadores es mirar quien eres en las redes sociales ya que te das cuenta de los valores de las personas a través de las redes.”

Se cierra este primer bloque en el que surgen ideas clave: **Innovación como prioridad; investigación dirigida y aplicada; transferencia de conocimiento entre universidad y empresa; tecnología como mejora de calidad de vida y a la vez generadora de consumismo; necesidad de educar en valores ante los retos que plantea la tecnología, diseñar estrategias y educar ante la ciberseguridad y el ciberacoso; falta de innovación social; resistencia ante los procesos de la digitalización y el uso profesional y social de las redes sociales.**

5. La comunicación

¿Qué cambios pueden generar los nuevos y emergentes medios de comunicación en relación con el ámbito empresarial? ¿Cómo se puede potenciar y estimular la relación entre la empresa y el cliente, proveedor o distribuidor?

Albert Costa, doctorando de la Universidad de Girona pone de manifiesto que **redes sociales como Facebook, Instagram o canales de mensajería instantánea como WhatsApp, pueden ser entornos amigables para aproximarse y conversar con los jóvenes** alrededor de sus preocupaciones y recibir apoyo y asesoramiento psicológico sobre temas íntimos y confidenciales como la sexualidad, las drogas, las relaciones de pareja, los trastornos de conducta alimentaria, etc.

Destaca también el **rol democratizador de las redes, ya que cualquier ciudadano puede usarlas como altavoz ante una injusticia social, generando un impacto mediático determinado**.

Joan Batlle considera interesantes los posibles beneficios de las redes aunque afirma: “Los teclados tendría que llevar un sensor de temperatura, ya que a menudo la gente opina a sangres calientes, sin pensar”.

Mariona Serra opina que ante las redes: **“La propia sociedad penaliza y favorece que haya un autocontrol.”** Acerca de la comunicación en el ámbito empresarial afirma: **“La comunicación y las redes son claves para la captación de clientes**. En GoodGut, previamente a la primera rueda de prensa de presentación, nos pusimos a seguir asociaciones de pacientes de cáncer colorectal, enfermedades intestinales, etc. A los pocos días los pacientes iban al Hospital Trueta a pedir si el kit ya estaba desarrollado. Gracias a la comunicación podemos hacer tests de mercado. Por ejemplo, una empresa que quería desarrollar una aplicación para informar de las playas en las que había más olas para practicar surf, a partir de los interesados en descargarse la aplicación decidieron que realmente había demanda y tenía sentido desarrollarla.”

Marc Teixidor sigue: **“La comunicación es el talón de Aquiles de cualquier empresa en todos los niveles: producción, gestión de personal, relación con los clientes y proveedores, etc.** La comunicación permite incluso realizar prevendas antes de que exista el producto.

Albert Costa continúa: **“Las redes sociales permiten segmentar y fidelizar los clientes de pequeñas empresas**. Hace años las empresas invertían en publicidad convencional en medios generalistas con menos sentido estratégico. Por su parte, el **periodismo social permite denunciar y hacer eco también gracias a las redes de malas praxis empresariales, la cual cosa democratiza y facilita la libertad de expresión.”**

Sobre la **comunicación empresarial**, Isabel Godoy, responsable de turismo inclusivo en el Patronat de Turisme Costa Brava Pirineu de Girona, explica que en el ámbito de turismo están elaborando una diagnosis sobre accesibilidad en 700 empresas de Girona. Se encuentran sorpresas como una empresa que se dedica al submarinismo: “dispone de una plataforma que facilita que cualquier persona con discapacidad pueda bucear y no lo comunica a través de

ningún canal. ¿Cómo puede un turoperador fijarse en ella y enviar turistas sino comunica lo que tiene?”

Gema Guzmán: “Los medios de comunicación también se convierten en un **elemento de control de lo que hacen las empresas, ya que suelen estar muy preocupadas por su reputación**. El ciudadano a través de las redes tiene mucho poder y revierte en que las empresas lo quieran hacer cada vez mejor.”

Meius Ferrés acerca de la comunicación empresarial afirma: “Los nuevos jóvenes desconfían rotundamente de la comunicación institucional, van a ver **webs de opiniones, testimonios en comunidades**. Según Xavier Marcet, “Tripadvisor y Booking han cambiado comportamientos de hoteles y restaurantes”.

Antoni Sudrià pone de relieve el riesgo de las opiniones en la red que pueden ser generadas por agencias aunque admite que las nuevas tecnologías han socializado la comunicación. También reflexiona alrededor de la **brecha digital relacionada con la desigualdad que genera entre las personas el hecho de disponer o no de acceso y conocimiento sobre las nuevas tecnologías**.

Joan Duran afirma que las empresas cada vez dan mayor importancia a la comunicación con sus clientes y usan las mejores herramientas para aproximarse y fidelizarlos. **Donde aprecia dificultades es en la relación empresa-proveedor. Afirma que las reuniones y negociaciones suelen ser presenciales y difíciles de suplir con soluciones tecnológicas de comunicación**: “En ferias como el Mobile World Congress o en la Smart City Expo te das cuenta que las empresas tienen la necesidad de hablar cara a cara con quien te venderá y firmarás un contrato.”

A raíz de las Smart Cities, Meius Ferrés opina que **deberían estar al servicio de la gente necesitada** y denuncia el caso de Reus, ciudad muy tecnificada en la que una anciana que tenía la luz cortada muere en un incendio causado por una vela.

Joan Batlle afirma que “la tecnología actual supera con creces para que esto no pase”. Explica que hace 8 años desarrollaron un terminal táctil con el código de programación de Skype y un marco de diodos leds, que permitía convertir cualquier televisor particular a táctil. Estaba pensado para que las personas mayores pudieran conectarse con sus familiares por un coste muy reducido, aunque fue imposible encontrar financiación e interés por parte de la administración para avanzar con este proyecto social.

Sobre las necesidades de personas en riesgo de exclusión social, Antoni Sudrià explica que **el estudio de los patrones de consumo energético de los particulares permitirían diagnosticar con rapidez casos en que es necesaria una intervención urgente**. “Se puede detectar por ejemplo que no se ha realizado la ducha matutina diaria o calentado la leche del desayuno”.

En referencia a los nuevos medios de comunicación, Joan Duran afirma que se consideran emergentes las redes sociales como **Twitter, LinkedIn, Slack** -que sirve para trabajar en equipo al poder hablar por temas-, **Telegram o Pidgin**. A la vez, destaca el uso del correo electrónico y la mensajería instantánea para poder organizar el trabajo a partir de herramientas no invasivas. Herramientas como

el Drive o Dropbox son totalmente inseguras a nivel de protección de datos y confidencialidad.

Volviendo al tema inicial, Ioanna Alsasua de SIMBIM Solutions, razona alrededor de las **oportunidades que generan las nuevas herramientas y medios de comunicación emergentes en empresas de base tecnológica** enfocadas al sector de la construcción y las Smart Cities: “**La implantación de la tecnología BIM** (Building Information Modeling, Modelado con Información para la Construcción) nos permite realizar prototipos virtuales de nuestros edificios para que antes de llegar a construirlos seamos capaces de ver lo que va a ocurrir. Nos permite trabajar de una forma mucho más eficiente ya que desde las primeras fases podemos controlar que no vaya a haber problemas en la obra, vamos a saber los costes exactos que genera, como vamos a hacer el mantenimiento del edificio, etc. En definitiva, permite gestionar todo el ciclo de vida de un edificio de una forma integrada.”

Carmen Echazarreta destaca que: “Las tecnologías permiten optimizar el conocimiento y **gracias a los sistemas virtuales se ahorran recursos energéticos incidiendo en la sostenibilidad**”.

Acerca de ahorrar costes, Joan Batlle afirma que: “Hace treinta años ya se trabajaba en red, el problema era la **velocidad del sistema** y los **elevados costes**” aspectos que han cambiado de forma significativa en nuestros días.

Continua Ioanna Alsasua: “En una industria como la arquitectura, aunque tradicionalmente se ha mostrado muy reticente a compartir información, **las tecnologías que se aplican tienden a modelos de colaboración entre profesionales. El valor principal que persiguen las herramientas de apoyo es la transparencia**. Distintos arquitectos pueden estar trabajando a tiempo real sobre un mismo archivo, optimizando enormemente el trabajo y ahorrando cantidad de información que se transmitiría por mensajería instantánea o correo electrónico. Si bien cabe afirmar que **falta educación a la hora de trabajar con sistemas colaborativos**.”

Continua Joan Duran afirmando: “Con el tiempo las empresas tendrán que ser más transparentes. Los proveedores estarán obligados a compartir su información de forma más abierta, posibilitando una relación más virtual con sus posibles clientes. El CRM (*Customer Relationship Management*) es un software que se hará imprescindible para gestionar la relación con los clientes.

A raíz de las bases del modelo colaborativo, Antoni Sudrià afirma que: “**La falta de inversiones en Catalunya ha propiciado la existencia de numerosos polígonos que no suministran el ancho necesario para que las empresas alojadas trabajen de forma colaborativa con sus stakeholders**”.

El segundo bloque se cierra con unas ideas clave para profundizar en los cambios que pueden generar los nuevos y emergentes medios de comunicación así como mejorar la relación entre empresa y stakeholders: **Redes sociales y comunicación empresarial con capacidad para segmentar, captar y fidelizar clientes; gestión transparente de la comunicación; protección de datos y seguridad garantidas; fomento del trabajo colaborativo; falta de educación y formación para trabajar con nuevos modelos emergentes; periodismo social con una función**

democratizadora; aparición de webs de opiniones y testimonios en comunidades que fomenta la preocupación por la mejora y la reputación empresarial, y finalmente se destaca la brecha digital relacionada con la desigualdad que genera entre las personas el hecho de disponer o no de acceso y conocimiento sobre las nuevas tecnologías.

6. Liderazgo y gestión de recursos humanos

¿Partimos de la idea que la gestión de una empresa inteligente es más colectiva que individual? ¿Qué rol tienen que llevar a cabo los equipos de trabajo? ¿Cómo tienen que ser los liderazgos?

En este nuevo bloque empieza Marc Teixidor contando que Sergi Garcia Preckler, que durante 15 años ha sido director, gerente y vicepresidente del departamento de Recursos Humanos de Sony Iberia, con un equipo de más de 3.000 personas a su cargo, hizo una conferencia en PIMEC y preguntaba a los gerentes asistentes: “¿En qué consiste tu trabajo? ¿Cuál es el trabajo más importante de un CEO?” La mayoría de respuestas eran “Yo llevo las grandes cuentas, los clientes más importantes.” Entonces, hizo la comparativa con la familia y los hijos: “**A tus trabajadores les tienes que dar las herramientas para que desarrollen e intentar que sean mejores que tú, para que crezcan. Debes crear un clima en tu organización en el cual la motivación y el reconocimiento hacia tus trabajadores sea de primer nivel. Faltan líderes con talento, con responsabilidad y con capacidad para comunicar. El líder es el que hace mejor la gente que lo rodea. Ha de ser humilde, con capacidad de trabajar en equipo.**”

Gema Guzmán matiza que en la actualidad el término usado ya no es recursos humanos sino **dirección de personas**: “Se requieren **objetivos y visión compartida**. No puedes tener un equipo y no contarle hacia dónde vas. Por esto es más fácil trabajar en start-ups ya que el equipo se identifica más fácilmente en el proyecto.”

Meius Ferrés afirma que: “**El 48% de sitios de trabajo en diez años estarán ocupados por robots. Los trabajos manuales y mecánicos, con los que alguien difícilmente puede realizarse, serán ocupados por máquinas.** Carlos Zahumenszky, editor en Gizmodo ES, afirmaba en un TEDxReus que se tendrá que desarrollar una nueva forma de trabajar. Si nuestro sitio de trabajo está amenazado por un robot, **tendremos que hacer más humano nuestro trabajo.** Hablaba de los médicos que tienen que atender una media de 35 personas en un centro de atención primaria de 8 a 15 h. Los enfermos suelen acceder a servicios complementarios como el psicólogo o el homeópata porque les dedican una hora. Afirmaba que hay muchas tareas que las hace el médico que las podrá hacer una máquina, pero que **el trabajo de entender a una persona, solo lo podrá hacer una persona. La robotización es un reto social, se tendrá que apostar por el talento individual y potenciar trabajos más creativos.** El voluntariado también será importante en un futuro ya que nos hace mejores como personas.”

Para Marionna Serra: “El equipo es el elemento principal de la empresa. Los trabajadores deben entender la empresa como suya, tienen que sentirse parte de ella. Las nuevas generaciones estamos acostumbrados a trabajar **colaborando, multitarea, con varios idiomas.** Por ejemplo

la empresa Mango trabaja por objetivos y visión compartida. Los nuevos tiempos requieren **mayor flexibilidad horaria para potenciar la conciliación, para que las mujeres podamos coger el liderazgo.** Sobre la selección de personal, Michael Page, consultora líder a nivel mundial en selección de personal cualificado, apuntaba que tienes tendencia a seleccionar gente como tú. Es importante **seleccionar las personas según la posición que ocupen. Debes pensar para la función concreta el perfil que requieres.**”

Joan Batlle resalta que “Donde tenemos el problema es **que los sueldos son muy bajos para la gran mayoría de gente.** La **robotización** quitará un determinado tipo de mano de obra menos calificada, pero a la vez **generará sitios de trabajo de más alta calificación.**”

Antoni Sudrià destaca que: “**Los recursos humanos está cambiando de forma significativa en las empresas de un alto contenido tecnológico.** Por ejemplo, Indra Sistemas S.A. empresa multinacional española del sector de las tecnologías de la información i la comunicación **contrata por proyectos, sin horarios, ni disposición de un sitio de trabajo fijo.** Las jerarquías desaparecen y se aplican métodos de agentes activos cooperantes que tienen que ser inteligentes y comunicarse entre sí.” A la vez, destaca que “Las personas que tienen un talento muy elevado muy a menudo tienen una alta movilidad. **El talento es difícil de retener.** Suelen trabajar por proyectos, y cuando terminan cambian de país y de proyecto. En épocas de crisis es cuando tenemos los mejores **contratos de transferencia de conocimiento** con las empresas.”

Albert Costa afirma: “Cabe destacar que no todo el mundo necesita ser emprendedor en su sitio de trabajo. **Del trabajador tenemos que esperar que se implique hasta un punto razonable. Quien es el responsable, se juega todo su capital y puede obtener todos sus beneficios es únicamente el empresario.**”

En el mismo sentido, Joan Batlle afirma: “La diferencia entre los propietarios de las empresas y los trabajadores existe siempre. En plena crisis, los trabajadores sentían mucho su empresa hasta que se les decía que tenían que cobrar la mitad. En este momento solo veían que los propietarios vivían en casas de lujo, con coches buenos, piscinas... El empresario catalán de la PIME cuando ve que empiezan a ir mal, aguanta, grave error, empieza a utilizar pólizas de crédito, a pedir créditos a nivel personal para aguantar a los trabajadores que son como de la familia, y un buen día descubren que ni son de la familia, y los trabajadores descubren que tampoco es la empresa que tanto amaban.”

En este tercer bloque destacan conceptos como la: “**Dirección de personas; liderazgo con talento, con responsabilidad y con capacidad para comunicar, que hacen mejores a la gente que los rodea; equipos que comparten objetivos y visión; progresiva robotización y humanización de sitios de trabajo más creativos que potencian el talento individual; mayor flexibilidad horaria para potenciar la conciliación y importancia de la remuneración adecuada.**”

7. Empresas inteligentes

¿Qué características identifican las empresas inteligentes (smart)? ¿Qué se entiende por inteligencia aplicada a la empresa? ¿Falta pedagogía sobre el tema?

Empieza el tercer bloque Joan Batlle, que advierte que **“La empresa debe tener beneficios económicos para ser viable.”**

Añade Antoni Sudrià que además **“tiene que generar conocimiento invirtiendo dinero y valorar el talento.”** Opina que hay empresas de Girona, especialmente las familiares, que les cuesta valorar el conocimiento y pensar que para avanzar e innovar hay determinados factores que se tienen que estudiar. En la industria 4.0 cada vez será más imprescindible el análisis de datos para mejorar las estrategias. Y añade: **“Un indicador para valorar si una empresa es inteligente es el plan de formación de su personal. ¿Cuánto dinero invierte en formación?”**. Finalmente también destaca la **necesidad de cuidar y saber gestionar al personal**: **“Es importante detectar situaciones de malestar, de estrés. Debes interesarte por la situación personal de tus trabajadores. Se tiene que hacer al revés de lo que marcan las escuelas de negocios: mantener la presión no funciona. La empresa inteligente es la que tiene la capacidad de reconocer sus errores.”**

Marc Teixidor y Mariona Serra coinciden con Sudrià y destacan de las empresas inteligentes la **“Conciliación entre actividad económica y todos los agentes que la hacen posible. Generar valor con cada stakeholder y dar valor el conocimiento generado y a la formación de los trabajadores”**. Teixidor también destaca la **“necesidad de humildad por parte de la dirección, con capacidad de saber el nombre de sus trabajadores y saber qué hacen”**.

En el mismo sentido, Gema Guzmán destaca que **“Es la empresa que tiene en cuenta todos sus stakeholders por un bien común y final de todas las partes. Otro aspecto importante es que se respire un buen clima laboral.”**

Meius Ferrés destaca la importancia de **“Generar orgullo de pertinencia”**. También destaca la **necesidad de cuidar las relaciones laborales en las empresas**. Pone el ejemplo de mala praxis en algunas empresas colaborativas emergentes como Uber en las que no existen trabajadores ni derechos laborales. Otro aspecto característico de las empresas inteligentes será la **“capacidad de hacer un retorno a la sociedad.”**

Carlos Grau, desarrollador de talento y socio de tecnología e innovación en el grupo Konsac destaca **“la asignatura pendiente es la transferencia universidad-empresa. A la vez es importante implantar la innovación en las organizaciones. Hay un debate importante en la industria alrededor del big data, machine learning (aprendizaje automático) y business intelligence (inteligencia de negocios). El 60% de los sitios de trabajo en los estados unidos y en muchas empresas en los próximos 3 o 4 años que sean tareas secuenciales repetitivas de análisis de información y que no tengan un grado de complejidad elevado desaparecerán. Igual que se ha hecho en planta, lo harán robots que pueden analizar semánticamente documentos, que pueden a partir de lógica y algoritmos analizar pasos y lo que era un flujo de un control de una información para pasarla a otro compañero que validaba... la gran oportunidad de las empresas inteligentes son tareas relacionadas con el trabajo en red, trabajo con terceros, creatividad, mayor orientación al cliente...”**

Las empresas inteligentes son las que avanzan hacia esta dirección. Que reconocen que las tareas más repetitivas, manuales tediosas acaban sustituidas por sistemas que lo

automatizaran. Todo el mundo le tiene terror y piensa que su sitio de trabajo desaparecerá. **El reto que tenemos es crear muchos de estos sitios de trabajo con valor.”**

Joan Duran pone el ejemplo antagónico de dos compañías: **“Apple históricamente se ha ido realimentando en la innovación. En la época de Steve Jobs se podía considerar inteligente porque intentaba hacer productos diversos, que dieran valor. Des de su pérdida, ha cambiado su estrategia. Sus beneficios no los reinvierte en innovación, sino que los reparte entre sus inversores y poco a poco irá perdiendo peso en el mercado. Por el contrario, Amazon, la considero inteligente y es digna de ser estudiada. En el ámbito del comercio electrónico está innovando. Está añadiendo nuevos servicios y productos a diario. Irá creciendo indefinidamente.”**

Puntualiza Gema Guzmán, que según le consta, Amazon Inglaterra trata a sus trabajadores con unas condiciones pésimas, impropias de una empresa inteligente. Se requiere pues, un equilibrio entre la innovación y la dirección de personas. Continúa y explica que en el foro de desempleo del País Vasco en 2016 intervino Michael West, profesor de la Universidad de Lancaster, que afirmaba que lo realmente importante es **“tratar a la gente que trabaja en la organización con dignidad y compasión, con empatía, escuchándoles y ellos harán lo mismo con otros trabajadores y con los clientes o pacientes. Si creamos un ambiente positivo en el trabajo, seremos mejores personas al final de la jornada.”**

Carlos Grau destaca que **las culturas organizativas propias de las empresas inteligentes se basan en aspectos como la creación de áreas de innovación, la capacidad de transformación, la humildad y la modestia siempre aunque las cosas te vayan muy bien, tener curiosidad, respeto a la diversidad en general, generacional y multicultural así como el orgullo de pertinencia al proyecto.**

Destaca un proyecto socialmente responsable desarrollado por la **Fundación DKV Integralia** para la integración laboral. Explica que en 15 años han conseguido la inserción de unos 300 discapacitados y que está impulsada y gestionada íntegramente por personas con discapacidad. Gestionan call centers, centros de atención al cliente de grandes empresas e incluso de ministerios. **“Ves los casos de éxito y su afán de superación y quedas impresionado, aprendes muchas cosas. Hay empresas que desarrollan temas de RSC alrededor del arte, la cultura, el entretenimiento y el ocio... Más que el ámbito, lo importante es que lo que hagas sea transversal y genere impacto real en el modelo de empresa. Las empresas inteligentes vinculan a sus empleados, generan sensación de orgullo y de pertinencia y promueven el voluntariado.”**

Otro aspecto que destaca Grau es que **“En Estados Unidos distintas empresas están generando el perfil de profesionales de pedir perdón. Ante la cultura empresarial de innovar y equivocarse es muy importante saber pedir perdón a los clientes. Aunque cada vez que se genera un problema con un cliente es una oportunidad de mejora, gestionar la situación y saber pedir perdón es una de las tareas más sofisticadas del mundo”**.

En este último bloque alrededor de las características que identifican las empresas inteligentes (smart) se destacan los

siguientes conceptos: **Viabilidad económica; generación de conocimiento; valoración del talento; formación y reciclaje de los empleados; cuidado y gestión adecuada del personal; conciliación de la actividad económica y generación de valor en sus stakeholders; dirección humilde y modesta, que sabe el nombre de sus trabajadores y conoce sus tareas; buen clima laboral; orgullo de pertinencia y vinculación de sus empleados; atención a las relaciones laborales; retorno a la sociedad; transferencia de conocimiento universidad-empresa; generación progresiva de trabajos de valor, creativos, en red y orientados al cliente ante la robotización; trato hacia sus clientes con dignidad y compasión; curiosidad; respeto a la diversidad en general, generacional y multicultural; promoción del voluntariado y pedida de perdón.**

8. Conclusiones

Concluye Carmen Echazarreta que vivimos en una era de grandes innovaciones tecnológicas, que tiene el potencial de ayudar a dar respuesta a la mayoría de retos sociales: superar las crisis económicas y financieras, combatir la desigualdad, erradicar el cambio climático, eliminar el trabajo infantil, contrarrestar el envejecimiento de la población o frenar la rápida urbanización.

A partir del desarrollo del foro, se destacan una serie de características diferenciales de las **empresas que hacen un uso inteligente de la tecnología en distintos campos del conocimiento:**

Tecnología: a) Humanización y generación progresiva de trabajos con valor, en red y orientados al cliente frente a la robotización y la digitalización; d) Tecnologías para mejorar la calidad de vida, y c) Ciberseguridad y protección de datos.

Administración y gestión: a) Conciliación de la actividad económica y generación de valor en sus stakeholders; b) dirección de personas y liderazgo con talento, con responsabilidad y con capacidad para comunicar y hacer mejores a la gente que los rodea; c) optimización del clima laboral, fomento del trabajo colaborativo y de equipos que comparten objetivos y visión; d) cuidado y gestión adecuada del personal, valorando el talento, aportando mayor flexibilidad horaria para potenciar la conciliación e importancia de la remuneración adecuada; e) generación de orgullo de pertinencia y vinculación de los empleados; f) retorno a la sociedad; g) trato hacia los clientes con dignidad, compasión, empatía y escucha activa; h) respeto a la diversidad en general, generacional y multicultural, y i) Promoción del voluntariado.

Investigación: a) Innovación como prioridad; b) Investigación dirigida y aplicada; c) transferencia de conocimiento entre universidad y empresa, y d) generación de conocimiento

Educación y formación: a) Educación en valores ante los retos que plantea la tecnología, diseño de estrategias y formación ante la ciberseguridad y el ciberacoso; b) educación y sensibilización para trabajar con nuevos modelos emergentes, y c) formación y reciclaje de los empleados

Comunicación: a) Gestión transparente de la comunicación; b) redes sociales y comunicación empresarial con

capacidad para segmentar, captar y fidelizar clientes; c) periodismo social con una función democratizadora y fomento de la libertad de expresión y el derecho a recibir información; d) aparición de webs de opiniones y testimonios en comunidades que fomenta la preocupación por la mejora y la reputación empresarial, y finalmente se destaca la e) brecha digital relacionada con la desigualdad que genera entre las personas el hecho de disponer o no de acceso y conocimiento sobre las nuevas tecnologías.

A partir de los parámetros descritos se desarrollarán herramientas que favorezcan la promoción de las empresas que hacen un uso inteligente de la tecnología, capaces de favorecer dinámicas útiles para combatir los efectos sociales de la robotización y digitalización.

La definición de indicadores cualitativos y cuantitativos a partir de las conclusiones del foro “Empresas inteligentes, generando futuro” permitirá disponer de una herramienta de dirección empresarial entorno a la gestión de las tecnologías en las organizaciones.

En concordancia con Echazarreta y Costa (2017b) , se pone de relieve la necesidad de disponer de un modelo integrador, basado en los resultados de las revisiones bibliográficas y de los foros de discusión centrados en tres ámbitos: la inclusividad, la sostenibilidad y la tecnología al servicio de la mejora de la calidad de vida. También se requieren estudios experimentales para contrastar la idoneidad de los indicadores definidos por los distintos profesionales para detectar y potenciar las empresas con valores. Finalmente, se recomienda desarrollar un instrumento de fácil aplicación para las empresas con el objetivo de fomentar los valores relacionados con la inclusividad, la sostenibilidad e inteligencia en el uso de la tecnología.

Como en el primer foro, los resultados y conclusiones del presente debate requieren ser confirmados en estudios posteriores que incluyan otros expertos en el ámbito así como otro tipo de metodología de estudio. Se concluye que, ante estos nuevos escenarios cambiantes y retos, la investigación en este campo debe ser interdisciplinar y sistemática.

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Los responsables del proyecto Vusiness del Grupo de investigación Arpa (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales) del Departamento de Filología y Comunicación de la Universitat de Girona agradecen la colaboración y firme apoyo en la realización de este foro a Antoni Sudrià, profesor emérito en la Universitat Politècnica de Catalunya y exdirector del Centro de Innovación y Tecnología CITCEA; Carlos Grau, desarrollador de talento y socio de tecnología e innovación en el grupo Konsac; Gema Guzmán, responsable de proyectos de desarrollo profesional en la Fundación Princesa de Girona; Isabel Godoy, responsable de turismo inclusivo en el Patronat de Turisme Costa Brava - Pirineu de Girona; Ioanna Alsasua Pastrana, directora de operaciones en SIMBIM Solutions; Joan Batlle Grabulosa, exrector de la Universitat de Girona entre 2002 y 2005 y catedrático del Departamento de Arquitectura y Tecnología de Computadores; Joan Duran, área de estrategia de la Secretaría de Telecomunicaciones, Ciberseguridad y Sociedad Digital de la Generalitat de

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FORO DE REFLEXIÓN Y DEBATE: EMPRESAS SOSTENIBLES, AFRONTANDO EL CAMBIO CLIMÁTICO

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Resumen

Se presentan los resultados y conclusiones de un foro de reflexión y debate entre profesionales de distintos ámbitos para debatir y definir indicadores relevantes y significativos que faciliten la identificación, diferenciación y promoción de las empresas sostenibles. En coherencia con una revisión bibliográfica previa, se organiza el debate a través de cinco ejes: empresas sostenibles, cambio climático, medio ambiente, movilidad y responsabilidad social corporativa. e destacan una serie de características diferenciales de las empresas sostenibles en cuatro ámbitos: a) **Minimización del consumo y promoción de las energías renovables**: transformación de sectores contaminantes; internalización del impacto; energías renovables; productos reciclables y reutilizables gestión de la demanda energética; segregación y gestión de residuos. b) **Movilidad**: almacenamiento de la energía; aumento de ocupación de vehículos; bicicleta; electrificación del transporte; mejora del transporte de mercancías; transporte y movilidad a demanda; vehículos eléctricos. c) **Gestión empresarial ambiental, económica y social**: contribución a la mejora del entorno; economía colaborativa; ecosistemas innovadores; estrategias empresariales sostenibles flexibilidad; Igualdad de oportunidades; innovación colaborativa; teletrabajo transparencia, y d) **Administración pública**: concienciación; c) reducción de las emisiones de entre un 7 y 8% anual; fiscalidad positiva; gestión estratégica del territorio; promoción de certificaciones ambientales; promoción de las estrategias sostenibles a largo plazo, y transporte público eficiente y asequible. La definición de indicadores cuantitativos y cualitativos permitirá disponer de una herramienta de dirección empresarial entorno a la gestión sostenible de las empresas. La reflexión, el debate y el conocimiento generado en este foro de expertos persigue la investigación cualitativa y la posterior transferencia de conocimiento sobre tres ámbitos: la educación, el emprendimiento y la empresa.

Palabras clave

Foro de reflexión y debate, empresas con valores, sostenibilidad, cambio climático, reducción consumo energético, energía renovable, transporte y movilidad.

1. Introducción

La Universitat de Girona promueve un foro de reflexión acerca de la sostenibilidad y de las empresas. El debate que se celebra el 18 octubre de 2016, es un espacio de encuentro pensado para reflexionar en el marco del proyecto Vusiness [del inglés Business, negocios, con “V” de valores] que pretende promover las empresas sostenibles, inteligentes, abiertas, democráticas e inclusivas, que tienen que inspirar el futuro, impulsado por el Grupo de investigación Arpa (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales) del Departamento de Filología y Comunicación de la Universitat de Girona.

Según Echazarreta y Costa (2018): “El cambio climático representa una amenaza apremiante y con efectos potencialmente irreversibles. En el entorno económico actual, la globalización incrementa de forma significativa el uso no equilibrado de recursos energéticos finitos no renovables.”

La Oficina Española de Cambio Climático (2006) afirma: “En la actualidad existe un amplio consenso científico en que el fenómeno del cambio climático es un hecho inequívoco, causado principalmente por la acción del hombre.”

Los estudios de Ordóñez y Maserà (2001) concluyen en el mismo sentido que: “Las actividades humanas, tales como

el uso de combustibles fósiles para la producción de energía y los procesos derivados del cambio en el uso del suelo y silvicultura, están generando grandes emisiones de gases de efecto invernadero (GEI) como dióxido de carbono (CO₂), monóxido de carbono (CO), clorofluorocarbonados (CFC’s), óxidos de nitrógeno (NO_x) y metano (CH₄), principalmente, siendo el CO₂ uno de los GEI más importantes por las grandes cantidades en las que se emite.

Analizando el origen del cambio climático relata Moscoso (2018) que durante el s. XVIII, la Revolución Industrial se caracterizó por la producción mecánica y a gran escala gracias al uso de los motores a vapor. Este factor favoreció un rápido crecimiento y desarrollo económico pero también supuso el inicio de los desajustes climáticos generados por la utilización masiva de recursos energéticos como el carbón.

En consonancia con dichas conclusiones, sostiene Acquatella (2008): “Los gases de efecto invernadero generados por la industria durante el último siglo y medio más significativos son el dióxido de carbono,

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metano y óxido nítrico, siendo el primero el gas más importante con un incremento que va desde un valor preindustrial de 280 ppm hasta 379 ppm en el año 2005, superando su comportamiento natural en los últimos 650.000 años." Los autores proponen estrategias técnicas, políticas, económicas y científicas para reducir y estabilizar el incremento de emisiones de gases de efecto invernadero: redacción y aprobación de un marco jurídico específico relativo al control y reducción de las emisiones atmosféricas, aplicación de incentivos e impuestos ambientales a las empresas y potenciación del uso de tecnologías verdes y energías renovables.

Respeto a los efectos del cambio climático en las últimas décadas, afirma Stocker et al. (2013): "Desde los años cincuenta, muchos de los cambios observados no han tenido precedentes en los últimos milenios. La atmósfera y el océano se han calentado, los volúmenes de nieve y hielo han disminuido, el nivel del mar se ha elevado y las concentraciones de gases de efecto invernadero han aumentado". El autor concluye que el cambio climático genera efectos adversos cuyos impactos pueden poner en riesgo el desarrollo de los países y la integridad ecosistémica a nivel global. Numerosas especies vegetales y animales afectadas por la contaminación y pérdida de hábitat no sobrevivirán en los próximos años. Los análisis científicos consideran que las altas temperaturas, olas de calor y fuertes precipitaciones continuarán siendo más frecuentes en el futuro lo que puede ser desastroso para el entorno.

A nivel de recomendaciones, Brea (2006) afirma con rotundidad y urgencia: "Tal como evoluciona la geopolítica mundial, consumir menos petróleo y más energía renovables constituye una necesidad urgente para España. Debe ser un objetivo y una política de Estado. La oportunidad es única porque tenemos todas las condiciones para lograrlo y somos líderes mundiales en tecnologías renovables. Pero es necesario y urgente trasladar a la sociedad otra cultura de la energía."

Llamas (2009) acerca de la reducción de consumo, afirma: "El ahorro y la eficiencia energética constituyen un elemento fundamental para la mejora del medio ambiente, en especial en lo que se refiere al calentamiento global."

Sobre las energías renovables, alternativas a las convencionales basadas en petróleo, carbón y gas natural, Boyle (2004) destaca la energía solar, térmica, fotovoltaica, bioenergía, hidráulica, de las mareas, eólica, del oleaje y geotérmica.

Otro aspecto clave para hacer frente al cambio climático es incidir en la movilidad. Miralles-Guasch (2002) afirma: "En los últimos decenios se han producido profundos cambios sociales, económicos y tecnológicos que han derivado en un nuevo modelo de movilidad urbana. Ese modelo, que tiende a implantarse globalmente, se caracteriza por el aumento de las distancias medias recorridas, los cambios en los motivos de los desplazamientos y las modificaciones en la localización de las actividades productivas."

Estevan y Sanz (1996) afirman que las ciudades se han pensado, reformado y construido para satisfacer sobre todo las necesidades de los vehículos motorizados y, en particular, del automóvil, la cual cosa ha generado consecuencias como la congestión, la contaminación o el ruido. Los autores enfatizan la necesidad de nuevos modelos de planificación

urbana y de movilidad, que aceleren hacia la reconversión ecológica del transporte.

En la misma línea caben destacar las investigaciones de Mollinedo (2014) que analiza la insostenibilidad ambiental y social del actual modelo de movilidad urbana, junto con las externalidades negativas que provoca el transporte y expone algunos de los principios que deben regir el modelo de movilidad urbana sostenible para mejorar la calidad de vida y hacer frente al cambio climático. Se destaca la necesidad de movilidad a partir de una red adecuada de transporte público. También destacan los avances tecnológicos, especialmente en la capacidad de almacenaje de las barreras en los vehículos eléctricos como la bicicleta, la motocicleta o el coche. Finalmente se relacionan modalidades de economía colaborativa como son las nuevas formas de uso compartido del transporte, *carsharing*, el alquiler a días y horas o aplicaciones que ofrecen un servicio de transporte a partir de la geolocalización del usuario como Uber y Cabify, que están generando una gran polémica en el sector tradicional del taxi.

Según Echazarreta y Costa (2018): "Las empresas sostenibles se basan en dos principios fundamentales como son el medio ambiente (recursos energéticos renovables, desarrollo sostenible, preservación del medio ambiente, consumo responsable de energía, minimización de emisiones, ecoeficiencia, e economía circular) y la movilidad (transporte público colectivo, vehículo eléctrico, sistemas de movilidad limpios y no motorizados)".

Eguiguren (2011), director ejecutivo de The Global Alliance for Banking on Values (GABV), concluye que la gestión de fenómenos como el cambio climático, las crisis económicas, sociales o la globalización aceleran la búsqueda de modelos económicos alternativos, capaces de sentar unas bases que den una mejor respuesta a las carencias del actual modelo basado en el capitalismo. Según Eguiguren se requieren empresas que actúen con sentido de ética, responsabilidad, transparencia, democracia y participación; empresas lideradas con valores corporativos propios de una cultura empresarial sostenible a nivel ambiental, inclusiva a nivel social y sabia a nivel del uso de la tecnología al servicio de la calidad de vida.

Para contrastar y ampliar la información recopilada en la fase de revisión bibliográfica se llevan a cabo tres foros para reflexionar y debatir acerca de las empresas sostenibles, inclusivas e inteligentes. El primero lleva por título: "Las personas, el centro de las empresas", el segundo: "Empresas inteligentes, generando futuro" y el tercero: "Empresas sostenibles, afrontando al cambio climático". En total unos treinta profesionales han participado activamente en los tres foros.

El modelo se presenta en distintas universidades americanas: Harvard University, MIT-Massachusetts Institute of Technology, Emerson College, Boston College y Suffolk University de Boston.

Actualmente, 50 profesionales de distintos ámbitos, están creando de forma colectiva un "Valómetro", una herramienta para medir 50 valores empresariales vinculados a la identidad, la administración y gestión, las personas, la sostenibilidad y la tecnología inteligente en las empresas.

A la vez, técnicos expertos en emprendimiento y en asesoramiento empresarial, están desarrollando un "Vusiness

Plan”, modelo de plan de empresa con valores para guiar a futuros emprendedores.

2. Metodología

El III Foro “Empresas sostenibles, afrontando el cambio climático” se lleva a cabo el 24 de enero de 2017 en la Sala de Reuniones SD2 de la Facultad de Turismo. La reflexión del debate gira alrededor de los aspectos singulares que configuran las empresas sostenibles, que promueven valores como la igualdad, la transparencia, la corresponsabilidad o la accesibilidad y que en último término mejoran la calidad de vida.

Participan en el foro Pere Macias, presidente de la Fundación del Cercle de Infraestructuras y profesor de la Universitat Politècnica de Catalunya; Imma Pérez, directora de Nottopic - RSC, comunicación y redes; Sara Pizzinato, responsable de las compañías de energía y cambio climático de Greenpeace España; Joan Barfull, responsable Técnico de la delegación de PIMEC Girona y de sostenibilidad; Marc Casadellà, director Par3 Pitch&Putt Gualta y presidente de la Associació Catalana de Pitch and Putt y Josep Serra, viticultor y emprendedor del Celler de La Vinyeta.

Organizan y dinamizan la sesión la Dra. Carmen Echazarreta, profesora agregada de comunicación audiovisual y publicidad y directora del Grupo de Investigación Arpa, experta en temas de género y publicidad y Albert Costa, Doctorando de la Universitat de Girona.

3. El debate

El objetivo principal de los Foros de reflexión es la interacción entre profesionales relacionados con el ámbito empresarial para debatir y definir indicadores relevantes y significativos que faciliten la identificación, diferenciación y promoción de las empresas sostenibles. La reflexión y el debate generado en este foro de expertos sirve para generar investigación cualitativa.

A nivel de **sostenibilidad**, acorde con las conclusiones de Echazarreta y Costa (2018) surgen los siguientes asertos:

- Existen lagunas de información e investigación en relación con el cambio climático.
- Los instrumentos utilizados actualmente para la mitigación de sus efectos son insuficientes e inadecuados.
- Se requiere con urgencia mayores índices de gobernanza y estrategia transnacional.
- Surge la necesidad de empresas sostenibles que compatibilicen el desarrollo empresarial con el medio ambiente y la protección del planeta.

Según Eguiguren (2011) la misión de las empresas sostenibles se sustenta en ideales y valores comprometidos con el planeta, contribuyen al bien común y a la vez pueden generar un volumen de beneficios económicos similar al resto de las empresas.

De acuerdo con el Programa de las Naciones Unidas para el Desarrollo, las empresas sostenibles orientan su misión a promover los siguientes ámbitos: a) Agua limpia y saneamiento; b) Energía asequible y no contaminante; c) Ciudades y comunidades sostenibles; d) Producción y

consumo responsables; e) Acción para el clima; f) Vida submarina, y g) Vida de ecosistemas terrestres.

El debate sobre la sostenibilidad en las empresas se organiza alrededor de cinco descriptores que según Echazarreta y Costa (2018) destacan en los estudios previos relacionados: empresas sostenibles, cambio climático, medio ambiente, movilidad y responsabilidad social corporativa.

4. Empresas sostenibles

¿Cuáles son las características que identifican una empresa sostenible? ¿Qué se entiende por sostenibilidad? ¿Falta pedagogía sobre el tema?

Empieza el foro Joan Barfull, responsable Técnico de la delegación de PIMEC Girona y de sostenibilidad: **“La sostenibilidad es un tema transversal que se debe enfocar a nivel de medio ambiente, social y económico.** Un indicador clave es que las empresas realicen sus actividades provocando impacto cero o negativo en el medio ambiente. Aunque la empresa nace con el objetivo de ganar dinero, cada vez se toma más consciencia que **se tiene que contribuir a la mejora del entorno en que desarrollan sus actividades, aportando valores positivos a la sociedad.**

Continúa Josep Serra, viticultor y emprendedor del *Celler de La Vinyeta* afirmando que las empresas sostenibles **se gestionan con visión a corto y largo plazo, internalizando los impactos que tiene en su entorno, compatibilizando la defensa de sus intereses con la solidaridad en su entorno y pensando en las generaciones futuras.**

Retomando la línea argumental Pere Macias, presidente de la Fundación del Cercle de Infraestructuras y profesor de la Universitat Politècnica de Catalunya afirma: “Haciendo un símil, en el mundo de las infraestructuras se empezó, hace unos cuarenta años en los países más avanzados, a evaluar el impacto ambiental que generaban las infraestructuras en el territorio. Este ámbito ha quedado superado actualmente por la planificación ambiental estratégica. En el ámbito de la sostenibilidad en las empresas, **más allá de mitigar los impactos, la clave reside en las estrategias empresariales sostenibles.** Por ejemplo, si producimos motores diésel, aunque le pongamos un tapón, el error reside en fabricar este tipo de motores.” Continúa subrayando la importancia de mantener la cultura industrial caracterizada por capitalizar los equipos humanos capacitados para mejorar su cadena de producción y hacerla más sostenible y no de reducir costes pensando en el corto plazo.

A continuación, Sara Pizzinato, responsable de las compañías de energía y cambio climático de Greenpeace España define las **empresas sostenibles como las que tienen impacto cero o positivo teniendo en cuenta todo el proceso, analizando desde su origen, por ejemplo la obtención y transporte de la materia prima, hasta el consumo final del producto.** “Legalmente las actividades peligrosas para el medio ambiente tendrían que estar limitadas. Solamente tendrían que estar permitidas las actividades sostenibles.” Explica que el problema reside en que las recomendaciones voluntarias no son seguidas por parte de las empresas. Por ejemplo, la asociación europea de fabricantes de coches ha hecho presión durante veinte años para que los objetivos que marca la normativa europea

referente a las emisiones de CO₂ en coches fuera de cumplimiento voluntario.

Apunta que: **“Los elementos fundamentales de la sostenibilidad son la medibilidad y la transparencia”**. Pone de ejemplo las dificultades que encuentra desde su organización para obtener el consumo de electricidad de los grandes centros de datos de empresas como Facebook, Google o Amazon, que consumen grandes cantidades de energía.

Imma Pérez, directora de Nottopic - RSC, comunicación y redes, continua con el tema afirmando que la sostenibilidad es que la empresa pueda desarrollar y realizar su actividad sin perjudicar, sin penalizar el medio ambiente ni la sociedad. Es importante diferenciar la estrategia sostenible, una forma de ser con el *greenwashing*, **práctica de ciertas empresas consistente en presentar sus servicios y productos como respetuosos del medio ambiente aunque no sea cierto**. Sostiene que **la sostenibilidad a las empresas les aporta rentabilidad y que otros aspectos clave de la sostenibilidad son la transparencia y la ética**.

Cuando las empresas incorporan el desarrollo sostenible a su modelo de negocio, obtienen trabajadores mucho más comprometidos, más innovadores y con talento y son más aceptados por parte del conjunto de la comunidad. **Las empresas sostenibles también son empresas colaborativas, incluso con su competencia**.

En esta misma dirección, Sara Pizzinato afirma que **“Las empresas sostenibles utilizan su buen hacer, su deseo de ir más allá de lo legalmente vinculante, para facilitar que otras también lo hagan**. Utiliza su representatividad e influencia para promover un mercado sostenible y un sistema basado en energías renovables que pueda ser útil para el conjunto de las empresas.”

Por su parte, Joan Barfull añade que en España cabe diferenciar los grandes lobbies de la energía que tienen enorme influencia incluso en la redacción de las normativas, de las PIME, pequeñas y medianas empresas que tienen enormes posibilidades para minimizar y compensar todos los impactos negativos que pueden tener. A pesar del **régimen sancionador**, cabe tener en cuenta las posibilidades que ofrecen los **certificados ambientales**, que permiten potenciar empresas realmente sostenibles. En este entorno, **la economía circular significa un cambio de modelo empresarial, ya que persigue potenciar y alargar el ciclo de vida de los productos, materiales y recursos energéticos y reducir la generación de residuos. Los valores cada vez tienen más cuota de mercado**.

En consonancia Josep Serra explica que lo deseable es cuando **“La sostenibilidad está dentro de la ventaja competitiva** de una empresa, aporta valor y genera una diferenciación. La diferenciación es valorada y percibida por los consumidores. Cada vez más se valoran los buenos productos y se está dispuesto a pagar un poco más.”

Pere Macias contrapone el hecho que hay sectores en los que devenir sostenibles es más complicado que otros. Pone el ejemplo de la industria cárnica del país, en el que hay mucha competencia y en el que cuesta mejorar la calidad desde la cría de los cerdos hasta la exportación de la carne.

Se cierra este primer apartado en el que se han destacado las siguientes **características de las empresas sostenibles**: a) Transparentes; b) Éticas; c) Medibles; d)

Enfocadas a nivel de medio ambiente, social y económica; e) Contribuidoras a la mejora del entorno en que desarrollan sus actividades; f) Con visión a corto y largo plazo, internalizando los impactos que tiene en su entorno y pensando en las generaciones futuras g) Gestionadas con estrategias empresariales sostenibles; h) No hacen *greenwashing*; i) Colaborativas, incluso con su competencia; j) La sostenibilidad se plantea de la ventaja competitiva.

5. Cambio climático

El calentamiento global de la Tierra es ya un hecho que está produciendo, y producirá, graves consecuencias en el clima, la atmósfera y la biodiversidad. ¿Cómo pueden las empresas ayudar a mitigar las consecuencias de dicho cambio? ¿Cómo pueden revertir la situación?

Empieza este segundo apartado Sara Pizzinato afirmando: **“El cambio climático requiere de una estrategia de estado, ya que se necesita una reducción urgente de las emisiones de entre un 7 y 8% anual, para llegar a evitar el calentamiento global e intentar reducir en 1,5 grados la temperatura media del planeta.”** El estado es quien debe tener una estrategia y marcar las prioridades de la sociedad frente a las empresas: **“Los estados deben regular con mayor rigor la fiscalidad de determinados productos**: los aviones tendrían que pagar impuestos sobre los hidrocarburos, el diésel tendría que tener una fiscalidad superior a la gasolina o se debería facilitar la normativa para poder disponer de enchufes aptos para vehículos eléctricos.”

Y complementa la idea afirmando que los ciudadanos deben internalizar los costes sociales, ambientales y económicos de las actividades contaminantes. **La sostenibilidad tiene que ser un valor fundamental, básico y obligatorio para cualquier producto**, mientras que la excelencia o la calidad puede marcar la diferenciación.

En el mismo sentido, Joan Barfull relata que **se debería aprovechar el clima mediterráneo para promover las energías renovables**. Opina que desde el gobierno se debería facilitar la producción y el consumo de renovables, aunque el decreto de autoconsumo plantea un escenario opuesto, ya que desincentiva que las empresas se planteen inversiones en este sentido.

Según Pere Macias, una de las formas más importantes de intervenir que tienen los estados es la **vía impositiva**. Gracias a los impuestos el estado redistribuye según la acción política prioritaria. hace acciones redistributivas. Desde el s. XIX, se aplica el **principio de desafectación impositiva**, que supone atribuir a los impuestos un carácter no finalista, de forma que lo recaudado no atiende al origen o a la fuente de los mismos sino que se redistribuye según lo priorizado políticamente. Rompe con el portazgo, un impuesto medieval que gravaba los derechos de tránsito sobre las personas, las mercancías o los animales.

Macias opina que: **“El modelo de desafectación impositiva está en crisis porque necesitamos internalizar los costos sociales y ambientales de forma clara**. Solamente en cánones como el del agua del primer al último céntimo recaptado se invierte a la mejora del ciclo del agua. Los ciudadanos entienden que pagan cara el agua porque tiene que volver limpia. En casos como el aire pasa justamente el contrario, en el que el diésel, más

contaminante, resulta más barato. También el transporte necesita internalizar costes, promoviendo el pago por uso: quien se mueve tiene que pagar todos los costes de su movimiento, desde los costes físicos de arreglar la carretera a los costes ambientales de la contaminación que genera su paso. Se requiere pedagogía para que los ciudadanos lo entiendan y lo acepten, ya que **hablamos de transformar impuestos, no de subirlos o bajarlos.**"

Imma Pérez recupera la idea descrita en el primer apartado y explicita que se expande la economía circular y añade que también **entra con fuerza la economía colaborativa**. Un aspecto que va más lento que los propios consumidores es el de definir el marco legal para las actividades colaborativas. En este sentido se requiere un cambio de mentalidad. Por ejemplo, ante la desventaja de disponer de un vehículo en propiedad existen distintas alternativas más eficientes y económicas como son el uso del transporte público o el hecho de compartir coche.

Sara Pizzinato continúa el bloque acerca de cómo hacer frente al cambio climático y establece tres tipologías de empresas.

"El primer tipo de empresas es la que tiene en su core business, negocio principal, el hacer energía, que suponen los grandes sectores emisores de gases de efecto invernadero, como son la energía, el transporte y la avicultura. Como país no podemos continuar teniendo centrales térmicas ni minas de carbón, ni continuar quemando combustible fósil si queremos evitar el cambio climático. Si tenemos como prioridad el cambio determinados sectores tienen que transformarse al 100%." También cabe tener en cuenta que: "Hay sectores que se están transformando radicalmente, así por ejemplo, la mayor revolución en el campo de los vehículos eléctricos los está haciendo el fabricante de baterías eléctricas Tesla y no Volkswagen."

El segundo tipo son las empresas que no tienen en su core business efectos tan contaminantes, pero usan las energías finitas para prestar sus servicios. Aquí destacan empresas que están revolucionando el uso de renovables, por ejemplo en La Rioja distintos viñedos incorporan molinos eólicos.

El tercer bloque está constituido por las empresas que plantean una estrategia a largo plazo y visualizan los servicios necesarios en un sistema renovable, eficiente e inteligente: servicios de carsharing –servicio de alquiler de un vehículo por horas, carpooling - sistema de transporte privado compartido-, gestión de la demanda, comida ecológica y su distribución, etc.

Finalmente se enfatiza en el hecho de que el gobierno tiene la responsabilidad de compatibilizar la reducción de emisiones de gas con una economía sana.

En este segundo apartado se exponen distintos actuaciones que podrían mitigar el cambio climático: a) Estrategia de estado para conseguir una reducción de las emisiones de entre un 7 y 8% anual para reducir en 1,5 grados la temperatura media del planeta; b) Regulación fiscal rigurosa para las energías finitas; c) Sostenibilidad concebida como un valor fundamental, básico y obligatorio para cualquier producto; d) Clima mediterráneo propicio para promover las energías renovables; e) Internalización de costos sociales y

ambientales; f) Surgimiento de la economía colaborativa; g) Transformación de los sectores de la energía, transporte y avicultura como grandes emisores de GEI; h) Control de servicios prestados por empresas que usan energías finitas; i) Promoción de las estrategias sostenibles a largo plazo.

6. Medio ambiente

¿Qué factores consideras claves en una empresa para preservar el medio ambiente? ¿Qué medidas cabría tomar?

Joan Barfull inicia el debate afirmando que las empresas actúan adecuadamente desde un punto de vista medioambiental cuando **minimiza consumos y busca formas de reutilizarlos**. También declara: **"Lo que produce la empresa debe ser fácilmente reciclable o reutilizable. Además, tiene que hacer un esfuerzo para comunicarlo a sus clientes y consumidores. Disponer de certificaciones ambientales como la ISO 14001 o el distintivo de calidad ambiental EMAS ayuda."**

En una línea complementaria, según Barfull: **"El desarrollo y aprovechamiento de energías renovables a nivel de PIME en España es legislativamente complicado."**

Continúa afirmando; "Contaminar no es gratis. La normativa siempre determina control y régimen sancionador. Incluso si hay infracciones reiteradas se puede llegar al cese de la actividad." Las últimas normativas propician la **segregación y gestión de cada tipo de residuos de forma separada**. Añade que de forma positiva se tendría que **incentivar más con fiscalidad positiva** las buenas praxis que realizan algunas empresas.

Pere Macías destaca dos factores: **el transporte y los desplazamientos**. En los dos explica que las empresas pueden incidir, para empezar, por ejemplo, en el desplazamiento de sus trabajadores. En Francia si vas a trabajar en bicicleta tienes más sueldo y la empresa recibe ayudas públicas. También a nivel de transporte algunas se organizan para conseguir los máximos niveles de sostenibilidad.

Argumenta que históricamente se ha hecho un uso del territorio consistente en segregar usos y por esta razón los polígonos industriales se han separado de las ciudades, aunque actualmente la mayoría de actividades que se realizan no necesitan ningún tipo de segregación especial. Los polígonos dispersos condenan a los trabajadores a moverse y su geolocalización dificulta su movilidad y la organización de transporte público que sobreviene caro y poco eficiente. Por lo tanto, de forma indirecta se incentiva el uso del coche privado.

Otro factor relevante: la **energía**. Explica que históricamente en España se ha avanzado mucho en **cogeneración** pero que este modelo en parte está en crisis. Para Macías ahora viene otra revolución que es la de **almacenar la energía**. Tesla y otros fabricantes están aplicando los últimos avances tecnológicos para optimizar la capacidad de las baterías hasta tal punto que ciudades como Nueva York están construyendo equipamientos para el almacenamiento de la energía la cual cosa permite un funcionamiento de la ciudad más eficiente. Una de las formas de almacenar la energía más revolucionaria es a partir del aprovechamiento,

reciclaje y reaprovecho de baterías de vehículos usadas. El almacenaje de energía también debe ser considerado para el uso compartido en polígonos industriales.

Josep Serra introduce el **teletrabajo** como una opción que evitaría los costes ambientales del transporte, contaminante y gran consumidor de recursos de energía.

También introduce el concepto del **mercado de proximidad**, como contrapunto a la moda empresarial de potenciar la importación y la exportación.

Imma Pérez habla sobre el **uso de la energía**. Destaca la **gestión por objetivos**, el teletrabajo y la **flexibilidad horaria** como factores que potencian el ahorro energético. Existen aplicaciones que informan sobre la trazabilidad y las emisiones ambientales de las empresas, la cual cosa facilita que los consumidores puedan orientar racionalmente su compra sostenible.

Destaca la estrategia de Unilever, que optimiza el transporte de mercaderías a partir del estudio de recorridos y en función de si requiere o no de cámara frigorífica para emitir menos CO₂ y ser más rentables.

También explica sobre Knorr, que ha implicado a más de 350 agricultores en Extremadura para mejorar sus procesos de producción, aumentando la cantidad producida, disminuyendo el consumo de agua en un 20% y consiguiendo que sus productos sean más sostenibles; incluso la biodiversidad reflota otra vez.

Explica que en el año 2008 tuvo la ocasión de participar en un proyecto en el que se **vinculaba la igualdad de oportunidades a la productividad**. El proyecto perseguía trabajar de forma más eficiente a partir de la satisfacción de los trabajadores. Implicaron a 32 empresas de forma simultánea e involucraron unas 3.000 personas con impacto directo. En las plantas de manipulación de muchas empresas en la zona del Vallés hay más mujeres trabajando en planta que hombres. Con la cría de los hijos y la falta de transporte público, había índices de absentismo laboral elevado que terminaba en penalizaciones y expulsiones. Por un lado la situación generaba drama social por las familias que quedaban en paro y, a su vez la empresa perdía productividad por el absentismo y por la necesidad de volver a incorporar trabajadores nuevos y enseñarles las tareas. En los municipios de Rubí y Barberà del Vallès escalaron los horarios de la cadena de producción compatibilizándolos con los de los autobuses públicos. Las medidas incrementaron la fidelización, mejoraron el clima laboral e incrementaron la productividad.

Otro aspecto que destaca Pérez es la necesidad de fomentar un activismo responsable dirigido entre la ciudadanía. Es clave **concienciar a través de acciones pedagógicas**.

Según Sara Pizzinato es determinante que la empresa tenga una **estrategia sostenible**. Uno de los aspectos que destaca como fundamental es la ubicación de las empresas, en la misma línea que Macias, para garantizar un **plan de movilidad sostenible**.

Respeto la idea que las empresas colaboren para optimizar costes, explica el caso de Google, que se comprometió con Greenpeace a ser 100% renovable. En Holanda, Google ha acordado con Siemens y otra empresa, el contrato a 25 años con precio garantizado, con un grupo de agricultores

y ganaderos para que inviertan en renovables y les puedan suministrar energía.

También respeto a la **gestión de la demanda energética** existen diversas opciones aunque la empresa no tenga capacidad de almacenaje con baterías. Determinados procesos de producción pueden adaptar su consumo a los valles, acelerando actividad, o subidas del mercado, frenando actividad.

Finalmente destaca las **cooperativas de financiación**, que respaldan proyectos que tienen un efecto positivo sobre el entorno: potenciar paneles fotovoltaicos, compra de madera sostenible, reforma energética de una tienda, etc.

Se requieren **criterios medibles y objetivables**, ya que el dinero no es neutro. Hay que saber si un banco invierte en carbón o en armas.

Además critica el rol del estado al favorecer las grandes empresas eléctricas que no pagan los costes de las emisiones de CO₂, tal y como marca el protocolo de Kioto aunque son las que mayor uso hacen de las centrales de carbono y gas, sino que siempre acaba afectando la factura del ciudadano.

Se recomienda la **etiquetación** de los productos para informar al consumidor. Sería positivo que se pudiera etiquetar lo malo: "Este producto ha emitido emisiones" o "Este producto es tóxico".

La Dra. Carmen Echazarreta, profesora agregada de comunicación audiovisual y publicidad y directora del Grupo de Investigación Arpa, asiente respeto las etiquetas y afirma: "Creo que son muy importantes para que las decisiones de los consumidores comprometidos se vean reforzadas, porque afectan a la consciencia. Este tipo de procesos lleva al consumidor a pagar un poco más si es necesario por un producto sostenible y a la vez a penar determinadas empresas, como por ejemplo algunas del sector textil, que han transnacionalizado sus procesos de producción de manera perversa.

En determinados casos, las multinacionales controlan la agenda *setting* de algunos medios de comunicación de tal manera que consiguen esconder las malas praxis respeto a la sostenibilidad, de manera que falta información.

Se cierra este tercer bloque destacando que los factores clave en una empresa para preservar el medio ambiente son: **a) minimizar consumos y busca formas de reutilizarlos; b) fabricar productos fácilmente reciclables o reutilizables; c) disponer de certificaciones ambientales o distintivos de calidad ambiental; d) segregar y gestionar de cada tipo de residuos de forma separada; e) fiscalidad positiva; f) transporte, desplazamientos y movilidad sostenible; g) almacenamiento de la energía; h) gestión de la demanda energética i) etiquetación. j) gestión estratégica del territorio: situación polígonos, potenciación mercado de proximidad; k) igualdad de oportunidades, teletrabajo y flexibilidad horaria; i) comunicar los procesos sostenibles a los clientes y consumidores, y m) concienciación a través de acciones pedagógicas;**

7. Movilidad

Pensando en términos de acciones de movilidad ¿Cuáles son las que generarían más impacto? ¿Cuáles se pueden potenciar desde la iniciativa empresarial? (transporte

público colectivo, vehículo eléctrico, sistemas de movilidad limpios y no motorizados)

Empieza Pere Macias: “Me gusta definir la movilidad como un proceso histórico. Cuando aparecen los ferrocarriles la gente descubre que se puede mover colectivamente, con comodidad, con seguridad, con una cierta velocidad, que se pueden mover mercaderías... El territorio que tiene tren es muy distinto al que no tiene. Es el periodo <<Nos podemos mover>>. En el s. XX cuando Henry Ford empieza a producir el Ford T de una forma masiva, a gran escala, cambia la movilidad. El que tiene coche dice <<Me puedo mover >>. Transforma la sociedad hasta el punto que la gente se va a vivir en urbanizaciones, al sistema americano, y no al lado de la estación. Ahora estamos en la fase <<Necesito moverme>>. Ante esta situación hay aspectos que revierten en la sociedad, otros en la administración y otros, como la movilidad o la logística, que recaen en las empresas.

En estos momentos destacan batallas como la necesidad de organizar sistemas de **transporte públicos eficientes y asequibles**; avances tecnológicos como los **vehículos eléctricos** pueden ayudar; el **almacenamiento de la energía** para promover determinada movilidad o el **transporte a demanda**. Es importante que cada uno asuma su movilidad de forma *wise*, sabia, un paso más allá de *smart*, inteligente. También cabe destacar la importancia del debate con la ciudadanía para conseguir convicciones acerca del uso de medios de transporte sostenibles como la bicicleta.

La **administración tiene que tomar decisiones** como es el desarrollo de una gran red con continuidad para que se pueda acceder y aparcar en todos los sitios con bicicleta. “Aquellas sociedades que sepan tender puentes entre los ciudadanos, las administraciones y las empresas son las que van a avanzar más. A veces se tienen que tomar decisiones desagradables como los noruegos o la alcaldesa de París que han prohibido la entrada de vehículos diésel por el elevado índice de contaminación y los efectos nocivos para la salud”.

Imma Pérez afirma que “Es importante observar que progresivamente la sociedad está cada vez está más acostumbrada a **compartir coche, a usar la bicicleta** y a ser usuaria del transporte público. Respeto a **transporte público**, nos gustaría hacer uso especialmente del tren para ir al trabajo, pero no podemos confiar en él por su poca formalidad en el cumplimiento de horarios y menos cuando la empresa te penaliza por llegar tarde. La administración tendría que hacer un esfuerzo para mejorar el transporte público y las empresas para promover la flexibilidad horaria y el teletrabajo.”

También reflexiona acerca de que la sostenibilidad y la responsabilidad social tienen que ver con la innovación. En nuestro país “la innovación se vive en soledad. Primero la gente te toma por raro, y después te copia.” Apuesta por **lainnovación colaborativa** como clave en el futuro. Solamente se requiere confianza y superar la resistencia al cambio.

Respeto a la innovación Pere Macias opina que sí que existen en nuestro país **ecosistemas innovadores** como el Distrito 22@ en Barcelona y muchos emprendedores que apuestan decididamente por la innovación. Aunque sí que es cierto que durante unos años ha habido una cierta hegemonía ideológica de buscar seguridades, permanecer en la zona de confort y en este sentido la innovación implica riesgo.

Joan Barfull denuncia que hay empresas que dejan de seleccionar candidatos si se desplazan al trabajo en tren. Comenta también que los **planes de movilidad** solamente están regulados para las grandes empresas. En el caso de las pequeñas y medianas lo que hacen es por convicción.

Sara Pizzinato pone de manifiesto que la realidad del día a día nos obliga a tener una movilidad que no es racional. También denuncia el **transporte de mercancías**. Existen grandes acuerdos internacionales para la importación y exportación de determinados productos que se cultivan o producen aquí.

Si analizamos las emisiones de **gases de efecto invernadero** en los distintos sectores económicos, en el **transporte es el único sector que crece en Europa**, todos los demás están minorando sus emisiones. Dentro del transporte, **las mercancías** tienen un impacto muy importante, pero la **movilidad** de las personas también. Dentro de la movilidad de las personas, el coche supone casi la mitad de las emisiones.

Para disminuir las emisiones se deberían reducir los kilómetros que hacen mercancías y personas. La **movilidad a demanda**, el transporte público, las bicicletas, etc. también favorecen la disminución de las emisiones.

El segundo aspecto es la **electrificación del transporte**, factible en todos los transportes y más complicado para la aviación y la marítima internacional. Actualmente en Europa hay 8 millones de bicicletas eléctricas y motos eléctricas. El coche eléctrico tiene limitaciones de autonomía, probablemente debe ser concebido como un mini autobús de cuatro personas. En España el 30% del sistema de trenes está pendiente de electrificación y aún depende de locomotoras diésel.

Un tercer aspecto es el **aumento de ocupación de los vehículos de todo tipo**: autobuses, trenes, bicicletas, motos, coches, etc. Aunque implica un cambio de mentalidad del sistema, repensando desde la propiedad del vehículo, el servicio y el uso.

Un cuarto elemento para disminuir emisiones es promover la **proximidad de trabajo y escuela**. Se estima que el 80% de los movimientos de transporte son cautivos.

Josep Serra hace una apuesta por equilibrar el territorio, ya que denuncia una sobrepoblación en las ciudades mientras el territorio queda despoblado. Afirma que “Si la gente pudiera vivir en los pueblos de una forma desconcentrada podría acceder a las empresas de forma inteligente.”

Marc Casadellà, director Par3 Pitch&Putt Gualta y presidente de la Asociación Catalana de Pitch and Putt y promotor de la Burricleta, una bicicleta eléctrica que se usa en actividades turísticas afirma que el problema número uno que tenemos es **salvar la tierra**. Se requieren de grandes dosis de concienciación social.

Explica que, como ingeniero industrial, ha aplicado diversas medidas en el Pitch and Putt que está situado en un pueblo de 300 habitantes donde nació. Cuenta las dificultades que aparecieron cuando decidió comprar en Estados Unidos la primera máquina eléctrica de cortar césped del estado español. Con 3 o 4 horas de autonomía le añadía una placa solar en el tejado que le alimentaba un 5% adicional y según sus cálculos le permitía ahorrar entorno a un 90% de consumo. Tampoco generaba contaminación acústica. Al principio recuerda que, sin duda, el mayor

problema lo encontraba con las personas que tenían que conducir la máquina y que no confiaban en ella. Además decidieron poner placas solares para alimentar el suelo radiante y no poner aire acondicionado por el local porque tan solo se necesita algunos días concretos al año.

En el cuarto apartado, destacan las siguientes acciones para mejorar la movilidad: **a) transporte públicos eficientes y asequibles; b) vehículos eléctricos; c) usar la bicicleta; d) compartir coche; e) transporte y movilidad a demanda; f) electrificación del transporte; g) almacenamiento de la energía; h) mejora del transporte de mercancías; i) toma de decisiones de la administración; j) planes de movilidad; k) innovación colaborativa y ecosistemas innovadores; l) aumento de ocupación de los vehículos de todo tipo, y m) proximidad de trabajo y escuela.**

8. Responsabilidad social

La responsabilidad social corporativa (RSC) aplicada al cambio climático y al medio ambiente está de moda, porque es estratégica para muchas empresas, pero ¿Cómo tiene que aplicarse la responsabilidad social sobre el medio ambiente para que sea algo más que una estrategia?

Empieza Joan Barfull explicando un proyecto enfocado a PIMEs que desarrollaron hace tres años para diagnosticar como enfocaban la RSC respecto a los ejes ambiental, económico y social. Los resultados indicaron que en la mayoría de casos las empresas estaban trabajando algunos de los ámbitos de la RSC **sin necesidad de etiqueta o de certificación. En todos los casos lo hacían porque les era práctico y rentable.** Valoraban que gracias a ello mejoraba el clima laboral, la comunicación y la participación en la empresa. Se tomaban iniciativas como el uso compartido de vehículo, flexibilidad horaria, etc. También concluyeron que **en ninguno de los casos se comunicaban las medidas para mejorar su imagen corporativa.**

Josep Serra piensa que tenemos que concienciar a las empresas y particulares ya que en estos momentos de crisis muchas van en un sentido opuesto a la sostenibilidad.

Imma Pérez explica que habitualmente **se concibe erróneamente que la RSC es para las empresas grandes y que es cara.** Es importante dibujar una **estrategia vinculada a acciones concretas y medirlo.** También cabe destacar que genera rentabilidad. Pérez explica que el concepto de "RSC" se está redefiniendo y actualizando por "Desarrollo Sostenible". Otro aspecto positivo de este tipo de medidas es que: "Cuando las empresas consiguen un buen clima laboral y buena rentabilidad económica, **se genera atracción del talento.** En cinco años, la llamada generación Y, también conocida como generación del milenio, ocupará los sitios de trabajo y tenemos que atraer gente buena. Tenemos que generar empresas con sentido, que **ganen dinero pero que sean sostenibles y éticas.**"

Finalmente explica el concepto del **intraemprendimiento**, consistente en desarrollar una actividad emprendedora en el sí de una organización que ya existe. Gracias a ello se aportan iniciativas innovadoras para mejorar modelo de negocio, lo cual puede resultar para muchas personas fuente de ilusión y motivación.

Pere Macias denuncia la RSC que practican algunas de las grandes corporaciones que no dejan de ser mero *greenwashing*: páginas web, memorias fantásticas, etc. Explica la anécdota que una petroquímica en Tarragona que tuvo un accidente y que para paliar los efectos quería hacer algo para la sociedad. Desde la administración se le pidió que pusiera unos paneles informativos grandes para informar sobre sus emisiones, aunque la idea no gustó. Terminaron haciendo un magnífico libro sobre los paisajes del camp de Tarragona.

Opina que la pequeña empresa comete otro tipo de acciones de impacto real. Es importante **poner en valor y compensar el entorno que permite desarrollar tus productos y servicios y que los consume.**

Marc Casadellà añade la idea de la **proactividad** como un elemento importante para promover el desarrollo sostenible. Explica que en ocasiones se habla de empresarios y trabajadores con una concepción como si estuviéramos en plena revolución industrial aunque los conceptos han cambiado radicalmente: "Hoy eres una cosa y mañana otra. La diferencia está entre los que creen que el futuro depende de ellos y los que creen que su futuro se los tiene que solucionar otro. Proactivos y pasivos. En la tierra hay los que se atreven o no."

Finalmente, Sara Pizzinato añade otro aspecto como es la **motivación** que tiene que promover la empresa entre sus trabajadores para favorecer un entorno proclive a la RSC.

Piensa que las empresas deben orientar sus **estrategias de RSC al core business como la actividad principal** mejorándolo, marcando objetivos, estrategias, etc. "Si lo que estás es compensando, estás haciendo penitencia, simplemente haces greenwashing."

En el último bloque, destacan los siguientes aspectos clave sobre la RSC: **a) estrategias de RSC dirigidas al core business, a la actividad principal; b) porque son prácticas y rentables; c) sin necesidad de etiqueta o de certificación; d) sin necesidad de comunicar las medidas para mejorar la imagen corporativa; e) no son caras; f) no son para las grandes empresas sino para todas; g) estrategias vinculada a acciones concretas y medibles; h) generan atracción del talento; i) acciones sostenibles y éticas; j) intraemprendimiento; k) proactividad; l) motivación, y necesidad de compensar el entorno que permite desarrollar tus productos y servicios y que los consume.**

9. Conclusiones

A partir de los resultados del foro, se destacan una serie de características diferenciales de las **empresas sostenibles en cuatro ámbitos:**

Minimización del consumo y promoción de las energías renovables: a) Almacenamiento de la energía; b) Clima mediterráneo propicio para promover las energías renovables; c) Comunicación de los procesos sostenibles a los clientes y consumidores; d) Con visión a corto y largo plazo, internalizando los impactos que tiene en su entorno y pensando en las generaciones futuras; e) Etiquetación para guiar a los consumidores sobre los consumos; f) Fabricación de productos fácilmente reciclables o reutilizables; g) Gestión de la demanda energética; h) Internalización de

costos sociales y ambientales; i) Minimizar consumos y buscar formas de reutilizarlos; j) Segregación y gestión de residuos de forma separada; k) Sostenibilidad concebida como un valor fundamental, básico y obligatorio para cualquier producto y m) Transformación de los sectores de la energía, transporte y avicultura como grandes emisores de GEI

Movilidad: a) Almacenamiento de la energía; b) Aumento de ocupación de los vehículos de todo tipo; c) Bicicleta; d) Compartir coche; e) Electrificación del transporte; f) Mejora del transporte de mercancías; g) Planes de movilidad; h) Transporte y movilidad a demanda; i) Transporte, desplazamientos y movilidad sostenible, y j) Vehículos eléctricos.

Gestión empresarial ambiental, económica y social: a) Acciones concretas y mesurables; b) Atracción del talento; c) Colaborativas, incluso con la competencia; d) Contribución a la mejora del entorno en el que se desarrollan las actividades; e) Economía colaborativa; f) Ecosistemas innovadores; g) Estrategias empresariales sostenibles; h) Ética; i) Flexibilidad horaria; j) Igualdad de oportunidades; k) Innovación colaborativa; l) Intraemprendimiento; m) Motivación; n) No al greenwashing; o) Proactividad; p) Sin necesidad de comunicar las medidas para mejorar la imagen corporativa; q) Sostenibles en el core business o actividad principal, r) Teletrabajo y s) Transparencia.

Administración pública: a) Concienciación a través de acciones pedagógicas; b) Control de servicios prestados por empresas que usan energías finitas; c) Estrategia de estado para conseguir una reducción de las emisiones de entre un 7 y 8% anual para reducir en 1,5 grados la temperatura media del planeta; d) Fiscalidad positiva; e) Gestión estratégica del territorio: situación polígonos, potenciación mercado de proximidad; f) Promoción de certificaciones ambientales o distintivos de calidad ambiental; g) Promoción de las estrategias sostenibles a largo plazo; h) Proximidad al trabajo y a la escuela; i) Regulación fiscal rigurosa para las energías finitas y j) Transporte público eficiente y asequible.

La definición de indicadores cualitativos y cuantitativos a partir de las conclusiones del foro “Empresas sostenibles, afrontando el cambio climático” permitirá disponer de una herramienta de creación, dirección y promoción empresarial de la gestión sostenible en las organizaciones, minimizando las emisiones de las energías finitas y potenciando las renovables.

En correlación con Echazarreta y Costa (2018), se concluye la necesidad de elaborar un modelo integrador, basado en los resultados de las revisiones bibliográficas y de los foros de discusión centrados en la inclusividad, la sostenibilidad y la tecnología al servicio de la mejora de la calidad de vida. Simultáneamente se requieren estudios experimentales para contrastar la idoneidad de los indicadores definidos por los distintos profesionales para detectar y potenciar las empresas con valores. En último lugar, se recomienda el desarrollo de un instrumento que facilite la aplicación de los valores descritos en las organizaciones.

Como en el primer y segundo foro, los resultados y conclusiones del presente debate requieren ser confirmados en estudios posteriores que incluyan expertos de ámbitos complementarios así como otros tipos de metodologías

de estudio. Ante estos nuevos retos, la investigación en este ámbito debe continuar de forma sistemática e interdisciplinar.

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FORO DE REFLEXIÓN Y DEBATE: LAS PERSONAS, EL CENTRO DE LAS EMPRESAS

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Resumen

Se establece un foro de reflexión y debate multidisciplinar y multiprofesional para debatir y definir indicadores relevantes y significativos que faciliten la identificación, diferenciación y promoción de las empresas inclusivas. En coherencia con una revisión bibliográfica exhaustiva previa, se enfoca el debate a través de cuatro ejes: empresas inclusivas, equipos de trabajo, responsabilidad social corporativa y marketing responsable. En las conclusiones se destacan una serie de características diferenciales de las empresa inclusiva: a) Empresa Abierta: con capacidad de escucha, transparente, en coherencia con la sociedad, comprometida y responsable; b) Liderazgo que inspira, legítima y estimula; c) Trabajo en equipos manejados por valores; d) Remuneración de forma justa a sus trabajadores; e) Creación de un entorno que respete y fomente la igualdad y la diversidad y la no discriminación en ninguna forma; f) Garantiza la accesibilidad universal; g) Fomenta la atención médica y de salud para garantizar la higiene y la seguridad en el trabajo; h) Promueve la conciliación de la vida laboral y familiar así como el teletrabajo; i) Fomenta la actualización continua y el reciclaje; j) Promueve el desarrollo profesional; k) Ahonda en las relaciones con la comunidad fomentando el voluntariado, los donativos, etc. l) Se preocupa por el bienestar de sus equipos; m) Trata a sus trabajadores, clientes y proveedores de forma justa y n) Tiene la responsabilidad social corporativa como principio, integrada en sus fundamentos. La definición de indicadores cuantitativos y cualitativos permitirá disponer de una herramienta de dirección empresarial entorno a la gestión de las personas en las organizaciones. La reflexión, el debate y el conocimiento generado en este foro de expertos persigue la transferencia sobre cuatro ámbitos: investigación, educación, emprendimiento y empresa.

Palabras clave

foro de reflexión y debate, empresas con valores, inclusividad

1. Introducción

La Universitat de Girona promueve el Primer Foro de reflexión y debate alrededor de las empresas inclusivas, abiertas y democráticas.

El Foro de debate, que se celebra el 18 octubre de 2016, es un espacio de encuentro pensado para reflexionar en el marco del proyecto Vusiness [del inglés Business, negocios, con “V” de valores] que pretende promover las empresas inteligentes, abiertas, democráticas, sostenibles e inclusivas, que tienen que inspirar el futuro, impulsado por el Grupo de investigación Arpa (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales) del Departamento de Filología y Comunicación de la Universitat de Girona.

Según Echazarreta y Costa (2017): “En el entorno actual la economía mundial ha sufrido una grave y rápida desaceleración que afecta fundamentalmente a los sectores sociales más vulnerables, generando desempleo y déficit de trabajo decente.”

La recesión ha generado un impacto negativo sobre la actividad económica aumentando el paro y destruyendo empleo de calidad, deteriorando las condiciones de vida y de trabajo. En Europa, del 2008 al 2012 se han destruido 7,2 millones de puestos de trabajo y tan solo se han creado 2,4 millones, la cual cosa implica un saldo negativo de 4,8 millones de empleos en tan solo cuatro años. En el caso del estado español ha registrado un ritmo de destrucción de empleo significativamente más intenso que

la mayoría de países de la Unión Europea, ya que existe una estrecha relación entre la especialización productiva relacionada con la construcción y la destrucción de empleo debido al hundimiento del sector por el efecto de la burbuja inmobiliaria. Además, se constata su impacto sobre determinados grupos sociales agravado por la política de recortes que ha agravado los efectos de la crisis. (Rocha y Aragon, 2012)

Según Ioé (2011) : “Una cuarta parte de los hogares, cuyas percepciones salariales en cómputo anual no llegan al Salario Mínimo Interprofesional y se encuentran en situación o riesgo de pobreza.”. Como consecuencia directa, la sociedad presenta un reparto de la riqueza cada vez más desigual. Por lo que hace referencia al acceso a la vivienda en propiedad ha implicado un creciente endeudamiento de las familias trabajadoras hasta que la crisis ha puesto fin a la especulación inmobiliaria. Aunque en los últimos años si bien es cierto que ha caído el precio de compra y de alquiler en contra las familias en paro han perdido de forma relevante su poder adquisitivo y tienen mayor dificultad de acceso al crédito. Además se han registrado 93.000 embargos de viviendas en 2009 y 120.000 en 2010, frente los registros de 2005 que se situaban en 15.000 casos anuales.

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Además, en España, ante una tasa de paro que en 2012 se situaba en torno al 22% en plena crisis, las actuaciones de los poderes públicos se han encaminado a la recuperación económica y la generación de empleo incidiendo en la cantidad y no tanto en la calidad laboral. (Merino et al., 2012)

El proceso de digitalización y el desarrollo de la inteligencia artificial implican un cambio profundo y significativo en la organización del trabajo en las empresas, sumado al ya comentado de la globalización de los procesos. (García-Echevarría, 2018) Siguiendo a Lombardero (2015), la cuarta revolución industrial se caracterizará por la digitalización del 90% del empleo relacionado con los sectores de la industria y de los servicios, aspecto que puede resultar positivo si se aprovecha como una oportunidad para desarrollar un nuevo modelo económico facilitador de la salida de la crisis de nuestro mercado económico.

Según Torrent-Sellens (2017): “La preocupación por el futuro del trabajo es un tema recurrente cada vez que se evidencia un proceso de cambio disruptivo en la tecnología. El análisis económico ha señalado que la tecnología no destruye el trabajo, sino que sesga habilidades y destrezas, y desplaza tareas, empleos, ocupaciones y personas.” En un nuevo entorno económico globalizado se asentan nuevas formas y condiciones de trabajo, caracterizadas en cinco elementos:

a) Uso integral en todos los procesos de tecnologías de la información y comunicación; b) Estrategia competitiva de las empresas basada en la innovación; c) Organización del trabajo flexible; d) Trabajadores cualificados, polivalentes, comprometidos y con una división del trabajo basado en todo tipo de conocimientos, y e) Gestión de recursos humanos avanzada (selección y trabajo por competencias; formación constante; retribución variable, formas de relación laboral flexible, etc.).

Según Mendizabal y Errasti (2006): “La mundialización de la competencia y las tecnologías de la información y de la comunicación permiten a las empresas generalizar los procesos de subcontratación y externalización con decisivas consecuencias en los países industrializados. En estas condiciones los procesos de «deslocalización empresarial» se convierten en un elemento central de una ofensiva económica y social que afecta directamente al tejido productivo y a los derechos sociales de los trabajadores”, repercutiendo de forma relevante y negativa sobre el empleo. Habitualmente, las víctimas en las sociedades industrializadas con los trabajadores menos cualificados.

Según Echazarreta a Costa (2017) : “Para superar el actual sistema económico fuente de desigualdad y exclusión, las empresas denominadas inclusivas tienen como principal objetivo reinventarse y evolucionar hacia un concepto de negocios en los que la colaboración, la participación y la implicación de los empleados sean indispensables y determinantes”.

Los estudios de Eguiguren (2011) , director ejecutivo de The Global Alliance for Banking on Values (GABV), concluyen que la gestión de las crisis económicas, sociales, al deslocalización, la globalización o el cambio climático entre otros, promueven y aceleran la búsqueda de modelos económicos alternativos, capaces de sentar unas bases más sólidas y que den una mejor respuesta a las carencias del actual modelo capitalista. Apunta Eguiguren que se necesitan empresas que actúen en el mercado global con

sentido de ética, responsabilidad, transparencia, democracia y participación; empresas lideradas con valores corporativos propios de una cultura empresarial inclusiva a nivel social, sostenible a nivel ambiental y sabia a nivel del uso de la tecnología al servicio de la calidad de vida.

En este entorno, desde el Grupo de Investigación ARPA (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales) del Departamento de Filología i Comunicación de la Universitat de Girona, se impulsa el proyecto **Vusiness [del inglés “Business”, negocios, con “V” de valores]** que promueve las empresas abiertas, democráticas, sostenibles, inclusivas y que hacen un uso inteligente de la tecnología con el objetivo de servir de modelo inspirador en los ámbitos de investigación, educación, emprendimiento y empresa.

Con el fin de sentar las bases científicas para la creación de un modelo alternativo basado en las empresas con valores en el marco del proyecto Vusiness, se ha llevado a cabo de forma estructurada y metódica una exhaustiva revisión bibliográfica desde 2015 para seleccionar las conclusiones de los estudios más relevantes.

Con el objetivo de contrastar y ampliar la información recopilada en la fase de revisión bibliográfica se llevan a cabo tres foros para reflexionar y debatir acerca de las empresas inclusivas, abiertas y democráticas. El primero lleva por título: “Las personas, el centro de las empresas”, el segundo: “Empresas inteligentes, generando futuro” y el tercero: “Empresas sostenibles, afrontando al cambio climático”. En total unos treinta profesionales han participado activamente en los tres foros, orientados a la inclusividad, la sostenibilidad y el buen uso de la tecnología.

El modelo se presenta en distintas universidades americanas: Harvard University, MIT-Massachusetts Institute of Technology, Emerson College, Boston College y Suffolk University de Boston.

En la actualidad, con el objetivo de transferir conocimiento al ámbito empresarial, 50 profesionales están creando de forma colectiva el “Valómetro”, una herramienta para medir 50 valores empresariales vinculados a la identidad, la administración y gestión, las personas, la sostenibilidad y la tecnología inteligente en las empresas. Simultáneamente, un grupo de técnicos expertos en emprendimiento y en asesoramiento empresarial, están desarrollando el “Vusiness Plan” un modelo de plan de empresa con valores para guiar a futuros emprendedores.

2. Metodología

El I Foro “Las personas, el centro de las empresas” se lleva a cabo el 18 de octubre de 2016 en la Sala de Reuniones SD2 de la Facultad de Turismo. La inauguración corre a cargo del Dr. Ramon Moreno, vicerrector de Planificación, Innovación y Empresa. La reflexión del Foro gira alrededor de los aspectos singulares que configuran las empresas inclusivas, que promueven valores como la igualdad, la transparencia, la corresponsabilidad o la accesibilidad y que en último término mejoran la calidad de vida.

Participan en el foro el Dr. Carles Serra, Adjunto al rector por Compromiso social; el Sr. Agustín Matía, Gerente de Down España; el Sr. Cayetano Alemán, ex operario maquinista a Aconda Papel; el Sr. Javier Blázquez,

Coordinador Técnico de Proyectos Internacionales de la Fundación ONCE; el Sr. Mohamed El Amrani, coordinador de proyectos a Suara Cooperativa. Premio Fundación Princesa Social 2014; la Sra. Esther Carreras, Relaciones externas de la Cooperativa “La Fageda”, y la Sra. Khaoula Echaouech, geógrafa en paro.

La sesión es organizada y dinamizada por parte de la Dra. Carmen Echazarreta, directora del Grupo de Investigación Arpa, experta en temas de género y profesora titular de comunicación audiovisual y publicidad y Albert Costa, Doctorando de la Universitat de Girona.

3. El debate

El objetivo principal de los Foros de reflexión es la interacción entre diferentes profesionales relacionados con el ámbito empresarial para debatir y definir indicadores relevantes y significativos que faciliten la identificación, diferenciación y promoción de las empresas abiertas, democráticas e inclusivas. La reflexión y el debate generado en este foro de expertos sirve para generar investigación cualitativa.

A nivel de **inclusividad**, acorde con las conclusiones de (Echazarreta y Costa, 2017): se proponen los siguientes objetivos específicos:

- Superar el actual sistema económico fuente de desigualdad y exclusión.
- Fomentar las empresas inclusivas que generan oportunidades para el desarrollo y tienen por objetivo mejorar la calidad de vida de las personas que sufren exclusión social.
- Describir las principales características de las empresas inclusivas que se basan en cuatro principios fundamentales como son los valores, la gestión de equipos, la responsabilidad social corporativa y el marketing responsable.
- Fomentar las empresas inclusivas que contribuyan al bien común, abanderadas por líderes que promuevan el uso de la tecnología de la información y la comunicación como medio para mejorar la calidad de vida de los ciudadanos.

Se proponen misiones fundacionales tales como superar la crisis económica, combatir la desigualdad social, contrarrestar el envejecimiento de la población o frenar la rápida urbanización.

Las empresas inclusivas mejoran la calidad de vida de las personas que sufren exclusión social. De acuerdo con el Programa de las Naciones Unidas para el Desarrollo, las empresas inclusivas orientan su misión a erradicar la pobreza extrema y el hambre; conseguir la enseñanza universal; promover la igualdad de género; reducir la mortalidad de los niños; mejorar la salud, garantizar la sostenibilidad medioambiental o fomentar la asociación mundial para el desarrollo.

El debate sobre la inclusividad en las empresas se organiza alrededor de cuatro aspectos que según Echazarreta y Costa (2017) destacan en los estudios previos relacionados: empresas inclusivas, la gestión de equipos, la responsabilidad social corporativa y el marketing responsable.

4. Empresas inclusivas

¿Cuáles son las características que identifican una empresa inclusiva? ¿Porqué de entrada, que se entiende por inclusividad? ¿Falta pedagogía sobre el tema?

La desaceleración económica ha aumentado significativamente el número de personas en situación de paro Rocha and Aragon (2012). Según Cayetano Alemán, parado de larga duración de 57 años: "Salen pequeños trabajos de días o semanas... Después de 33 años en una fábrica de papel cerraron y me quedé parado. Cuando **entregas el currículum ya notas que se fijan en la edad**. En todos los sitios aceptan el currículum pero aunque no te lo dicen, siempre entra un chico más joven. Es normal, a un empresario le sale más a cuenta formar a un chico joven que no a un señor mayor, aunque tengas ya experiencia. **La aparición de las máquinas también ha causado la pérdida importante de mano de obra**, por ejemplo con los peajes. Hemos substituido máquinas por personas. Otro problema es la **temporalidad de los contratos**. La juventud que está subiendo hoy en día no llegará ni a tener 15 años cotizados. Al paso que vamos les están dando trabajos temporales, de horas, fines de semana, no llegan a cotizar nunca. Por qué no los retiramos a los 50 años? Prejubilarlos, ponerlos a formar chavales jóvenes."

Las empresas inclusivas se caracterizan por ofrecer servicios más eficientes para mejorar la calidad de vida y el bienestar de la ciudadanía Echazarreta and Costa (2018) Según Javier Blázquez, coordinador de proyectos internacionales de la fundación ONCE: "Las empresas inclusivas se caracterizan **portenerlamentemásabierta, noestarcerradaanuevosretos**, a nuevas posibilidades, a nuevos trabajos, a personas diferentes, y que considera que **todas las personas pueden aportar algo dentro de su organización**. El modelo de integración de personas con discapacidad ha evolucionado hacia la inclusión, en el que **las personas diferentes están trabajando en el mismo entorno, en un entorno que no es diferente**."

Según Mohamed El Amrani, coordinador de proyectos de *Suara Cooperativa* y presidente de la asociación Xarxa de Convivència (red de convivencia): "La empresa inclusiva, tiene que ser una empresa que sea capaz de **escuchar, más humana, más cercana** y de promover la **comunicación interna** para fomentar la **participación de los trabajadores**".

Afirma Esther Carreras, relaciones externas en *La Fageda*: "Una empresa inclusiva, es la que **no excluye a ningún colectivo**, por razones de género, de raza, etc. En la Fageda nos gusta hablar de **personas con capacidades diferentes**. Falta muchísima pedagogía, y sería **importante iniciarla des de la enseñanza primaria**. Para cambiar los conceptos tienen que pasar algunas generaciones. **Si el principal valor de una empresa fuera la persona**, y todo el resto de valores pivotaran sobre la persona, todas las empresas tendrían otro recorrido.

Javier Blázquez de la *Fundación ONCE* afirma que estamos viviendo una segunda revolución industrial. La mecanización de los procesos implica que la sociedad tenga que adaptarse a la tecnología y plantea si **las máquinas deberían cotizar a la seguridad social**. En este sentido Mohamed El Amrani afirma que una parte del beneficio

de dicha cotización se tendría que invertir en **desarrollo, conocimiento e investigación.**

Para Khaoula Echaouech, geógrafa en paro, una de las principales características de la empresa inclusiva, sería: **“reconocer la diversidad que hay en la sociedad.** Porque afortunadamente no todos somos iguales, y en la sociedad, encontramos varios grupos de diferente índole”.

La crisis ha afectado a la población general, y concretamente a las personas más desfavorecidas. En este contexto según Agustín Matía, gerente de *DownEspaña*: "En el ámbito laboral el reto es conseguir que las personas con Síndrome de Down sean **laboralmente activas, lo más autónomas posibles, lo más integrados posibles en su sociedad.** En España hay unas 35.000 personas con Síndrome de Down de las que solamente trabajan el 5% en entorno ordinario y combinando con entorno protegido no llega al 15%. En la discapacidad en general, el 35% trabaja."

Complementando el reto con personas con distintos grados de discapacidad afirma Esther Carreras, relaciones externas en La Fageda: **"Nos gusta hablar de personas con capacidades diferentes.**

En la Fageda personas con certificado están conduciendo un tractor en la granja cosa de la que muchas personas sin certificado serían incapaces. Falta muchísima pedagogía, y sería importante iniciarla desde de la enseñanza primaria.

Sobre la inserción laboral de personas con riesgo de exclusión, explica que la Fageda es un centro especial de empleo en el que trabajan unas 130 personas con certificado de discapacidad intelectual, o bien, personas con un trastorno mental severo. Elaboran yogures, helados y mermeladas y también realizan servicios de jardinería para espacios públicos y privados. Además cuentan con un servicio de inserción a la comunidad, que se creó en el 2007 y que consiste en intentar insertar, en la empresa ordinaria, personas con certificado de discapacidad porque su grado les permite realizar una actividad laboral fuera del marco del centro especial de empleo. Para fomentar su inserción presentan las ventajas de la Ley de Integración Social del Minusválido (LISMI), aunque afirma que la sensibilidad de los responsables de recursos humanos de las empresas ordinarias es la clave para su inserción laboral.

Por analogía, sigue Javier Blázquez, Coordinador Técnico de Proyectos Internacionales de la Fundación ONCE y explica que la Fundación pretende eliminar todo tipo de barreras, ya sean físicas, tecnológicas o mentales, para que todas las personas tengan los mismos derechos de acceso a todos los ámbitos de la vida: educación, trabajo, ocio, cultura, etc. Para fomentar la inserción laboral la Fundación ONCE tiene un grupo empresarial que se conoce como el grupo Ilunion, que aglutina más de treinta empresas en distintos sectores: industriales, de tecnología, de limpieza, de seguridad, de medios de comunicación, un contact center, cadenas de hoteles, etc. Se creó porque en España existe una cuota del 2% de inserción de personas con discapacidad que tienen que cumplir las empresas de más de 50 empleados según la LISMI. "La mayoría de empresas no la cumple, o no quiere saber nada. El grupo Ilunion supone una alternativa, una forma de cumplir esta ley. Para cumplir la LISMI las empresas pueden contratar trabajadores o contratar servicios de centros especiales de empleo siempre que en estos centros

la plantilla sea como mínimo del 70% de personas con discapacidad. Al final esto genera, indirectamente, puestos de trabajo de personas con discapacidad visual, auditiva, física o psíquica. Actualmente en el grupo Ilunion hay unas treinta mil personas trabajando."

Entrando en el ámbito de terminología, afirma Agustín Matía, Gerente de Down España: "Uno de los problemas que tenemos es de pedagogía, y es que el concepto inclusivo no se entiende bien. Estamos utilizando un concepto que viene del inglés que es inclusive, que era una traducción del latino "incluyente". Se entiende mejor si hablamos de organizaciones y empresas incluyentes más que inclusivas. El modelo de organizaciones incluyentes implica que son muy abiertas, van incorporando la diversidad propia de la sociedad pensando más en las personas. Cuando más las organizaciones tienen un modelo de apertura al entorno más fácil que se genere esta cultura del cambio. Por este motivo **el objetivo es que la organización cambie de modelo hacia una cultura organizacional abierta, con capacidad de escucha, transparente, en coherencia con la sociedad, comprometida y responsable**".

Y sigue: "Las empresas incluyentes son las que de entrada trasladan los conceptos de participación y diálogo y son las que normalmente están más abiertas a entender la diversidad y resulta más fácil que tengan compromisos como opción social ante los grandes problemas que tenemos, como la discapacidad.

Otro tema que el gerente de Down España considera clave para las empresas inclusivas es el reto que supone la inserción laboral de la generación joven, de quien afirma "que llega tarde a puestos de trabajo, tarde a un proceso de emancipación." Anticipa que trabajaran poco más de quince años y que existe el peligro que a los cincuenta años queden en la calle aunque la jubilación por entonces esté a los setenta. Es una situación social que va más allá de lo tecnológico. Recuerda El desafío americano de Servan-Schreiber, libro de análisis económico sobre los años 50-60 que relata como la posguerra y la revolución tecnológica del siglo influyen sobre la economía. **"Las empresas que optan por el modelo abierto y de inclusión se les nota en todo el proceso, no solamente en el momento de la incorporación de personas, sino que es un proceso cultural.** Es un proceso que nutre el propio proyecto de la empresa. Esto es lo que caracteriza las dificultades que tienen las dinámicas inclusivas. **Los procesos inclusivos son procesos de cambio cultural de toda la organización para hacer que realmente incluyan a toda la diversidad humana, de raza, género, edad, discapacidad, etc.** El problema es que para hacer esta adaptación tienes que hacer un cambio de todo el concepto de la empresa porque **el gran reto en la discapacidad no es el empleo sino la educación que no está apostando por la inclusión**".

Según Javier Blázquez: "La palabra cambio es algo fundamental. El problema es el miedo al cambio y a la adaptación." Destaca que aunque la sensibilidad es la semilla, tiene que haber una formación ante este desconocimiento sobre qué pasa y como debo actuar si contrato una persona con discapacidad en mi empresa.

A modo de ejemplo explica que la Fundación ONCE hace una campaña de sensibilización que suele coincidir con el período navideño. En uno de los anuncios describe

una situación donde el responsable del departamento de contabilidad ha contratado a un compañero especial, una persona ciega. Para anunciar su incorporación a todos los empleados prepara un e-mail en el que avisa que se imagina que se le tendrá que ayudar incluso en lo básico, probablemente será tímido y le cueste comunicarse, habrá que tener paciencia y esperar que no tarde mucho en adaptarse al nuevo puesto de trabajo. Mientras escribe el e-mail se ve como esta persona ciega entra en la empresa, coge el ascensor, sube, baja, se va a tomar un café con una compañera, se sienta delante de su ordenador y empieza a escribir con su lector de pantalla. De repente, el responsable de contabilidad se percata de la situación, borra todo el correo y simplemente escribe "Hoy se incorpora un nuevo compañero, demos la bienvenida a Juan". Según el Coordinador Técnico de Proyectos Internacionales de la Fundación ONCE, La única forma de superar este miedo es romperlo con el conocimiento, con la formación, entrenamiento y concienciación.

Siguiendo con los prejuicios, Mohamed El Amrani, coordinador de proyectos a Suara Cooperativa, describe tres elementos clave para luchar contra ellos. Por una parte el sistema educativo debe educar en inclusión. El segundo aspecto que destaca es la escasez de liderazgo. Y finalmente hace hincapié en el rol de los medios de comunicación y hasta qué punto pueden ayudar a sensibilizar y generar un impacto distinto en la sociedad.

Advierte el Gerente de Down España, que uno de los problemas de la pedagogía de la inclusión o de la diversidad es: "Relatar la discapacidad con un discurso optimista simple, al estilo de Naciones Unidas cuando te plantea los objetivos del milenio. Este tipo de discursos suenan como una música agradable a la que nadie en su sano juicio puede decirle que no. Pero la dificultad está en que las sociedades modernas son diferentes, complejas, llenas de inputs i contradicciones. **En el ámbito de la diversidad uno de los elementos, a la hora de hacer una sociedad inclusiva es que la sociedad acepte con claridad y con conciencia los retos que tiene por delante. Por lo tanto, la discapacidad no hay que adornarla en términos de eliminar las dificultades, problemas o complicaciones que tiene, es un error. Hay que aceptar la realidad de la discapacidad y describirla con su complejidad.** Por esto el lenguaje es decisivo como un elemento de cambio pero también puede ser contraproducente como elemento de difuminar la realidad."

Según Carmen Echazarreta de la Universidad de Girona: "Cuando hablamos de la pedagogía tenemos que fundamentarla sobre un par de ejes. Por un lado es imprescindible romper prejuicios y estereotipos normalmente construidos sobre aspectos negativos, a través de la formación y no se trata de compadecer, ya que las estrategias, los procedimientos y las acciones serán demasiado proteccionistas y muchas veces limitando todas la posibilidades. Y por otro lado **se trata de ser conscientes de saber quién es cada uno con sus capacidades diversas como inspira Gardner con sus inteligencias múltiples.**"

El Coordinador Técnico de Proyectos Internacionales de la Fundación ONCE, Javier Blázquez, relaciona lo mencionado con el hecho de que se demuestra cómo **estas capacidades diferentes existen y se pueden aprovechar y promocionar**

en el empleo. Según el coordinador, distintos estudios concluyen que las personas sordas en entornos muy ruidosos rinden mejor que las personas que oyen bien, ya que en entornos de fabricación y de maquinarias este ruido continuo afecta la forma de trabajar. **"Los estudios demuestran que hay una serie discapacidades que se convierten en capacidades a la hora de desarrollar determinados trabajos. Por ejemplo a la hora de realizar tareas repetitivas y monótonas, las personas con discapacidad intelectual son capaces de mantener un ritmo de trabajo durante horas sin tener una pérdida de producción."**

Continuando con las empresas inclusivas afirma Agustín Matía que **el objetivo del proyecto Vusiness de fomentar que una empresa tenga valores es que ello conlleve consecuencias en términos de reequilibrio o de cambio en las acciones que genera esta organización. Por lo tanto en el fondo implica generar cambio organizacional.**

Para ahondar en la definición, Albert Costa de la Universidad de Girona añade tres conceptos relacionados con las empresas inclusivas. En primer lugar describe que aunque habitualmente nos centramos en los trabajadores de la organización, **es importante tener en cuenta a los clientes y proveedores y plantearse hasta qué punto la organización los respeta y se plantea establecer condiciones y precios justos por ambos lados.** En segundo lugar focaliza en la **democratización de la comunicación gracias a internet y las redes sociales**, que garantizan a los clientes de las empresas estar informados sobre los precios y condiciones de la competencia, y a la vez permiten denunciar o valorar determinadas prácticas empresariales. Finalmente, en tercer lugar habla sobre la **importancia de definir los valores de la empresa a través de un proceso participativo y abierto en el que se impliquen trabajadores, clientes y proveedores y que facilite la alineación de los mismos con la misión y visión de la empresa.**

Se cierra este primer bloque en el que una de las ideas clave más recurrentes y que genera consenso es la de definir la empresa inclusiva como abierta: con capacidad de escucha, transparente, en coherencia con la sociedad, comprometida y responsable.

5. La gestión de equipos

¿Se parte de la idea de que la gestión de una empresa basada en valores es más colectiva que individual? ¿Qué papel desempeñan los equipos de trabajo? ¿Cuáles tienen que ser las dinámicas de estos equipos?

En primer lugar, Mohamed El Amrani, coordinador de proyectos a Suara Cooperativa afirma: **"Saber qué valor aporta cada trabajador a la empresa es clave para gestionar bien un equipo; la gestión del conocimiento es esencial, así como la remuneración justa a los trabajadores"**

Por su parte, Javier Blázquez, Coordinador Técnico de Proyectos Internacionales de la Fundación ONCE, opina que: **"Las empresas deben pasar de un modelo jerárquico piramidal absoluto, tipo militar, de arriba abajo, a hacer una gestión de equipos mucho más dinámica en la cual se creen estos grupos de trabajo"**. Pone el ejemplo del liderazgo por proyectos, en que la persona más competente y con más conocimiento específico de cada proyecto, es quien

lo lidera. Propone un modelo más colaborativo, formado por equipos basados en **estructuras flexibles, en las que los roles se van intercambiando según cada proyecto o servicio, que fomenten la actualización continua y el reciclaje.**

Continuando con la gestión de equipos, la representante de La Fageda afirma: “La jerarquía piramidal está llegando a su fin. Cada vez más, hablamos de equipos que colaboran, en el que cada miembro aporta al conjunto todas sus fortalezas. A nivel individual, si cada profesional tiene interiorizados los valores, la misión y la visión de la organización se facilita enormemente la relación con su entorno laboral y es cuando deviene fácil sumar.” Opina que en una organización es importante que los distintos equipos empaticen entre ellos. En La Fageda, por ejemplo, argumenta que el equipo que comanda la parte productiva y el que comanda la parte asistencial necesitan trabajar coordinadamente, ya que si no se plantean disquisiciones tales como si es más importante comprar una nueva máquina para la producción de los yogures o una furgoneta para transportar a los trabajadores con discapacidad hasta sus hogares.

Por su parte, el coordinador de proyectos a Suara Cooperativa en relación a los equipos y su gestión afirma que es importante pasar del **ego al eco, pasar de una parte egocéntrica de la gestión de equipos a un ecosistema más colaborativo, equipos manejados por valores.**

El gerente de Down España afirma: **“Una dinámica de equipo de trabajo para que refleje sus valores tiene que ser abierta, enfocada a la innovación, transparentes por convicción, enfocados a la interacción con sus proveedores, clientes y fans y muy implicada socialmente”** y reflexiona sobre la idea que la sociedad suele preconcebir la gestión de empresas basada en valores como más colectiva que individual a pesar que el discurso de la gestión de empresas clásica y neoclásica de todo este siglo, así como del talento del emprendedor y del empresario de éxito, suelen descansar en el discurso individual. Cita el caso de Steve Jobs que aparece como omnipresente y del cual siempre destacan su talento individual y afirma que los valores, por lo tanto, que se proyectan sobre una de las empresas más modernas y de éxito son individuales.

Por su parte, Sr. Javier Blázquez, Coordinador Técnico de Proyectos Internacionales de la Fundación ONCE, contrapone la idea que Steve Jobs se puede ver como un líder piramidal o como un impulsor. **Opina que en cada equipo de trabajo tiene que haber el rol de un facilitador que inspire, legitime y estimule y que promueva el desarrollo personal.**

En este punto describe **Scrum, unaherramienta que facilita la gestión ágil de los equipos**, traducido del inglés como melé. El avance de las melés en partidos de rugby, fue la inspiración de Nonaka y Takeuchi para denominar una forma ágil de trabajar propia de empresas tecnológicas como Honda, Fuji-Xerox y Canon. Scrum es un proceso en el que se aplican periódicamente un conjunto de buenas prácticas para trabajar de forma colaborativa en equipo. En Scrum, se subdivide en tareas cualquier proyecto. Para estimar el tiempo que va a llevar a cabo gestionar cada tarea, todo el equipo opina sobre el tiempo que creen que va a durar la realización de la misma. El tiempo asignado para hacer cada tarea concreta es la media de los tiempos opinados por todo

el equipo. El método Scrum consigue que los trabajadores se involucren y se comprometan en equipo.

Otro elemento que ayuda a la gestión de equipos, según Esther Carreras, Relaciones externas de la Cooperativa “La Fageda” es la gestión adecuada por parte de la organización de la **comunicación interna**, ya que un factor clave para conseguir que los trabajadores se motiven es que sean informados de todo lo que realiza su organización. **Es clave que la organización se preocupe por el bienestar de sus equipos y fomente la atención médica y de salud para garantizar la higiene y la seguridad en el trabajo.**

Por su parte, Carles Serra, Adjunto al rector por Compromiso social de la Universitat de Girona, añade un factor clave para la gestión de equipos como es la **educación en valores**: “Las empresas tienen que encarnar sus valores a los trabajadores. Los procesos democráticos y participativos para educar en valores se tienen que trabajar. Cuando hablamos de democracia deliberativa se concreta en ir dialogando, imponiendo razones, construyendo, ante los cuales normalmente los trabajadores suelen ser bastante razonables. A veces equiparamos democracia con la opinión de todos y probablemente estaríamos de acuerdo que es mejor una opinión informada que otra que no lo es. Si trabajas en forma de debate y deliberación la opinión informada se va imponiendo y el conjunto de la organización va avanzando.”. **También se plantea la necesidad de conciliar la vida laboral y familiar a partir de nuevos modelos y entornos como el teletrabajo.**

Ante la idea de la educación en valores, Agustín Matía, Gerente de Down España, comenta que es importante la configuración colectiva de los valores para la propia organización: “Cuanto más participativo es un proceso, más democrático es el sistema educativo, más se trabaja el aprendizaje en equipo, cuando se generan más dinámicas inclusivas, estas no son neutras, tienen una base axiológica detrás que es colectiva, participativa, comunitaria, que es lo que explica a veces parte del rechazo. Lo que estás buscando es cambiar el esquema mental, el concepto de los trabajadores que van a formar parte de esos equipos y que lo trasladarán en una organización, en una empresa. Se trata de un proceso colectivo. **No va a haber organización sostenible que se base solamente en las ideas de una sola persona. Las organizaciones actualmente son muy dinámicas y cambiantes. Los ritmos de interacción son tan fuertes que o son procesos colectivos o no son sostenibles.** Una empresa conectada socialmente con sus trabajadores, clientes y opinadores va a cambiar constantemente a raíz de las interacciones, la cual cosa implica a la vez una pérdida del concepto clásico de control.”

Para concluir este apartado, Mohamed El Amrani, opina en relación a los valores que fomentan la gestión de equipos que: “Cuando una empresa quiere transmitir valores hace un trasvase de conocimiento. Cuando se lleva a cabo la misma, es importante tener en cuenta que hay dos tipos de conocimiento: el codificado, el que puedo transmitir a través de léete esto y la empresa somos esto y el conocimiento tácito, basado en la experiencia, la ideología, el valor; transmitirlo es más complicado y se convierte en uno de los retos de las empresas.”

El segundo bloque se cierra con unas ideas clave para ahondar en la definición de la empresa inclusiva como son:

Liderazgo que inspira, legitima y estimula; trabajo en equipos manejados por valores; remunera de forma justa a sus trabajadores fomenta la actualización continua y el reciclaje; promueve el desarrollo profesional, y se preocupa por el bienestar de sus equipos; fomenta la atención médica y de salud para garantizar la higiene y la seguridad en el trabajo, y promueve la conciliación de la vida laboral y familiar así como el teletrabajo.

6. La responsabilidad social corporativa (RSC)

La responsabilidad social está de moda, porque es estratégica para muchas empresas, pero ¿Cómo tiene que aplicarse la responsabilidad social para que sea algo más que una estrategia?

Empieza el bloque Esther Carreras de “La Fageda” afirmando que **las empresas socialmente responsables tienen la RSC como principio, en sus fundamentos, integrada, no como un departamento aparte.** Motivo por el cual las actuaciones socialmente responsables afloran en todos los departamentos en consecuencia en sus actuaciones. **Tratan a sus trabajadores, clientes y proveedores de forma justa.** Aunque si bien es cierto que si está en un departamento aparte puede ser un buen punto de partida para interiorizar lo que conlleva y significa la RSC, al final tiene que estar integrada en todos los poros de la empresa. Cuando una multinacional aporta dinero para una ONG puede ser una simple operación de maquillaje, en contraposición todos los proyectos sociales ya son de nacimiento responsables socialmente.

En la misma dirección, Javier Blázquez, afirma que la RSC tiene que ser un eje transversal de la empresa y no la última pestañita a la derecha de la página web la empresa. **Un factor clave es que las empresas trabajen la RSC de aspectos creíbles.** Pone el ejemplo que muchas utilizan la discapacidad en sus estrategias y no siempre resultan verosímiles.

Para concluir el apartado, Agustín Matía, comenta cada vez más se evidencia una presión social en el corazón de las empresas para que desarrollen acción social. A partir de ahí desarrolla cuatro ideas. En primer lugar, un estudio científico de 2016 concluye que **los clientes esperan que la RSC aparezca incorporada en los distintos procesos de elaboración y comercialización de productos y en la prestación de servicios** y no que de forma aislada ejecuten acciones de dimensión social.

En segundo lugar, **reprueba el hecho que las empresas hagan acción social. Argumenta que las empresas pueden elegir, decidir, colaborar y coordinar la realización de acciones entre distintos actores del tercer sector, cuyo objeto fundacional y especialización es lo social.** A partir de la compenetración entre empresa y entidad **la acción puede resultar estratégica, relevante y fundamental.**

En tercer lugar, **critica que las empresas apliquen la RSC según los manuales de las universidades norteamericanas, país en el que las entidades tienen mucho menos tejido social que en España,** donde la realidad es significativamente distinta, ya que hace más de quince años que se trabaja y evoluciona la RSC. **Es importante que ahonde en las relaciones con cada comunidad.**

Finalmente, en cuarto lugar, afirma que cuando las empresas tienen claros sus valores se integran y se comunican sin necesidad de vender. Si la RSC no se integra en la estructura de la empresa será una capa más como lo son los sistemas de calidad y de impacto, en la línea que afirmaba Esther Carreras y Javier Blázquez.

Se cierra este tercer bloque en el que un par de ideas que se han destacado son como que **la empresa socialmente responsable tiene la RSC como principio integrada en sus fundamentos; trata a sus trabajadores, clientes y proveedores de forma justa y ahonda en las relaciones con la comunidad fomentando el voluntariado, los donativos, etc.**

7. El marketing responsable

Pensando en términos de acciones de marketing ¿Cuáles son las que permiten visibilizar un marketing responsable?

Gracias a las nuevas tecnologías, los clientes, trabajadores y proveedores de las empresas tienen amplias posibilidades de crear, publicar contenido y dejar su testimonio sobre sus experiencias con las empresas con suma facilidad. A nivel de implantación de las redes sociales, Facebook cuenta en el primer trimestre de 2017 con 1.860 millones de usuarios activos; y en un solo segundo se comparten 3.600 fotos en Instagram y se generan 100.000 tweets Borgatti et al. (2018).

Esta nueva realidad genera a las organizaciones la necesidad de gestionar las opiniones. El periodismo ciudadano supone un quinto poder que permite oponer una fuerza democrática y cívica ciudadana ante la nueva coalición dominante de los grupos mediáticos, cómplices y difusores de la globalización liberal.

En este nuevo entorno comunicativo, concluye Moreno (2008): **que el marketing responsable tiene como finalidad satisfacer las necesidades racionales, ponderadas y pro-portionales de consumidores a partir de la fabricación y comercialización de productos y servicios,** por los que obtiene como contrapartida un precio razonable y justo y aspira a obtener un beneficio suficiente para continuar contribuyendo al desarrollo social y para procurar la lícita compensación de quienes arriesgan su capital y dedican su trabajo.

Empieza Esther Carreras, Relaciones externas de la Cooperativa “La Fageda”, explicando que en su caso: “Fabricamos yogures para el mercado catalán. Con las ventas obtenemos beneficios que reinvertimos y garantizan la perdurabilidad del proyecto. Nuestra competencia son grandes multinacionales como Danone y Nestlé, incomparables a nivel de presupuestos. En “La Fageda” **no tenemos dinero para hacer publicidad en medios convencionales como radio, prensa o televisión, pero hemos hallado un instrumento de marketing muy potente relacionado con la transparencia.** “La Fageda” está ubicada en un entorno privilegiado en medio de un Parque Natural protegido y desde hace 15 años recibimos visitas en nuestras instalaciones, hasta que hemos acabado organizando el servicio de atención al visitante. **Al año se reciben más de 40.000 personas, a las que se organizan visitas guiadas y concertadas.** Se reciben escuelas, universidades, entidades y los fines de semana familias. A través de las visitas pueden ver la elaboración de los yogures y las

mermeladas: *márketing sensorial* en todo el proceso de visita. Nunca les pedimos que compren el producto por ser quienes somos. En el *packaging* invitamos a visitar nuestras instalaciones y no que nos compren por ser un proyecto social. Queremos vender por la calidad de nuestros productos. La mayoría que nos visita viene por el boca oreja. Por nuestras dimensiones no podemos hacer patrocinios económicos, pero sí que aportamos producto a actividades relacionadas con las donaciones de sangre, las excursiones, las maratones, etc. La calidad es nuestra ley, producimos unos 60 millones de yogures al año.

Toma la palabra Javier Blázquez, Coordinador Técnico de Proyectos Internacionales de la Fundación ONCE, para añadir su opinión acerca de la idoneidad de la estrategia de "La Fageda" ya que "Por un lado **gestiona y controla el boca oreja**, elemento esencial en *márketing* y por otro **focaliza las acciones directamente al público cliente final**". Des de la Fundación ONCE lo desarrollan a través del Grupo Ilunion: "Los consumidores encuentran en nuestros hoteles confort, calidad, muy bien adaptados y con un buen diseño. En un hotel normal cuando te dan una habitación adaptada piensas que estás en un hospital, en un hotel Ilunion ni te das cuenta. **Para diseñar buenas estrategias de *márketing* primero tienes que tener un buen producto y estar muy comprometido con tu empresa. Es importante crear un entorno que respete y fomente la igualdad y la diversidad y la no discriminación en ninguna forma.**

Explica una de las campañas publicitarias responsables de más éxito de la Fundación ONCE con el título "Capacitados" en el que tres personajes trabajaban durante todo un día con una discapacidad: "El cocinero Ferran Adrià llevaba cascos con música que le impedían oír; el presidente de Coca-Cola Iberia, Marcos de Quinto trabajó con los ojos vendados, y la presidenta de Microsoft Ibérica, María Garaña se sentó todo un día en una silla de ruedas. Cada uno de ellos trabajaba durante un día con una discapacidad. Se hizo un reportaje que permitió visualizar como sentían en sus propias carnes la discapacidad y darse cuenta de las dificultades que implicaba en el sitio de trabajo, así como las mejoras que tendrían que hacer para poder aportar y contratar más personas con discapacidad. **Las empresas tienen que garantizar la accesibilidad universal.**"

Para terminar, explica que en la ciudad de Venecia organizaron un Maratón y se dedicaron a poner rampas en todos los canales de forma provisional, con madera, para poder realizarla. Al terminar la carrera, apareció una demanda popular de todas las personas que visitan Venecia que piden no quitar las rampas.

Después de esta anécdota, explica Carles Serra, Adjunto al rector por Compromiso social de la Universitat de Girona, por su experiencia: "**En nuestra sociedad, la caridad como tal está mal vista. La gente cuando va a comprar no quiere hacer caridad. Primero tenemos que tener un buen producto que funcione; el *márketing* tiene que ser responsable y sutil.**"

Agustín Matía afirma: "**Les pedimos a las empresas que sean responsables de todo el proceso que al final desarrollan para llevar a cabo ese producto o ese servicio.** El objetivo ideal es que la empresa utilice el *márketing* en relación a eso como hace Ausonia de P&G que colabora con la investigación contra el cáncer de mama. Cuando

los consumidores perciben disonancias cada vez son más críticos; como pasaba con las tabacaleras que intentaban tapar las consecuencias cancerígenas de fumar durante años."

En este cuarto apartado, se destacan un par de ideas clave previas a poder realizar un *márketing* responsable como son que la empresa **Cree un entorno que respete y fomente la igualdad y la diversidad y la no discriminación en ninguna forma y que garantice la accesibilidad universal.**

8. Conclusiones

A modo de conclusión los participantes definen a su manera las empresas inclusivas destacando las características y atributos que deben permitir elaborar indicadores.

Para gestionar empresas se requieren políticas y valores corporativos propios de una cultura empresarial sostenible a nivel social, económico y medioambiental. Las empresas cuya misión se sustenta en ideales y valores comprometidos con las personas y el planeta contribuyen al bien común y a la vez pueden generar un volumen de beneficios económicos similar al resto de las empresas Eguiguren (2011).

Agustín Matía, Gerente de Down España afirma: "Las empresas socialmente responsables e inclusivas deben generar beneficio y hacérselo ganar al entorno. Tienen que ser empresas **muy abiertas, dispuestas a estar en la sociedad y a interactuar continuamente con ella, cuanto más cerca del ámbito en el que están mejor, que escuchen, transparentes, capaces de explicar bien todo lo que hacen. Las empresas tienen que responder a como es la sociedad: si la sociedad va cambiando, es abierta y sus valores van transformándose, eso se tiene que notar.**"

Por su parte, afirma Carles Serra, Adjunto al rector por Compromiso social: "Un factor fundamental es la alineación. Tienen que ser flexibles en los procesos, con buen trato con la gente, con capacidad y disposición para introducir cambios."

Cayetano Alemán, ex operario maquinista a Aconda Papel, añade un indicador motivacional y práctico: "Las empresas inclusivas son las que cuando llegas por la mañana y al día siguiente tienes ganas de volver a ir y que cuando sales no te sientes como un número más."

Esther Carreras, Relaciones externas de la Cooperativa "La Fageda", por su parte, cita una frase de Confucio: "Elige un trabajo que te guste y no tendrás que trabajar ni un día de tu vida." y afirma que la empresa ideal es la que **aporta valor socioeconómico a la sociedad, que tiene capacidad para adaptarse a los nuevos tiempos y que acaba siendo un modelo inspirador.**

Con palabras de Javier Blázquez, Coordinador Técnico de Proyectos Internacionales de la Fundación ONCE: "**La empresa inclusiva sería una empresa abierta, comunicativa, innovadora, concienciada, multidisciplinar, incluyente, con la estrategia alineada a su misión, y que coloque a la persona en el centro de todos sus procesos.**"

Mohamed El Amrani, coordinador de proyectos a Suara Cooperativa y Premio Fundación Princesa Social 2014, opina que la empresa inclusiva: "**Es una empresa que fomenta la creatividad, y que tiene un espíritu inconformista, pero desde la parte constructiva, es decir que es una empresa que hace activismo social y empresarial, alineados a los valores de la misma.**"

Afirma en este entorno Khaoula Echaouech, involucrada en distintos proyectos sociales en la Bisbal del Empordá y

geógrafa en paro que "las empresas tienen que reconocer y reflejar la diversidad que hay en la sociedad".

Concluye Carmen Echazarreta de la Universidad de Girona: "La empresa ideal es la que está constituida por personas que desarrollan una labor auténtica por el bien común conciliándolo con el hecho legítimo de trabajar para obtener un beneficio. También cabe destacar el hecho que el beneficio puede ser de distintas índoles: en la universidad puede ser el beneficio por la investigación, por la calidad docente y por el bienestar de la comunidad educativa en general o si es una empresa comercial por un beneficio económico. Si hablamos de una empresa del tercer sector de un beneficio social a todos los niveles. En las empresas inclusivas el beneficio de los demás, revierte en el beneficio personal."

En conjunto, se destacan una serie de características diferenciales de las empresas inclusivas: a) Abierta: con capacidad de escucha, transparente, en coherencia con la sociedad, comprometida y responsable; b) Liderazgo que inspira, legítima y estimula; c) Trabajo en equipos manejados por valores; d) Remunera de forma justa a sus trabajadores; e) Crea un entorno que respeta y fomenta la igualdad y la diversidad y la no discriminación en ninguna forma; f) Garantiza la accesibilidad universal; g) Fomenta la atención médica y de salud para garantizar la higiene y la seguridad en el trabajo; h) Promueve la conciliación de la vida laboral y familiar así como el teletrabajo; i) Fomenta la actualización continua y el reciclaje; j) Promueve el desarrollo profesional; k) Ahonda en las relaciones con la comunidad fomentando el voluntariado, los donativos, etc. l) Se preocupa por el bienestar de sus equipos; m) Trata a sus trabajadores, clientes y proveedores de forma justa y n) Tiene la responsabilidad social corporativa como principio, integrada en sus fundamentos.

A partir de las características descritas se pretende continuar desarrollando herramientas que favorezcan el desarrollo y promoción de las empresas inclusivas, capaces de favorecer dinámicas útiles para combatir los efectos sociales de la crisis y de la recesión económica.

El foro de discusión pone de relieve que las empresas inclusivas puede beneficiar la inclusión social de personas en situación de vulnerabilidad. El hecho de generar valor social para los colectivos en riesgo de exclusión, sin duda ayuda a combatir la pobreza y la marginación.

La definición de indicadores cuantitativos y cualitativos a partir de las conclusiones del foro "Las personas, el centro de las empresas" permitirá disponer de una herramienta de dirección empresarial entorno a la gestión de las personas en las organizaciones. Además, se pone de manifiesto la necesidad y oportunidad de disponer de un modelo integrador, basado en los resultados de las revisiones bibliográficas y de los foros de discusión centrados en los ámbitos de inclusividad, sostenibilidad y tecnología al servicio de la mejora de la calidad de vida. Posteriormente se requerirán estudios experimentales para contrastar la idoneidad la herramienta desarrollada, como instrumento para distinguir y potenciar las empresas inclusivas.

Los resultados y conclusiones cualitativas del presente foro requieren ser confirmados en estudios posteriores que incluyan otros expertos en el ámbito. Se concluye que, ante

estos nuevos escenarios cambiantes y retos, la investigación en este campo debe ser multidisciplinar y sistemática.

8. Agradecimientos

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Forum for Reflection and Debate: People, the Heart of Companies

Carmen Echazarreta Soler, Albert Costa Marcé

Abstract—A forum for reflection and multidisciplinary and multi-professional debate is established to discuss and define relevant and significant indicators that facilitate the identification, differentiation and promotion of inclusive companies. Following an exhaustive bibliographical review, the debate focuses on four axes: inclusive companies, work teams, corporate social responsibility and responsible marketing. The conclusions highlight a series of differential characteristics of an inclusive company: a) Open Company: with the capacity to listen, transparent, in coherence with society, committed and responsible; b) Leadership that inspires, legitimates and stimulates; c) Work in teams managed by values; d) Fair remuneration for its workers; e) Creation of an environment that respects and promotes equality and diversity and rejects all forms of discrimination; e) Guarantee of universal accessibility; f) Promotes medical and health care to guarantee hygiene and safety at work; g) Promotes the reconciliation of work and family life as well as teleworking; h) Fosters continuous updating and recycling; i) Promotes professional development; j) Fosters strong links with the community, promoting volunteering, making donations, etc. k) Care for the well-being of its teams; l) Treats its workers, customers and suppliers fairly, and m) Has corporate social responsibility integrated within its founding principles. By defining quantitative and qualitative indicators, we provide a business management tool based on the management of people in organizations. The reflection, debate and knowledge generated on this expert forum is aimed at knowledge transfer in four areas: research, education, entrepreneurship and business.

Index Terms—Corporate social responsibility, inclusive companies, responsible marketing, work teams

I. INTRODUCTION

The University of Girona held the 1st Forum for reflection and debate on inclusive, open and democratic companies. It took place on October 18, 2016, and was a meeting place designed to reflect on the Vusiness project [business, with a “V” for values], which aims to promote smart, open, democratic, sustainable and inclusive companies that inspire the future. The project is run by the Arpa Research Group (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales), which forms part of the University of Girona’s Department of Philology and Communication.

According to Echazarreta and Costa (2017), “In the current environment, the world economy has suffered a

serious and rapid deceleration that fundamentally affects the most vulnerable social sectors, generating unemployment and deficits in decent employment”.

The recession has had a negative impact on economic activity, increasing unemployment and destroying quality employment, while at the same time deteriorating living and working conditions. Some 7.2 million jobs were destroyed and only 2.4 million created in Europe between 2008 and 2012, a negative balance of 4.8 million jobs in just four years. In the specific case of Spain, there was a significantly higher rate of job destruction than in most European Union countries, due to its specialization in the construction industry and jobs being destroyed due to the housing bubble and the subsequent collapse of the sector. In addition, the impact on certain social groups has been exacerbated by the policy of cuts, aggravating the effects of the crisis (Rocha & Aragon, 2012).

According to Ioé (2011): “A quarter of households whose annual income does not reach the Minimum Interprofessional Salary are in a situation of poverty or at risk of it”. As a direct consequence, society presents an increasingly unequal distribution of wealth. As regards access to home ownership, there was an increasing indebtedness among working families until the crisis put an end to real estate speculation. Although in recent years it is true that the prices of real estate purchase and rental have fallen, unemployed families have also lost a significant amount of purchasing power and now have greater difficulty accessing credit. Furthermore, 93,000 home foreclosures were registered in 2009 and 120,000 in 2010 compared to 15,000 cases per year in 2005.

In addition to the above, the Spanish public authorities, faced with a mid-crisis unemployment rate of around 22% in 2012, have targeted economic recovery and the creation of employment, which has had an impact on the quantity and not so much on the quality of work (Merino, Somarriba, & Negro, 2012).

The digitization process and development of artificial intelligence have resulted in a profound and significant change in how work is structured in companies, in addition to that already mentioned deriving from globalization processes (García-Echevarría, 2018). Following Lombardero (2015), the fourth industrial revolution will be characterized by the digitization of 90% of work related to industry and services, an aspect that could be positive if used as an opportunity to develop a new economic model that facilitates the end of the current crisis in our markets.

According to Torrent-Sellens (2017): “Concern for the future of work is a recurring theme whenever a process of disruptive change in technology becomes evident. Economic analysis has indicated that technology does not destroy work,

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but skews abilities and skills, and displaces tasks, jobs, occupations and people". In a new globalized economic environment, new forms and conditions of work are established, characterized by the following five elements: a) Integral use of information and communication technologies in all processes; b) Companies adopting a competitive strategy based on innovation; c) Flexible work organization; d) Skilled, versatile, and committed workers with a division of labor based on all types of knowledge; and e) Advanced human resource management (selection and work based on competences, ongoing training, variable remuneration, flexible forms of employment relations, etc.).

According to Mendizabal and Errasti (2006), "The globalization of competition and information and communication technologies allows companies to generalize subcontracting and outsourcing processes with decisive consequences for industrialized countries. Under these conditions, the processes of 'business relocation' become a central element of an economic and social offensive that directly affects the productive fabric and social rights of workers", having a relevant and negative impact on employment. The victims of this dynamic in industrialized societies are usually the less qualified workers.

According to Echazarreta and Costa (2017), "In order to overcome the current economic system, which is a source of inequality and exclusion, the main objective of so-called inclusive companies is to reinvent themselves and evolve towards a business concept in which the collaboration, participation and involvement of employees are indispensable and determining factors".

Studies conducted by Eguiguren (2011), Executive Director of The Global Alliance for Banking on Values (GABV), conclude that the management of economic and social crises, delocalization, globalization and climate change, among others, promotes and accelerates the search for alternative economic models capable of laying a more solid foundation and providing a better response to the shortcomings of the current capitalist model. Eguiguren highlights the need for companies that act in the global market with a sense of ethics, responsibility, transparency, democracy and participation; companies that are led by corporate values characteristic of an inclusive business culture at the social level, sustainable at an environmental level and wise at the level of using technology in the service of quality of life.

In this environment, the ARPA Research Group (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales), which forms part of the University of Girona's Department of Philology and Communication, is promoting the **Vusiness project (business with a "V" for values)**. This project promotes open, democratic, sustainable, inclusive companies that make intelligent use of technology with the aim of serving as an inspiring model in the fields of research, education, entrepreneurship and business.

In order to lay the scientific foundations for an alternative model based on companies with values within the framework of the Vusiness project, a thorough, structured and methodical bibliographical review has been carried out since 2015 to identify the conclusions of the most relevant studies in this respect.

In order to contrast and expand the information gleaned from the bibliographic review phase, three forums

have been held to reflect and debate on inclusive, open and democratic companies. The first is entitled: "People, the heart of companies"; the second: "Smart companies, generating future"; and the third: "Sustainable companies in the face of climate change". In total, some thirty professionals have actively participated in the three forums, which address inclusiveness, sustainability and good use of technology.

The model will be presented at different American universities: Harvard University, MIT-Massachusetts Institute of Technology, Emerson College, Boston College and Suffolk University in Boston.

Currently, with the aim of transferring knowledge to the business world, 50 professionals are collectively creating the "Valometer", a tool for measuring 50 business values linked to identity, administration and management, people, sustainability, and smart technology in companies. Simultaneously, a group of experts in entrepreneurship and business consulting are developing the "Vusiness Plan" - a business plan model with values to guide future entrepreneurs.

II. METHODOLOGY

The 1st Forum "People, the heart of companies", was held on October 18, 2016 in Meeting Room SD2 at the University of Girona's Faculty of Tourism. Dr. Ramon Moreno, vice-rector of Planning, Innovation and Business, took charge of the inauguration. Reflection revolved around the unique aspects that shape inclusive companies, which promote values such as equality, transparency, co-responsibility and accessibility, and ultimately improving people's quality of life.

Participants included Dr. Carles Serra, Assistant Rector of Social Commitment; Mr. Agustín Matía, Owner of Down España; Mr. Cayetano Alemán, former machinist at Aconda Papel; Mr. Javier Blázquez, Technical Coordinator of International Projects for the ONCE Foundation; Mr. Mohamed El Amrani, project coordinator at Suara Cooperativa and 2014 Princess Social Foundation Award; Ms. Esther Carreras, External relations manager for the "La Fageda" cooperative, and Ms. Khaoula Echaouech, an unemployed geographer.

The session was organized and run by Dr. Carmen Echazarreta, director of the Arpa Research Group, expert on gender issues and Professor of audiovisual communication and advertising, and Albert Costa, PhD student at the University of Girona.

III. THE DEBATE

The main objective of the Reflection Forums is interaction between different professionals related to the business sector to discuss and define relevant and significant indicators that facilitate the identification, differentiation and promotion of open, democratic and inclusive companies. The reflection and debate generated on this forum of experts serves to generate qualitative research.

At the **inclusiveness** level, the following specific objectives were proposed in line with the conclusions drawn by Echazarreta and Costa (2017):

- To overcome the current economic system, which is a source of inequality and exclusion.

- To promote inclusive companies that generate opportunities for development and aim to improve the quality of life of people who suffer from social exclusion.
- To describe the main characteristics of inclusive companies, which are based on the following four founding principles: values, team management, corporate social responsibility and responsible marketing.
- To promote inclusive companies that contribute to the common good, championed by leaders who promote the use of information and communication technology as a means to improve citizens' quality of life.

Founding missions were proposed, such as overcoming the economic crisis, combating social inequality, counteracting the aging of the population and curbing rapid urbanization.

Inclusive companies improve the quality of life of people who suffer from social exclusion. According to the United Nations Development Program, inclusive companies focus their mission on eradicating extreme poverty and hunger; achieving universal education; promoting gender equality; reducing the child mortality rate; improving health, ensuring environmental sustainability; and promoting global partnerships for development.

The debate on inclusiveness in companies was organized around four aspects that according to Echazarreta and Costa (2017) stand out in related previous studies: inclusive companies, team management, corporate social responsibility and responsible marketing.

IV. INCLUSIVE COMPANIES

What characteristics identify an inclusive company? What is meant by inclusiveness? Is there a lack of education on the subject?

The economic slowdown has significantly increased the number of unemployed (Rocha & Aragon, 2012). According to Cayetano Alemán, a 57 year-old who is long-term unemployed: "The only jobs are small ones for a few days or weeks... After 33 years in a paper factory they closed and I was made redundant. When you **submit your resume you see they're looking at your age**. Everywhere accepts your resume but even if they don't tell you, a younger guy always comes in. It's normal, a businessperson is more likely to train a young guy than an older man, even if you already have experience. **The arrival of machines has also resulted in a significant loss of labor**, with toll stations, for example. We've replaced people with machines. Another problem is the temporary nature of contracts, the young people of today won't even have 15 years of social security contributions. While they're being given temporary jobs, for hours, weekends, they'll never contribute enough. Why don't we retire them at 50? Pre-retire them, have them training young people".

Inclusive companies are characterized by offering more efficient services to improve citizens' quality of life and well-being (Echazarreta & Costa, 2018). According to Javier Blázquez, coordinator of international projects for the ONCE foundation, "Inclusive companies are characterized by

having a more open mind, not being closed to new challenges, new possibilities, new jobs, different people, and considers that **everyone can contribute something to their organization**. The model of integrating people with disabilities has evolved towards inclusion, which means **different people are working in the same environment, or in an environment that is not different**".

According to Mohamed El Amrani, project coordinator for the Suara cooperative and president of the association *Xarxa de Convivència* (Coexistence Network), "The inclusive company has to be one that is capable of **listening, is more human, closer** and of promoting **internal communication** to encourage the **participation of its workers**".

Esther Carreras, External Relations manager for La Fageda, states that "An inclusive company is one that **does not exclude any group** for reasons of gender, race, etc. There is a need to teach this, and it would be important to start in primary school. For ideas to change, some generations must pass. **If the main value of a company were the person**, and all the other values pivoted around the person, all companies would have another path".

Javier Blázquez of the ONCE Foundation states that we are experiencing a second industrial revolution. The mechanization of processes entails society having to adapt to technology and considering whether **machines should contribute to social security**. In this sense, Mohamed El Amrani affirms that part of the benefit of said contribution would have to be invested in **development, knowledge and research**.

For Khaoula Echaouech, an unemployed geographer, one of the main characteristics of the inclusive company would be "**acknowledging the diversity that exists in society**. Because fortunately we are not all equal and we find various different kinds of groups in society".

The crisis has affected the general population, and specifically the most disadvantaged. In this context, according to Agustín Matía, General Manager of Down España, "In the labor sphere, the challenge is to get people with Down syndrome **actively working, as autonomous as possible, as integrated as possible in their society**. There are 35,000 people with Down Syndrome in Spain, only 5% of whom work in an ordinary environment; if we add a sheltered environment, it still doesn't reach 15%. As for the disabled in general, 35% work."

Commenting on the challenge for people with different degrees of disability, Esther Carreras, External Relations manager at La Fageda, says: "**We like to talk about people with different abilities**. At La Fageda, people with a disability certificate drive a tractor on a farm, something that many people without that certificate would not be able to do. There is a lack of education in this area, and it would be important to start it from primary school".

With regard to employment opportunities for people at risk of exclusion, she explains that La Fageda is a special employment center where around 130 holders of the intellectual disability certificate or people with severe mental disorders work. They make yogurts, ice cream and jams and also provide gardening services for public and private spaces. They also have a community integration service, which was created in 2007 and consists in trying to integrate people with a disability certificate into ordinary companies because their

certificate allows them to do work outside the framework of the center. To promote integration, the center informs companies of the benefits of the Law on the Social Integration of the Disabled (LISMI), although Carreras states that sensitivity on behalf of human resources managers employed in ordinary companies is the key to their labor market integration.

By way of analogy, Javier Blázquez, Technical Coordinator of International Projects for the ONCE Foundation, explains that the Foundation aims to eliminate all types of barriers, whether physical, technological or intellectual, so that all people have the same rights to access all areas of life: education, work, leisure, culture, etc. To promote labor market integration, the ONCE Foundation has a business group known as the Ilunion group, which comprises more than thirty companies from different sectors: industry, technology, cleaning, security, media, a contact center, hotel chains, etc. It was created because companies with more than 50 employees in Spain must comply with a 2% quota of employees with disabilities according to the LISMI. “Most companies do not comply with it, or don’t want anything to do with it,” Blázquez notes. “The Ilunion group is an alternative, a way to comply with this law. To comply with the LISMI, companies can hire workers or contract the services of special employment centers, provided at least 70% of the staff at these centers have disabilities. In the end, this indirectly generates jobs for people with visual, auditory, physical or intellectual disabilities. There are currently some thirty thousand people working in the Ilunion group.”

Referring to the sphere of terminology used in Spain, Agustín Matía, General Manager of Down España says, “One of the problems we have is education, and that is because the inclusive concept is not well understood here. We’re using a concept that comes from English -“inclusive”- which is a translation of the Latin-based word ‘*inclusivo*’. It is understood better if we use the Latin-based term than talk about ‘inclusive’ organizations and companies. The ‘*inclusivo*’ model implies that companies are very open, incorporate the diversity of society itself, and think more about people. The more organizations adopt a model of openness to the environment, the easier it is to generate this culture of change. For this reason, **the objective is for the organization to change its model towards an open organizational culture, with a capacity for listening, which is transparent, coherent with society, committed and responsible.**”

He continues: “Inclusive companies are those that transfer the concepts of participation and dialogue from the outset and the ones normally more open to understanding diversity. They are more likely to have express commitments as a social option to the big problems we face, such as disability.”

Another issue that the General Manager of Down España considers key for inclusive companies is the challenge posed by integrating the younger generation into the labor market, who, he says, “come late to the labor market, late to the emancipation process”. He predicts that they will work for little more than fifteen years and that there is a danger they will find themselves on the streets at fifty, even if the retirement age by that time will be seventy. He recalls Servan-Schreiber’s *American Challenge*, an economic

analysis book about the 1950s and ‘60s that describes how the post-war and the technological revolution of the century influenced the economy. “**Companies that opt for the open model and inclusion are notable throughout the process, not only when recruiting people; rather it’s a cultural process.** It’s a process that nourishes the company’s own project. This is what characterizes the difficulties of inclusive dynamics. **Inclusive processes are processes of cultural change for the entire organization to make them truly include all human diversity: race, gender, age, disability, etc.** The problem is that to make this adaptation you have to change the whole concept of the company because **the real challenge in disability is not employment but education not being committed to inclusion.**”

According to Javier Blázquez, “The word change is fundamental. The problem is fear of change and adaptation”. He stresses that although sensitivity is the seed, training is needed to address people’s ignorance regarding what is happening and how to act when hiring a person with a disability.

By way of example, he explains that the ONCE Foundation conducts an awareness-raising campaign that usually coincides with the Christmas period. One of the ads describes a situation where the head of the accounting department has hired a special colleague, a blind person. To announce this to all employees, he prepares an e-mail in which he notifies everyone that he imagines the blind person will need to be helped in even the most basic matters, that he will probably be shy and have difficulty communicating, and that they will all need to be patient and hope that he does not take long to adapt to the new job. While he is writing the e-mail we see the blind person enter the company, take the elevator, go up, go back down, go for a coffee with a colleague, sit in front of his computer and start writing with his screen reader. Suddenly, the accountant realizes the situation, deletes the e-mail and simply writes, “Today a new colleague is joining us, let’s all welcome Juan”. According to the Technical Coordinator of International Projects for the ONCE Foundation, the only way to overcome this fear is to eradicate it through knowledge, training and awareness.

Continuing the theme of prejudices, Mohamed El Amrani, project coordinator at the Suara cooperative, describes three key elements to counter them. On the one hand, the education system must educate children about inclusion. The second aspect he highlights is a lack of leadership. And finally, he emphasizes the role of the media and how they can help raise awareness and influence society.

The General Manager of Down España warns that one of the problems of educating about inclusion or diversity is “relating disability to a simple optimistic discourse, in the style of the United Nations when it presented its objectives for the millennium. These kinds of discourses sound like pleasant music that no one in their right mind can say no to. But the difficulty lies in modern societies being different, complex, and full of inputs and contradictions. **In the area of diversity, one element when building an inclusive society is for society to accept the challenges that lie ahead with clarity and awareness. Therefore, disability should not be adorned with terms related to eliminating the difficulties, problems or complications inherent in it, that’s a mistake. We must accept the reality of disability and describe it in all its complexity.** This is why language is decisive as an

element of change but can also be counterproductive as an element that blurs reality.”

According to Carmen Echazarreta of the University of Girona, “When we talk about education we must base it on two axes. On the one hand, it is essential to use training to break prejudices and stereotypes, which are normally built on negative aspects; it is not about showing pity, since strategies, procedures and actions will then be too protectionist and often limiting the possibilities. And on the other hand, **it is about being aware of who everyone really is and their diverse capacities, taking inspiration from Gardner’s multiple intelligence theory.**”

The Technical Coordinator of International Projects for the ONCE Foundation, Javier Blázquez, relates the above to the fact that it demonstrates how **these different capacities exist and can be used and promoted for the purposes of employment.** According to Blázquez, different studies conclude that deaf people perform better than people who hear well in very noisy environments, since this continuous noise affects the way people work in manufacturing and machinery environments. **“Studies show that there are a number of disabilities that become capacities when doing certain jobs. For example, when performing repetitive and monotonous tasks, people with intellectual disabilities are able to work for hours without there being a loss of production.”**

Continuing with inclusive companies, Agustín Matfá states that **the Business project’s aim of encouraging companies to have values has consequences in terms of rebalancing or changing the actions of these organizations. Therefore, under the surface it involves generating organizational change.**

To analyze the definition in more detail, Albert Costa of the University of Girona adds three concepts related to inclusive companies. First, he says that although we usually focus on the workers in an organization, **it is important to also take into account customers and suppliers and consider to what extent the organization respects them and considers establishing fair conditions and prices on both sides.** Second, he focuses on the **democratization of communication thanks to the Internet and social networks**, which guarantee that customers of companies are informed about competitors’ prices and conditions, while at the same time allowing them to report or rate certain business practices. And third, he talks about the **importance of defining the company’s values through a participatory and open process that workers, customers and suppliers are all involved in and facilitates their alignment with the mission and vision of the company.** This concludes the first section, in which one of the most recurrent key ideas that generates consensus is to define the inclusive company as open: which means having the capacity to listen, being transparent, in coherence with society, committed and responsible.

V. TEAM MANAGEMENT

Is the basic idea that the management of a company based on values is more collective than individual? What role do work teams have? What dynamics should these teams have?

In respect of this, Mohamed El Amrani, project coordinator at Suara Cooperativa, says, **“Knowing what**

value each worker brings to the company is key to managing a team well; knowledge management is essential, as well as fair compensation for workers.”

For his part, Javier Blázquez, Technical Coordinator of International Projects for the ONCE Foundation, believes that **“companies must move from an absolute pyramidal hierarchical, military-style model, from top to bottom, to a much more dynamic style of team management that creates these working groups”.** He gives the example of leadership by projects, in which the most competent person with the most specific knowledge of each project is the one who leads it. He also proposes a more collaborative model, comprising teams based on **flexible structures, in which roles are exchanged according to each project or service, and which encourage continuous updating and recycling.**

Continuing with the theme of team management, the representative of La Fageda states that “the pyramidal hierarchy is coming to an end. We are talking increasingly about collaborative teams, in which each member contributes all their strengths to the group. At the individual level, if each professional has internalized the values, mission and vision of the organization, the relationship with their work environment is hugely facilitated and it becomes easy to add more elements.” She believes that it is important for different teams to empathize with one another in an organization. At La Fageda, for example, she argues that the team in charge of production and the one in charge of welfare need to work in coordination with one another, as they need to consider issues such as whether it is more important to buy a new machine for yogurt production or a van to transport the disabled workers home.

For his part, in relation to work teams and their management the project coordinator at Suara Cooperativa states that it is important to move from the **ego to the echo, to move from an egocentric part of team management to a more collaborative ecosystem, teams driven by values.**

The General Manager of Down España states that **“for a work team dynamic to reflect its values it must be open, focused on innovation, transparent by conviction, focused on interaction with its suppliers, customers and fans and very socially involved”.** He reflects on the idea that society usually preconceives company management based on values as being more collective than individual, despite the classical and neoclassical business management discourse throughout this century, as well as discourse regarding entrepreneurial talent and the successful entrepreneur tending to focus on the individual, citing the case of Steve Jobs, who appears omnipresent and whose individual talent is always highlighted. He therefore shows that the values projected onto one of the most modern and successful companies are related to the individual.

For his part, Mr. Javier Blázquez, Technical Coordinator of International Projects for the ONCE Foundation, contrasts the idea that Steve Jobs can be seen as a pyramidal leader or as a promoter. **He believes that each individual team must have a facilitator who inspires, legitimizes, stimulates and promotes personal development.**

On this point he describes **Scrum, a tool that facilitates agile team management.** The way a scrum advances in rugby was the inspiration for the tool’s founders, Nonaka and Takeuchi, to call an agile way of working, typical

of technological companies such as Honda, Fuji-Xerox and Canon. Scrum introduces a process in which a set of good practices is periodically applied to collaborative work as a team, subdividing any project into tasks. The entire team estimates the time they think it will take to complete the task. The time allocated to each specific task is then the average of the times given by the whole team. The Scrum method allows workers to get involved in and commit themselves to a team.

Another element that helps team management, according to Esther Carreras, External Relations manager for the Cooperative “La Fageda”, is the organization managing its **internal communication** effectively, since a key factor in motivating workers is to keep them informed about everything the organization does. **It is key that the organization cares about the welfare of its teams and promotes medical and health care to ensure hygiene and safety at work.**

For his part, Carles Serra, Assistant Rector for Social Commitment at the University of Girona, adds a key factor in team management, which is **educating in values**: “Companies have to imbue their values in their workers. Democratic and participatory processes that educate in values have to be worked on. When we speak of deliberative democracy, it means dialoguing, giving reasons, building, which workers usually respond quite reasonably to. Sometimes we equate democracy with everyone’s opinion and we would probably agree that an informed opinion is better than one that is not. If you work using debate and deliberation, informed opinion gradually imposes itself and the whole organization moves forward”. **He also points out the need to reconcile work and family life through the employment of new models and environments such as teleworking.**

With regard to the idea of educating in values, Agustín Matía, General Manager of Down España, says that the collective configuration of values is important for the organization itself: “The more participative a process is, the more democratic the education system, the more work is done learning in teams. When more inclusive dynamics are generated, these are not neutral, they have an underlying axiological basis that is collective, participatory, and community-based, which can sometimes partly explain reasons for their rejection. What you are looking for is to change the mental schema, the perceptions of the workers that are going to form part of those teams and will transfer it within an organization, in a company. It’s a collective process. **No sustainable organization can be based only on the ideas of one person. Organizations are currently very dynamic and changing. The pace of interaction is so fast that if they are not collective processes they are not sustainable.** A company that is socially connected with its workers, customers and opinion leaders will constantly change as a result of these interactions, which involves loss of the classic concept of control.”

To conclude this section, Mohamed El Amrani’s opinion on the values that promote team management are as follows: “When a company wants to transmit values, it transfers knowledge. When it does this, it is important to bear in mind that there are two types of knowledge: codified, which I can transmit through “read this” and “the company is this”, and tacit knowledge, based on experience, ideology, value;

transmitting the latter is more complicated and becomes one of the challenges for companies.”

We conclude the second section with some key ideas for defining the inclusive company in more detail. These are: **Leadership that inspires, legitimizes and stimulates; work in teams driven by values; remunerating its workers fairly; fostering continuous updating and recycling; promoting professional development and caring about the well-being of its teams; promoting medical and health care to ensure hygiene and safety at work; and promoting the reconciliation of work and family life as well as teleworking.**

VI. CORPORATE SOCIAL RESPONSIBILITY (RSC)

Social responsibility is fashionable right now, because it is strategic for many companies, but how should social responsibility be applied to make it more than just a strategy?

Esther Carreras of “La Fageda” begins this section, stating that **socially responsible companies have CSR as a principle, integrated in their founding principles, not as a separate department.** And socially responsible actions emerge from all departments as a consequence. **They treat their workers, customers and suppliers fairly.** Although having a separate department can be a good starting point to internalize what CSR entails and means, in the end it has to be integrated within the very pores of the company. When a multinational contributes money to an NGO, it can be a simple “make-up” operation, whereas true social projects are already socially responsible from their conception.

In the same vein, Javier Blázquez states that CSR has to be a transversal axis of the company and not the last little tab at the bottom of the company website. **A key factor is that companies work on credible aspects of CSR.** He gives the example that many claim to use disability in their strategies and this is not always true.

To conclude the section, Agustín Matía comments that there is increasing evidence of social pressure being at the heart of companies carrying out social actions. This leads us to four ideas. First, a 2016 scientific study concludes that **customers expect CSR to be incorporated within the different processes of manufacturing and selling products and in the rendering of services,** and not just in an isolated way to execute actions with a social dimension.

Second, **he criticizes the fact that companies implement social actions. He argues that companies can choose, decide, collaborate and coordinate the implementing of actions with different actors from the third sector, who operate and specialize in the social field.** The mutual understanding between the company and the organization can lead to **the action being strategic, relevant and fundamental.**

Third, **he criticizes companies applying CSR according to the manuals produced by North American universities,** where the reality is significantly different, since CSR has been in place and evolving there for over fifteen years. **It is important that CSR is carried out in line with the relations existing in each community.**

Finally, in fourth place, **he states that when companies are clear on their values, they are integrated and communicated without the need to sell them.** If CSR is not integrated into the structure of the company, it will be just

another layer, like impact and quality systems, along the lines of that noted by Esther Carreras and Javier Blázquez.

We conclude this third section with some of the ideas that have been highlighted: **the socially responsible company has CSR integrated within its founding principles; it treats its workers, customers and suppliers fairly; and it has strong links with the community, encouraging volunteering, making donations, etc.**

VII. RESPONSIBLE MARKETING

Thinking in terms of marketing actions, which display features of responsible marketing?

Thanks to new technologies, companies' customers, workers and suppliers have ample opportunities to easily create and publish content and leave their testimony about their experiences. In the first quarter of 2017, Facebook had almost 1.9 billion active users, while in a single second 3,600 photos were shared on Instagram and 100,000 tweets posted on Twitter (Borgatti, Everett, & Johnson, 2018).

This new reality generates the need for organizations to manage opinions. Citizen journalism represents a fifth power that allows a democratic and civic citizen force to oppose the new dominant coalition of media groups

In this new communicative environment, Moreno (2008) concludes that **responsible marketing aims to satisfy the rational, weighted and proportional needs of consumers via the manufacture and marketing of products and services**, for which it obtains a reasonable and fair price as compensation and aspires to obtain sufficient profit to continue contributing to social development and ensure the licit compensation of those who risk their capital and dedicate their work to it.

Esther Carreras, External Relations manager of the "La Fageda" cooperative, sets the ball rolling by explaining that in their case: "We manufacture yogurts for the Catalan market. With the profits we obtain from sales, we reinvest and guarantee the durability of the project. Our competitors are large multinationals such as Danone and Nestlé, unparalleled with regard to budget. At "La Fageda", **we do not have the money to advertise in conventional media such as radio, press or television, but we have found a very powerful marketing tool related to transparency.** "La Fageda" is located in a privileged environment in the middle of a protected Natural Park, and for 15 years we have been receiving visits at our facilities, until we finally set up a visitor service. **Each year, more than 40,000 people come on guided and organized visits.** Schools, universities, organizations, and families at the weekends. Through the visits they see how the yogurts and jams are prepared: sensorial marketing throughout the visit. We never ask them to buy the product because of who we are. On the packaging we invite you to visit our facilities and not to buy from us just because we are a social project. We want to sell because of the quality of our products. Most people who visit us come because of word of mouth. Because of our size we cannot sponsor anyone in economic terms, but we do contribute products to activities related to blood donation, excursions, marathons, etc. Quality is our law, we produce about 60 million yogurts a year."

Javier Blázquez, Technical Coordinator of International Projects for the ONCE Foundation, adds his opinion on the suitability of the strategy adopted by "La

Fageda": "On the one hand, **it manages and controls its word-of-mouth advertising**, an essential element in marketing, and on the other it **focuses actions directly on its target public**". Fundación ONCE develops through Ilunion Group: "In our hotels consumers find comfort and quality, they are very well adapted and have a good design.

In a normal hotel when you are given an adapted room you think you are in a hospital. At an Ilunion hotel, you do not even notice. **To design good marketing strategies you must first have a good product and be very committed to your company. It's important to create an environment that respects and promotes equality and diversity and rejects all forms of discrimination.**"

He explains one of the most successful advertising campaigns run by the ONCE Foundation under the title "Prepared", in which three well-known figures worked with a disability for a whole day: "The chef Ferran Adrià wore earbuds with music playing to prevent him from hearing, the president of Coca-Cola Iberia, Marcos de Quinto, worked blindfolded, and the president of Microsoft Ibérica, María Garaña, sat in a wheelchair all day. Each of them worked for a day with a disability. It was a report aimed at allowing them to see how it felt having the disability and to realize the difficulties it involved in the workplace, as well as improvements that they would have to make in order to contribute and hire more people with disabilities. **Companies must guarantee universal accessibility.**"

Finally, he explains that in the city of Venice they organized a marathon and set up provisional wooden ramps over all the canals. After the race, visitors to Venice demanded that the ramps not be removed.

Carles Serra, Assistant Rector for Social Commitment at the University of Girona, recounts from his experience: "**In our society, charity as such is frowned upon. When people go shopping, they do not want it to be for charity. First we have to have a good product that works; marketing has to be responsible and subtle.**"

Agustín Matía states the following: "**We ask companies to be responsible for the entire process they ultimately carry out to produce a product or service.** The ideal goal is for the company to use marketing in relation to that, as Ausonia does at P&G, which collaborates with research against breast cancer. When consumers perceive dissonances they become increasingly critical; this is what happened with the tobacco companies that tried to cover up the carcinogenic consequences of smoking for years."

In this fourth section, we have highlighted a couple of key ideas to be able to implement responsible marketing, such as the company **creating an environment that respects and promotes equality and diversity and rejects all forms of discrimination and guaranteeing universal accessibility.**

VIII. CONCLUSIONS

By way of conclusion, the participants define inclusive companies in their own way, highlighting the characteristics and attributes that should lead to the development of indicators.

In order to manage companies, corporate policies and values are required that result in a sustainable business culture at a social, economic and environmental level. Companies whose mission is based on ideals and values

committed to people and the planet contribute to the common good, while also being able to generate a similar volume of economic benefits to other companies (Eguiguren, 2011).

Agustín Matía, General Manager of Down España, states: “Socially responsible and inclusive companies must generate profit for environment. They must be **very open companies, willing to form part of society and interact continuously with it, the closer to the area they are in, the better; they must listen, be transparent, and be able to explain everything they do well. Companies have to respond to what society is like: if society changes, is open and its values are being transformed, that must be taken note of.**”

For his part, Carles Serra, Assistant Rector for Social Commitment at the UdG says: “One fundamental factor is alignment. They have to be flexible in their processes, treat people well, and have the capacity and willingness to introduce changes.”

Cayetano Alemán, former machinist at Aconda Papel, adds a motivational and practical indicator: “Inclusive companies are those where after you arrive in the morning you feel like going back the next day, and when you leave you don’t feel like just another number.”

Esther Carreras, External Relations manager for the “La Fageda” cooperative, quotes a phrase from Confucius: “Choose a job that you like and you will not have to work a day of your life”. She states that the ideal company is one that **contributes socio-economic value to society, has the capacity to adapt to the new times and ends up being an inspirational model.**

In the words of Javier Blázquez, Technical Coordinator of International Projects for the ONCE Foundation, “**The inclusive company would be an open, communicative, innovative, conscientious, multidisciplinary, inclusive company, with a strategy aligned to its mission, and that places the person at the center of all its processes.**”

Mohamed El Amrani, project coordinator at the Suara cooperative and winner of the 2014 *Fundación Princesa Social* Award, believes that the inclusive company “**is a company that fosters creativity and has a non-conformist spirit, but from the constructive point of view, that is to say, it is a company engaged in social and business activism.**”

Khaoula Echaouech, who is an unemployed geographer involved in various social projects in La Bisbal del Empordá, says that “**companies have to acknowledge and reflect the diversity that exists in society.**”

Carmen Echazarreta of the University of Girona concludes: “**The ideal company is one which is founded by people who truly work for the common good, reconciling it with the legitimate goal of working to obtain a benefit.** It is also worth highlighting that it can be different kinds of benefit: in the university it can be benefit in terms of research, quality of teaching or the well-being of the educational community in general, or if it is a commercial enterprise, economic benefit. We are talking about a third sector company with social benefit on all levels. **In inclusive companies, benefiting others is returned in personal benefit.**”

Overall, we would highlight the following differential characteristics of inclusive companies: a) **Open: with a capacity to listen, transparent, in coherence**

with society, committed and responsible; b) Leadership that inspires, legitimizes and stimulates; c) Work in teams managed by values; d) Remunerating workers fairly; d) Creating an environment that respects and promotes equality and diversity and rejects all forms of discrimination; e) Guaranteeing universal accessibility; f) Promoting medical and health care to guarantee hygiene and safety at work; g) Promoting the reconciliation of work and family life as well as teleworking; h) Fostering continuous updating and recycling; i) Promoting professional development; j) Creating strong links with the community, encouraging volunteering, making donations, etc. k) Caring for the welfare of its teams; l) Treating its workers, customers and suppliers fairly; and m) Having corporate social responsibility integrated as a founding principle.

Based on the characteristics described above, further tools should be developed that favor the evolution and promotion of inclusive companies and foster useful dynamics for combating the social effects of the economic crisis and the recession.

The discussion forum has highlighted that inclusive companies can benefit the social inclusion of people in vulnerable situations. Generating social value for groups at risk of exclusion undoubtedly helps combat poverty and marginalization.

Defining quantitative and qualitative indicators based on the conclusions of the forum “People, the heart of companies” lays the basis for creating a business management tool aimed at the effective management of people in organizations. The results of the bibliographic reviews and discussion forums focusing on the areas of inclusiveness, sustainability and technology and aimed at improving quality of life demonstrate the need and opportunity for an integrative model. Subsequently, experimental studies will be required to test the suitability of any tool that is developed as an instrument to identify and promote inclusive companies.

The results and qualitative conclusions of this forum need to be confirmed in subsequent research that includes other experts in the field. We conclude that, faced with these new changing scenarios and challenges, research in this field must be both multidisciplinary and systematic.

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Forum for Reflection and Debate: Smart Businesses, Creating the Future

Carmen Echazarreta Soler, Albert Costa Marcé

Abstract—An interdisciplinary and multi-professional forum for reflection and debate was created in order to discuss and define relevant and significant indicators that enable us to identify, differentiate and promote smart businesses – those that promote the use of communication and information technologies as a means of improving citizens' quality of life. Following an exhaustive literature review, the debate focuses on four axes: technology, innovation and quality of life; communication; leadership and people management, and smart businesses. In conclusion, we highlight a series of differentiating characteristics of smart businesses, in five areas: a) Technology: Humanization and creation of jobs of value in light of automation and digitalization; cyber security and data protection. b) Administration and management: Reconciling economic activity and value-generation for stakeholders; people management and value-based leadership; optimization of the work environment; fostering teamwork; care and appropriate management of staff; creating “pride of belonging”; giving back to society; respect towards generational, cultural and general diversity; promotion of volunteering. c) Research: Innovation: guided and applied research; university-business knowledge transfer, and knowledge creation. d) Education and training in values to face the challenges posed by technology; training; recycling in light of (climate) change e) Communication: Transparency; customer communication; democratizing social journalism, op-ed and testimony sites that foster corporate improvement and bridge the digital gap. Defining these qualitative and quantitative indicators will provide a business management tool for managing technology in organizations, at a time of transformation and big social challenges from digitalization and automation. The reflections, discussions, and knowledge arising out of this forum of experts seek knowledge transfer in four areas: research, education, entrepreneurship and business.

Index Terms—Automation, digitalization, discussion and reflection forum, leadership, people management, smart businesses, quality of life, technology, value-based businesses.

I. INTRODUCTION

The University of Girona promoted a reflection Forum on smart businesses that use technology to improve people's quality of life.

The discussion Forum, held on 22 November, 2016, was a meeting place designed to reflect on the Vusiness project [business, with a “V” for values], which aims to promote smart, open, democratic, sustainable and inclusive companies that inspire the future. The project is run by PhD. Carmen

Echazarreta Soler and PhD. student, Albert Costa Marcé, members of ARPA (Analysis group for reception and playback quality of Audio-visual Screens) Research Group, which forms part of the University of Girona's Department of Philology and Communication.

The economic and financial recession had a very negative impact on the economic activity of European Union countries and produced job destruction and an increase in unemployment, causing a loss in living standards for a large part of the population. From 2008 to 2012, 7.2 million jobs were destroyed in Europe, and only 2.4 million were created, a net loss of almost 4.8 million. In the specific case of Spain, specialization in the construction industry and jobs being destroyed due to the housing bubble and the subsequent collapse of the sector have aggravated the position of specific social groups, who have been left jobless (Rocha & Aragon, 2012).

Mendizabal and Errasti (2006) asserted that globalization helps businesses relocate production, which universalizes outsourcing and offshoring with critical consequences in industrialized countries, directly affecting the production fabric and the social rights of workers, negatively and relevantly affecting their employment status.

In this vein, Echazarreta and Costa (2017a) state that: “The destructions of thousands of jobs, increasing job insecurity and unemployment constitute risk factors for social exclusion and marginalization. In industrialized societies the victims tend to be less qualified workers.”

According to Merino, Somarriba, and Negro (2012) Spain reached an unemployment rate of 22% in 2012. The government has taken a path to promote economic recovery and face job destruction by creating jobs, with a focus on quantity, rather than job quality.

Secondly, another currently alarming factor is climate change, which represents a pressing threat with potentially irreversible effects. In the current economic climate, globalization significantly increases the unsustainable use of finite, non-renewable energy sources. There is a need for sustainable businesses that reconcile business development with protecting the planet and environment (Echazarreta & Costa, 2018).

A third key factor that is beginning to make significant changes to the global economy, and specifically the job market is the 4.0 Industry. According to Ceballos (2016): “The confluence of technologies gives industry unimaginable opportunities, defining thus a new industrial model, based on digitalization. The effect of digitalization is felt in all areas of business, strategy, the offer of products and services, the business model, operations, and in organization and company culture. This change involves a new company model, and industrial profile, which must face this opportunity for reindustrialization.” The new model will probably result in the gradual disappearance of mass production as we know it,

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as the internet allows direct contact between consumer and producer, enabling product customization thanks to the automation brought about by technological advances.

According to Lasi, Fettke, Kemper, Feld, and Hoffmann (2014), the convergence of different technologies has the disruptive potential to transform businesses, sectors and markets. Furthermore, the fact that the latest technologies are affordable for the majority of businesses, regardless of their size and turnover, contributes to the democratization and digitalization of industry.

Lombardero (2015) asserts that the fourth industrial revolution will involve the digitalization of 90% of jobs in industry and services. The combination of advances in digitalization and automation may involve opportunities for innovation, growth and job creation. The resulting model may involve an opportunity to develop business models that require new occupations which help us end the recession.

Seghezzi (2016) asserts that with the new production model, workers will enter new occupations such as designing the production process, setting goals, and programming, supervising and maintaining machinery.

The web also enables the creation of a virtual market which brings about the collaborative economy, that is, the ability to access goods and services without intermediary companies (Todolí Signes, 2017).

At the same time, according to Echazarreta and Costa (2016): “online society has developed alternative communication models, which act as loudspeakers for citizens. Thanks to the development of new means of citizen expression, communication, and collaboration such as social media, op-ed sites, citizen journalism and the collaborative economy, we contribute to the democratization of society and freedom of communication.”

In contrast, Goerlich (2016) claims that the automation of production, and digitalization of services entail a large negative impact on the job market, causing significant job destruction. In a scientific study by Frey and Osborne (2017), 702 occupations in the United States job market were carefully examined, with the aim of identifying which ones were at risk from digitalization. They conclude that in the next two decades, 47% of jobs are at high risk of disappearing as a consequence of technological advances and their application to industry and services.

Arntz, Gregory, y Zierahn (2016) estimate an average job loss of 6 to 12% in the member states of the OECD, with the average around 9% in the next few years. In the same report they state that the impact on the configuration of job posts will be between 25 and 45%.

Torrent-Sellens (2017) concludes by stating that each time there is a disruptive technological advance, there is genuine concern about jobs in society. Conclusive data from economic analyzes indicate that technology does not destroy jobs, rather it skews abilities, tasks, and skills, and shifts jobs, occupations, and people.

According to Echazarreta and Costa (2017b): “To overcome the shortcomings of the current economic system we need smart businesses, championed by leaders who promote the use of communication and information technology as a means to improve citizens’ quality of life. Ultimately, society needs businesses and consumers to act in the free market responsibly, ethically, justly, and with

solidarity. They must make their economic growth compatible with the distribution of wealth.”

Eguiguren (2011), executive director of The Global Alliance for Banking on Values (GABV), came to the conclusion that the previous phenomena such as globalization, displacement, climate change and automation speed up the search for alternative economic models, which are capable of overcoming the shortcomings of the current capitalist model. We need businesses to act with corporate values worthy of a company culture that is savvy in its use of technology to improve quality of life, inclusive at a personal level and sustainable from an environmental point of view.

In view of these challenges, the Vusiness [business with a “V” for values] project is driven by the ARPA Research Group (Analysis group for reception and playback quality of Audio-visual Screens) of the University of Girona’s Philology and Communication Department. This project promotes open, democratic, sustainable, inclusive businesses that make a smart use of technology, with the challenge of becoming a transferable model in the fields of research, education, entrepreneurship, and business.

An exhaustive literary review has been undertaken since 2015, in order to lay the scientific basis for an alternative model centered on value-based businesses.

In order to complement and contrast the information gathered in the literary review phase, three forums are conducted, with the aim of reflecting, discussing, and detecting differentiating characteristics of inclusive, sustainable and technologically smart businesses. The title of the first one is: “People, at the center of business”, the second is: “Smart businesses, creating the future” and the third: “Sustainable businesses, facing climate change”. In all, around 30 professionals have actively participated in the three forums.

The Vusiness model is presented in multiple US universities such as Harvard University, MIT-Massachusetts Institute of Technology, Emerson College, Boston College and Suffolk University in Boston.

There are currently 50 professionals collectively creating the “Value-metre”, a tool to measure 50 corporate values linked to identity, administration and management, people, sustainability and smart technology in businesses, with the aim of transferring the knowledge to the business sphere. At the same time, a group of experts in entrepreneurship and business consultancy and development are developing the “Vusiness Plan”, a value-based business model to guide future entrepreneurs.

II. METHODOLOGY

Forum II “Smart businesses, creating the future” was held on 22 November, 2016 in Meeting Room SD2 of the Tourism Faculty. The reflection of the forum centered on the singular aspects that configure smart businesses, championed by leaders who promote the use of communication and information technology as a means to improve citizens’ quality of life.

Participating in the forum are: Antoni Sudrià, emeritus professor at the Polytechnic University of Catalonia and former director of the CITCEA Center for Innovation and Technology; Carlos Grau, talent developer, and technology and innovation associate at Konsac group; Gema Guzmán, responsible for professional development projects at the

Princess of Girona Foundation; Isabel Godoy, responsible for inclusive tourism at the Costa Brava Pirineu de Girona tourist board; Ioanna Alsasua Pastrana, COO at SIMBIM Solutions; Joan Batlle Grabulosa, former director of the University of Girona from 2002 to 2005 and professor in the Computer Architecture and Technology Department; Joan Duran, strategy at the Ministry of Telecommunications, Cyber Security and Digital Society of the Generalitat de Catalunya; Marc Teixidor, PIMEC Young Businesspeople of Girona; Mariona Serra, co-founder and CEO of GoodGut, y Meius Ferrés, responsible for digital strategy tracking and protocol at the University of Girona. Dr Carmen Echazarreta, director of ARPA Research Group, expert in gender issues and associate professor of audio-visual communication and advertising, and Albert Costa, Doctoral candidate at the University of Girona, organize and drive the session.

III. THE DISCUSSION

The main goal of the reflection forum is to identify the differentiating elements that characterize businesses that make a smart use of technology, in order to improve people's quality of life. Moreover, the reflection and discussion generate qualitative knowledge that complements the literary review.

At the **smart technology** level, the following specific goals are proposed, consistently with Echazarreta and Costa's (2017b) conclusions:

- Having an in-depth analysis of businesses with a basis in factors such as sustainability and inclusivity, necessary accessories to "smartness"
- Developing a unifying model, based on smart use of technology, sustainability, and inclusivity, focused on business creation, administration, and management.
- Defining quantitative and qualitative indicators for evaluating said new model
- Developing educational content and informative and training material for the new model, with the aim of raising awareness with the general population, and training executives, workers, suppliers and customers in order to favour the new model and thus contribute to corporate sustainability in the medium and long term.

Technologically smart businesses can improve the quality of life of people living in social exclusion. In harmony with the United Nations Development Programme, smart businesses direct their mission to build smart infrastructures, promote inclusive and sustainable industrialization, foster innovation, and promote sustained, inclusive and sustainable economic growth, full productive employment, and decent employment for all.

The debate about the smart use of technology covers four points that, according to Echazarreta and Costa (2017b), stand out in the previous, related studies: technology, innovation and quality of life; communication; leadership and management of human resources, and smart businesses.

IV. TECHNOLOGY, INNOVATION, AND QUALITY OF LIFE

How can technology contribute to a better quality of life for people? Does it depend on technological advances or corporate will? Do the tools have limitations? Innovation is fashionable because it is strategic to many companies, but how must it be applied in order to be much more than a strategy?

Mariona Serra, cofounder and CEO of GoodGut, starts off the discussion: "**Innovation is a priority**, it must not be a fad, but rather an implicit value to all businesses. This is why a close relationship must be established for **transferring knowledge between universities, which create innovation and knowledge, and businesses, which develop and commercialize it**. Universities must **conduct research in a more guided and applied manner.**"

Carmen Echazarreta, from the University of Girona, continues by adding that, although it is necessary and evident that there must be a rapprochement between university and business to transfer knowledge, this causes a divide and debate in the heart of the university: "**Should knowledge creation be in harmony with corporate expectations? Or should it be pure knowledge, unconditioned by those expectations?**" In certain areas, such as engineering, economics or law, the application is heightened and more direct.

Joan Batlle Grabulosa, professor in the Computer Architecture and Technology Department, comments on the effect of technology on quality of life "**Technology improves quality of life in the physical world**. Yesterday I was chopping wood in the forest with a mechanical saw, which I carried in a trailer with my car. Our day-to-day is very physical: At home you cook, you use the washing machine... At the edge of this physical world is where **one must ask oneself if technology improves mental quality of life**, and this is where I have my doubts. Emails, messages... **There is a part of technology which falls outside my fundamental needs and which creates needs I didn't use to have**. New technology: social media, smartphones... has pros and cons."

Meius Ferrés, responsible for digital strategy tracking and protocol at the University of Girona follows: "**We must guide teenagers who come into initial contact with technology and teach them values**. There is a thing I always say in my course, which is: We teach them to put the world in their pocket and we don't teach them how to use it. This is a huge problem because they are alone, without teachers or parents. The parents have lost the battle, and teachers even more so. We have found that couple's relationships have lost value, we're regressing because of technology, as it introduces controls and bullying. This is why, **from the University we must educate, teach and warn in matters relating to cyber security and cyber bullying. We must attach added value to training, fostering competencies that last.**"

Revisiting the topic of values, Gema Guzmán, responsible for professional development projects at the Princess of Girona Foundation, asserts: "**Behind every quality of life improvement or positive repercussion from technology, there is a will, and a series of values, which ensure that the change is positive.**" She gives the example of Luz Rello, one of the latest people to be recognized by the Princess of Girona Foundation, who suffers from dyslexia and has developed a technological system for the early detection of

specific learning disabilities as well as their improvement and treatment.

Marc Teixidor, at PIMEC Young Businesspeople of Girona, claims: **“Innovation is what allows you to improve the value of your solution and solve the needs of the customer.”**

Antoni Sudrià, emeritus professor at the Polytechnic University of Catalonia and former director of the CITCEA Center for Innovation and Technology, follows up on the subject of the transfer of knowledge and values, confirming: **“Knowledge transfer is bidirectional.** The University transfers a specific type of knowledge and at the same time receives a different kind of knowledge from businesses, which is very enriching and allows the University to advance.

On the other hand there is a contradiction between technological development and quality of life, or sustainability. **Fads, and what they sell you in the media is unsustainable. In today’s society the most important value is economic.** This technological innovation, the new slavery in social media, young people’s dependency... **It’s a less autonomous society.** When a kid has to make a phone call, they find they’re incapable: **Their ability to reason and learn has been simplified. Technology causes a loss of human skills,** as before we were capable of designing tools, contributing to the environment being autonomous and surviving nature.

Finally, **there’s a clear economic incentive in putting products on the market to be consumed.** In contrast with waste and consumerism there are minority movements that support long-lasting technologies, for example, mobile phones that last 5 or 6 years and not the latest one that follows the trends and has just come out. At the same time, some manufacturers decide to lower the production rate of certain technological products, as they have found that the energy use is significantly lower, and not squander finite natural resources. **We lack social innovation and education in values.**

Joan Battle continues his intervention on technology, condemning emerging technologies: **“3D printers are the old lathes that have always been around, AutoCAD has always been used to draw, and all car parts have been made in 3D. Augmented reality, networking cars, drone robotics, smartphones, the cloud, big data, digital currency... The biggest risk with all of this are the massive servers that store all the information they generate, and which are controlled by multinationals who exert a huge and disproportionate control over society.”**

Furthermore, **“emerging technology creates costs and needs for society in areas where they didn’t previously exist. Online shopping, for example, and the need to have all your products such as food, clothes, etc. delivered quickly to your door. Services that involve transport, weight, consumption and energy, are the main generators of consumption from citizens. There is always a significant energy impact. It’s been years now since solar and wind power should have been the future. In 5 years’ time Germany won’t even have nuclear power.”** At an environmental level, the former president condemns the **lack of commitment and the indifference from society towards sustainability.**

Mariona Serra disagrees. **“It is precisely technology that promotes development and allows new business models to appear which are moving towards platforms and**

communities which prioritize sustainability thanks to the collaborative economy” with examples such as *carsharing* or *coworking* – shared workspaces; at a household level, home automation can also save energy.

Gema Guzmán adds: **“We’re talking about a qualitative jump thanks to the collaborative economy, such as the case of the non-profit, green energy consumption cooperative Som Energia.”**

Antoni Sudrià adds: **“Sometimes technology is abused, society pushes you to purchase goods that you don’t need at all and you end up doing social mimicry.** Is quality of life being able to spend more or is it about living equally well while spending less? Technology allows us to be more sustainable and have a better quality of life, but it’s important not to make a perverse use of it.

It is also important to note the **resistance from businesses to the digitalization process.** The problem lies in the fact that some companies that can still make profits without changing, may have disappeared in ten years if they don’t incorporate technology. On this point, there are noteworthy areas where there has been huge innovation in the past decades, such as in gastronomy with Ferran Adrià.

Joan Duran, strategy at the Ministry of Telecommunications, Cyber Security and Digital Society of the Generalitat de Catalunya: **“I believe that what is really important is the application of technology. If you are new to a platform which is uncharted territory for you and you don’t know what you want to get out of it, it’s better that you don’t use it.”**

Meius Ferrés says, along the same lines: **“I’m a fan of TED (Technology, Entertainment, Design, a US non-profit organization devoted to “Ideas worth sharing”). Very young people participate and they explain real actions through these innovative communication channels. For example, a group of youngsters explains that they are taking vaccines to India with GPS, which means they are combining innovation with sustainability. The danger is when people resist change. We must evolve communication with young people,** as they don’t read emails. It’s not their means of communication. At the same time, we need to educate them about the need to be on LinkedIn, not to search for work, but as a change in mentality, to display their biography. **Networks are for speaking about our professional and social life.** When you use them for personal use is when you have problems. When you search for jobs, a recruiter’s obligation is to check who you are on social media, as you see what values someone has through these networks.”

We close this first block in which key ideas come to the fore: **Innovation as a priority; guided and applied research; knowledge transfer between university and business; technology as an improvement of quality of life and at the same time generating consumerism; the need to educate with values in face of the challenges posed by technology, designing strategies and educating about cyber security and cyber bullying; lack of social innovation; resistance against digitalization and professional and social use of social media.**

V. COMMUNICATION

What changes can new and emerging means of communication generate, in the business sphere? How

can the relationship between the business and customer, supplier or distributor be boosted and stimulated?

Albert Costa, Doctoral candidate at the University of Girona, explains that **social media sites such as Facebook, Instagram or instant messaging services such as WhatsApp, can be friendly environments in which to get closer and speak to young people** about their concerns and to receive psychological support and advice on intimate and confidential matters such as sexuality, drugs, couple relationships, eating disorders, etc.

He also points out the **democratizing role of networks, as any citizen can use them as a loudspeaker against social injustice, generating a certain media impact.**

Joan Batlle considers that the possible benefits of these networks are of interest, but he claims: “Keyboards should contain heat sensors, as often people give their opinion in a hot temper, without thinking.”

Mariona Serra gives her opinion on networks: “**Society itself penalizes and favors self-control.**” On the topic of communication in business she states: “**Communication and networks are key for gaining customers.** At GoodGut, before the first presentation press conference, we started following societies of patients with bowel cancer, intestinal illnesses, etc. After a few days the patients went to Trueta Hospital to see if the kit had been developed yet. Thanks to communication we can do market research. For example, a company that wanted to develop an app for showing which beaches had the most waves to go surfing on, based on the number of people interested in downloading the app, discovered that there was real demand, and that it made sense to develop it.”

Marc Teixidor continues: “**Communication is the Achilles heel of any company at all levels: production, people management, relationships with customers and suppliers, etc.** Communication even allows you to pre-sell your product before it exists.

Albert Costa continues: “**Social media sites allow small companies to segment their customers and nurture loyalty with them.** Years ago, companies invested in conventional advertising in the general media, with less strategic sense. For its part, **with social journalism you can condemn and show up bad business practice through networks, which democratize and enable freedom of expression.**”

On the subject of **business communication**, Isabel Godoy, responsible for inclusive tourism at the Costa Brava Pirineu de Girona tourist board, explains that they are working towards a diagnosis on accessibility for 700 Girona businesses in the tourism sector. They have been surprised, as with the case of a scuba diving business: “they have a platform that enables people with disabilities to go diving but they haven’t advertised this in any way. How is a tour operator supposed to notice this business and send tourists their way, if they don’t advertise this facility?”

Gema Guzmán: “The media becomes **a controlling element of how businesses act, as they tend to be very concerned about their reputation.** Through social media, citizens have a lot of power, and this contributes to businesses wanting to continually improve.”

Meius Ferrés, on the topic of business communication: “New youngsters do not trust institutional communication in the slightest, they go to **op-ed sites,**

community testimonies. According to Xavier Marcet, “Tripadvisor and Booking have changed the behavior of hotels and restaurants.”

Antoni Sudrià highlights the risk of agencies generating reviews online, but he admits that new technology has socialized communication. He also reflects on the **digital gap which creates inequality between people who have access to and knowledge of new technology, and those who do not.**

Joan Duran claims that businesses are placing more and more value on customer communication and use the best tools to get close to them and nurture loyalty. **But he sees challenges in the business-supplier relationship. He says that meetings and negotiations tend to be face-to-face and not easily substituted with technological communication solutions:** “You realize in fairs, such as the Mobile World Congress or the Smart City Expo, that businesses need to deal face-to-face with the people who they will sign a contract with, and will supply them.

On the subject of Smart Cities, Meius Ferrés suggests that **they should work for vulnerable people** and she condemns a case in Reus, a very technological city, where an elderly woman who had her electricity cut off, died in a fire started by a candle.

Joan Batlle says that “current technology is more than advanced enough for this to be avoided”. He explains that 8 years ago they developed a touchscreen with Skype code and a LED frame, which allowed any domestic television to be turned into a touchscreen. It was designed so that elderly people could be connected with their families for a very low cost, but it proved impossible to raise funding or interest from the administration, and advance this social project.

Antoni Sudrià comments on the needs of people at risk of social exclusion, explaining that **the study on individuals’ energy consumption patterns will enable us to quickly detect cases where an intervention is needed urgently.** “For example, you can detect if they have skipped their morning shower or not heated up their breakfast milk”.

Referencing new media, Joan Duran claims some social media platforms that are considered emerging are **Twitter, LinkedIn, Slack** –which is used for teamwork and divides conversations by topic-, **Telegram or Pidgin.** At the same time, he highlights the use of email and instant messaging for managing work with non-invasive tools. Tools such as **Drive or Dropbox are completely insecure from a data protection and confidentiality perspective.**

Returning to the original topic, Ioanna Alsasua, from SIMBIM Solutions, thinks about the **opportunities generated by new tools and emerging media in technology businesses** that have their focus on construction, and Smart Cities: “**The introduction of BIM (Building Information Modelling) technology** allows us to construct virtual prototypes of our buildings and see what will happen before we build them. We can work much more efficiently, as it allows us to, from the first phases, avoid construction problems, know the exact costs generated and how to provide maintenance for the building, etc. Ultimately, it allows us to manage the whole lifecycle of the building in a unified way.”

Carmen Echazarreta points out: “Technology allows us to optimize knowledge and **we save energy thanks to virtual systems, which contributes to sustainability.**”

On cost savings, Joan Batlle claims: “Thirty years ago people already worked online, the problem was **system speed** and **high costs**”, matters that have changed significantly in our time.

Ioanna Alsasua continues: “although architecture is an industry which has traditionally been reluctant to share information, **the technologies that get used tend to follow a model of collaboration between professionals. The main value sought by support tools is transparency.** Multiple architects can be working on the same file in real time, hugely optimizing their work, and cutting down on the amount of information that would have been sent through instant messaging or email. Although it must be said that there is a **lack of education when it comes to working with collaborative systems.**”

Joan Duran continues with the claim: “In time businesses will have to be more transparent. Suppliers will be forced to share their information more openly, allowing a more virtual relationship with their potential customers. CRM (*Customer Relationship Management*) software will become indispensable for managing customer relationships.

Speaking about the bases of the collaborative model, Antoni Sudrià claims: “**A lack of investment in Catalonia has promoted the creation of many industrial estates which don’t provide the necessary scope for businesses within to work collaboratively with their stakeholders**”.

The second block closes with some key ideas for examining the changes that new and emerging media can bring about, and how the business-stakeholder relationship can be improved: **Social media and business communication that can segment and bring in customers while nurturing loyalty; transparent communication management; guaranteed data protection and security; fostering teamwork; lack of education and training to work with new emerging models; social journalism with a democratizing role; appearance of op-ed sites and community testimonies which foster a concern for business improvement and reputation, and finally we highlight the digital gap which creates inequality between people who have access to and knowledge of new technology, and those who do not.**

VI. 6. LEADERSHIP AND HUMAN RESOURCES MANAGEMENT

Do we assume that management in a smart business is more collective than individual? What role do the teams have to take? What should leadership look like?

In this new block Marc Teixidor begins by explaining that Sergi Garcia Preckler, who has been director, manager and vice-president of the Human Resources department at Sony Iberia for 15 years, leading a team of more than 3,000 people, delivered a conference at PIMEC and asked the managers in attendance: “What does your job entail? What is a CEO’s most important job?” Most of the answers were “I handle the big accounts, the most important customers.” Then, he compared this with family and children: “**You must give your employees the tools to develop and try to make them better than you, so that they grow. You must create an environment in your organization where employee motivation and recognition are first-rate. We need leaders who are talented, responsible and have the ability to communicate. A leader makes the people around them better. They must be humble, and capable of teamwork.**”

Gema Guzmán adds that the term used is no longer human resources, but **people management**: “We need **shared goals and vision.** You can’t have a team and not tell them where you’re going. This is why it’s easier to work in start-ups, as the team identifies more easily with the project.”

Meius Ferrés claims: “**48% of jobs will be taken up by robots in ten years’ time. Manual and mechanical jobs, which are not generally fulfilling,** will be done by machines. Carlos Zahumenszky, editor at Gizmodo ES, claimed at TEDxReus that we will have to find a new way of working. If our job is threatened by a robot, **we will have to make our job more human.** He spoke of doctors at a primary care center, who see an average of 35 patients from 8:00 to 15:00. Patients tend to use additional services such as psychology or homeopathy because they get seen for an hour. He claimed that machines may be able to do many of a doctor’s tasks, but **the job of understanding a person, can only be done by another person. Automation is a social challenge, we must support individual talent and promote more creative jobs.** Volunteering will also become important in future as it makes us better people.”

To Mariona Serra: “The team is the main building block of a business. Employees must understand that the company is their own, they must feel a part of it. In the newer generations we’re used to working **collaboratively, in multiple languages, and multitasking.** For example, the company Mango works with shared goals and vision. These times require **greater flexibility in working hours, to encourage harmony and enable women to take leadership.** On personnel recruitment, Michael Page, a leading worldwide consultancy in selecting qualified staff, point out that you tend to hire people like yourself. It’s important to **select people for the role they will fill. You must think of the profile you require for a specific role.**”

Joan Batlle highlights that “The problem lies in that **salaries are very low for the majority of people.** Automation will get rid of a specific kind of unskilled labor, but at the same time **will create more qualified jobs.**”

Antoni Sudrià highlights that: “**Human resources is changing significantly in highly technological businesses.** For example, Indra Sistemas S.A., a Spanish multinational in the communication and information technology sector, hires **on a project-basis, with no working hours, and does not provide a fixed workplace.** Hierarchies disappear and a method of cooperative active players who must be smart and communicate with each other, is applied.” At the same time, he highlights that “People with a lot of talent often have high mobility. **Talent is difficult to retain.** They tend to work on projects, and when they finish one they move to a different country and project. It is in times of recession when we have the best **knowledge transfer contracts** with businesses.”

Albert Costa claims: “It’s worth noting that not everyone has to be enterprising in their workplace. **We must expect employees to get involved to a reasonable extent. The person in charge is the one with all their capital at risk, and only the businessperson can gain all the profits.**”

In the same vein, Joan Batlle says: “The difference between business owners and workers is always there. In the middle of the recession, employees really felt for their company, until they were told their salary was cut in half. At that time, all they saw was the owners living in luxury homes, with nice cars and pools... The Catalan businessperson at an

SME, seeing things are going wrong, tries to hold on, a big mistake, and begins to use credit facilities and ask for personal loans to maintain workers who are like family. But then one day the employees discover that they're not family, and that this is not the company they thought they loved."

Some key concepts to highlight in this third block are: **"People management; leadership that is talented, responsible, with an ability to communicate, which improves the people it surrounds; teams with shared goals and vision; progressive automation and humanization of more creative jobs that boost individual talent; greater flexibility in working hours to encourage harmony and the importance of adequate remuneration."**

VII. SMART BUSINESSES

What characteristics define smart businesses? What do we mean by "smartness" in relation to business? Do we need education on the subject?

Joan Battle begins the third block, by warning that **"The business must make a profit in order to be viable."**

Antoni Sudrià adds that, furthermore, **"it must generate knowledge by investing capital and valuing talent."** He comments that some Girona businesses, especially the family-run ones, find it hard to value knowledge and realize that to advance and innovate they must study certain factors. In the 4.0 Industry data analysis will become more and more indispensable for improving strategies. He also adds: "An indicator to evaluate if a company is smart or not is the **employee training program. How much money do they invest in training? Finally, he highlights the need to look after staff, and manage them effectively:** "It's important to detect states of stress or unhappiness. You must take an interest in the personal state of your employees. You must do the opposite of what business schools tell you: maintaining pressure does not work. **A smart business is able to recognize its mistakes."**

Marc Teixidor and Mariona Serra agree with Sudrià and highlight that smart businesses: **"Reconcile economic activity and all the players that make it possible. Generating value for every stakeholder and recognizing the value of knowledge created and employee training"**. Teixidor also highlights that **"management must be humble, and able to know their employees' names and what they do"**.

In the same vein, Gema Guzmán highlights: "It is the business that takes into account all its stakeholders for **the ultimate common good of all parties.** Another important point is to have a good **work environment."**

Meius Ferrés highlights the importance of **"Creating pride of belonging"**. She also highlights the need to **safeguard good working conditions in business.** She gives the example of bad practices in certain emerging collaborative businesses such as Uber, where there are no employees or workers' rights. Another characteristic feature of smart businesses in the **"ability to give back to society."**

Carlos Grau, talent developer, and technology and innovation associate at Konsac group, highlights that "the outstanding issue is the **university-business transfer.** At the same time, it's important to bring **innovation** to organizations. There is an important debate in industry surrounding big data, machine learning and business intelligence. **60% of jobs that consist of sequential and**

repetitive information analysis, and aren't highly complex, will disappear in the US and in many businesses over the next 3 or 4 years. Just as it happened on the factory floor, this will be done by robots that can semantically analyze documents. By using logic and algorithms, they can analyze steps and a process which was simply a controlled flow of information from one colleague to the next, for validation. The big opportunities for smart businesses are **tasks relating to online work, working with third parties, creativity, greater customer-focus...**

Smart businesses are the ones marching in this direction. They accept that the most repetitive, manual and tedious tasks will end up being substituted by automated systems. Everyone is terrified and believes their job will disappear. **The challenge is in creating many jobs of value."**

Joan Duran gives the antagonistic example of two companies: **"Apple** has historically fed on innovation. In Steve Jobs' time it could be considered smart because they tried to make varied products and deliver value. Since his loss, the strategy has changed. Instead of investing their profits in innovation, they distribute them to their investors, and the company will slowly lose market share. On the other hand, I believe that **Amazon** is smart, and worthy of examining. They are innovating in the ecommerce world. They create new products and services on a daily basis. It will grow indefinitely."

Gema Guzmán points out that, to the best of her knowledge, Amazon UK has dismal working conditions for its employees, unworthy of a smart company. There must be, then, a balance between innovation and people management. She continues and explains that in the Basque Country's 2016 unemployment forum, Michael West, professor at the University of Lancaster, intervened, stating that the most important thing is to **"treat people working within an organization with dignity, compassion and empathy, and to listen to them,** and that they will do the same with other employees, customers, or patients. **If we create a positive workplace atmosphere, we will be better people at the end of the day."**

Carlos Grau highlights that **the organizational cultures of smart businesses are based on features like creating fields of innovation, the ability to transform, constant humility and modesty however well things are going, being curious, respect to generational, cultural and general diversity, and pride of belonging to the project.**

He highlights a socially responsible labor integration project that was developed by **Fundación DKV Integralia.** He explains that they placed around 300 disabled people over 15 years and that the foundation is driven and managed solely by people with disabilities. They manage call centers, customer service centers for large companies and even ministries. "You see their success stories and their will to overcome and are impressed, you learn many things. Some companies develop CSR (Corporate Social Responsibility) themes around art, culture, entertainment and leisure... More importantly than which area you work in, what matters is that what you do is transversal, and that it generates a real impact in the business model. **Smart businesses involve their employees, create a sense of pride and belonging and promote volunteering."**

Another detail that Grau highlights is that “In the United States various companies are creating a professional profile that **apologises**. In a business culture of innovation and making mistakes, it is important to know when to apologise to customers. **Although every occasion where a problem arises with a customer is an opportunity to improve, managing the situation and knowing how to apologise is one of the most sophisticated tasks in the world**”.

In this last block on the characteristics that define smart businesses, we highlight the following concepts: **economic feasibility; generating knowledge; valuing talent; training and recycling for employees; care for and management of staff; reconciling economic activity and generation of value for stakeholders; humble and modest managers who know the names of their employees and what their tasks are; healthy work environment; pride of belonging and involvement of employees; care for working relationships; giving back to society; university-business knowledge transfer; progressively generating creative online customer-focused jobs of value in face of automation; treating customers with dignity and compassion; curiosity; respect for generational, cultural, and general diversity; promotion of volunteering and apologising.**

VIII. CONCLUSIONS

Carmen Echazarreta concludes that we live in a time of great technological innovation, with the potential to help give an answer to a majority of social challenges: overcoming the economic and financial recessions, fighting inequality, eradicating climate change, eliminating child labor, counteracting the ageing population or stopping rapid urbanization.

As the forum progresses, we highlight a series of differentiating characteristics of **businesses that make a smart use of technology in different areas of knowledge**:

Technology: a) Humanization and progressive creation of online, customer-facing jobs of value in the face of automation and digitalization; b) Technologies for improving quality of life, and c) Cyber security and data protection.

Administration and management: a) Reconciling economic activity and generation of value for stakeholders; b) people management and talented, responsible leadership by leaders with an ability to communicate and improve the people surrounding them; c) optimizing the work environment, fostering collaborative work and teams with shared goals and vision; d) care for and adequate management of staff, valuing talent, increased flexibility in working hours to encourage harmony and the importance of adequate remuneration; e) generating a pride of belonging and involvement in employees; f) giving back to society; g) treating customers with dignity, compassion, empathy and actively listening; h) respect for generational, cultural, and general diversity, and i) promoting volunteering.

Research: a) Innovation as a priority; b) guided and applied research; c) transfer of knowledge between university and business, and d) knowledge creation

Education and training: a) Educating in values in the face of challenges posed by technology, designing strategies and training on cyber security and cyber bullying;

b) education and awareness for working with new emerging models, and c) training and recycling for employees.

Communication: a) Transparent communication management; b) social media and business communication capable of segmenting and capturing customers while nurturing loyalty; c) social journalism with a democratizing role, fostering freedom of expression and the right to gather information; d) op-ed sites and community testimonies that foster a concern for business reputation and improvement; and finally we would highlight e) the digital gap, which creates inequality between those people who have access to and knowledge of new technology, and those who do not.

Based on the parameters described here, some tools will be developed to foster the promotion of businesses that make smart use of technology and are able to favor useful dynamics for fighting the social effects of automation and digitalization.

Defining quantitative and qualitative indicators based on the conclusions of the forum “Smart businesses, creating the future” lays the basis for creating a business management tool aimed at the effective management of technology in organizations.

In line with that posited by Echazarreta and Costa (2017b), we highlight the need for a unifying model, based on the results of the literature review and the discussion forums centered on three areas: inclusivity, sustainability, and technology working to improve quality of life. Some experimental studies are also needed to contrast the suitability of the indicators defined by the various professionals in order to identify and support companies with values. Finally, we recommend the development of an easily applied instrument for businesses with the aim of fostering values related to inclusivity, sustainability and smart use of technology.

As with the first forum, the results and conclusions of the current debate need to be confirmed in subsequent research that includes other experts in the field as well as a different research methodology. We conclude that, faced with these new changing scenarios and challenges, research in this field must be both multidisciplinary and systematic.

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Forum for Reflection and Debate: Sustainable Companies, Tackling Climate change

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Abstract:- This paper presents the results and conclusions from a forum for reflection and debate among professionals from different fields to discuss and define relevant and significant indicators that facilitate the identification, differentiation and promotion of sustainable companies. Consistent with a prior literature review, the debate was organized on the basis of five axes: sustainable companies, climate change, the environment, mobility and corporate social responsibility. A series of differential characteristics of sustainable companies are highlighted in four areas: a) **Minimizing the consumption and promotion of renewable energies: transforming polluting sectors; internalizing the impact; renewable energy; recyclable and reusable products; energy demand management; segregation and waste management;** b) **Mobility: energy storage; increasing vehicle occupancy; using bicycles; electrified transport; improving freight transport; transport and mobility on demand; electric vehicles;** c) **Environmental, economic and social business management: contributing to improving the environment; the collaborative economy; innovative ecosystems; sustainable business strategies; flexibility; equal opportunities; collaborative innovation; teleworking; transparency; and d) Public administration: awareness; e) reducing emissions by between 7% and 8% per year; positive taxation; strategic management of the territory; promoting environmental certifications; promoting long-term sustainable strategies, and efficient and affordable public transport. Defining quantitative and qualitative indicators will provide a business management tool for the sustainable management of companies. The reflection, debate and knowledge generated in this forum of experts is aimed at producing qualitative research and the subsequent transfer of knowledge in three areas: education, entrepreneurship and business.**

Keywords:- Forum for reflection and debate; companies with values; sustainability; climate change; reducing energy consumption; renewable energy; transport and mobility.

I. INTRODUCTION

The University of Girona promoted a forum for reflection on sustainability and companies. The debate took place on October 18, 2016, and provided a meeting place for reflection on the Vusiness project [business with a “V” for values], which aims to promote sustainable, intelligent, open

companies that are democratic and inclusive and must inspire the future. The project is run by the Arpa Research Group (Audiovisual Screen Reception Analysis Group), which is part of the University of Girona’s Philology and Communication Department.

According to Echazarreta and Costa (2018): “Climate change represents a pressing threat with potentially irreversible effects. In the current economic environment, globalization significantly increases the unbalanced use of non-renewable finite energy resources”.

The Spanish Office of Climate Change (2006) has stated that: “At present, there is a broad scientific consensus that the phenomenon of climate change is an unequivocal fact, caused mainly by the actions of man”.

The studies conducted by Ordóñez y Masera (2001) similarly concluded that: “Human activities, such as the use of fossil fuels for producing energy and the processes derived from changes in land and forest use, are generating large emissions of greenhouse gases (GHG) such as carbon dioxide (CO₂), carbon monoxide (CO), chlorofluorocarbons (CFC’s), nitrogen oxides (NO_x) and methane (CH₄), mainly, CO₂ being one of the most important GHGs due to the large amounts in which it is issued.

Analyzing the origins of climate change, Moscoso (2018) states that during the 18th century, the Industrial Revolution was characterized by large-scale mechanical production thanks to the use of steam engines. This factor favored rapid growth and economic development but also meant the beginning of climatic imbalances generated by the massive use of energy resources such as coal.

In line with these conclusions, Acquatella (2008) argues that: “The most significant greenhouse gases generated by industry over the last century and a half are carbon dioxide, methane and nitrous oxide, the first being the most important, with an increase from a pre-industrial age value of 280 ppm to 379 ppm in 2005, surpassing its natural behavior over the last 650,000 years.” The authors propose technical, political, economic and scientific strategies to reduce and stabilize the increase in greenhouse gas emissions: drafting and approval of a specific legal framework for the control and reduction of atmospheric emissions, application of incentives and environmental taxes on companies, and the use of green technologies and renewable energies.

With regard to the effects of climate change in recent decades, Stocker et al. (2013) have the following to say:

“Since the 1950s, many of the observed changes have not had precedents in recent millennia. The atmosphere and the ocean have warmed up, snow and ice volumes have decreased, sea levels have risen and greenhouse gas concentrations have increased.” This author concludes that climate change generates adverse effects, the impacts of which can jeopardize the development of countries and the integrity of the world’s ecosystem. Numerous plant and animal species affected by pollution and habitat loss will not survive in the coming years. Scientific analyses predict that high temperatures, heat waves and heavy rainfall will continue to be more frequent in the future, which could be disastrous for the environment.

When it comes to recommendations, Brevia (2006) categorically and urgently states that: “As global geopolitics evolves, consuming less oil and more renewable energy is an urgent need for Spain, it must be an objective and a State policy. It is a unique opportunity because all the conditions are in place to achieve it and we are world leaders in renewable technologies, but it is necessary and urgent to transfer a different energy culture to society.”

Regarding the reduction of consumption, Linares Llamas (2009) stated the following: “Energy saving and efficiency are a fundamental element for improving the environment, especially in regard to global warming.”

With regard to renewable energies, alternatives to conventional ones based on oil, coal and natural gas, Boyle (2004) highlights the following energy alternatives: solar, thermal, photovoltaic, bioenergy, hydraulic, tidal, wind, wave and geothermal.

Another key aspect when dealing with climate change is influencing mobility. Miralles-Guasch (2002) stated that: “In recent decades, profound social, economic and technological changes have led to a new model of urban mobility.” This model, which tends to be implemented globally, is characterized by an increase in average distances traveled, changes in motives for travel and changes in the location of productive activities.”

Estevan and Sanz (1996) stated that cities were designed, reformed and built to satisfy above all the needs of motorized vehicles and, in particular, the automobile, which has generated consequences such as congestion, pollution and noise. These authors emphasized the need for new models of urban planning and mobility, which result in an ecological reconversion of transport.

In the same line, we can highlight research conducted by Mollinedo (2014), which analyzed the environmental and social unsustainability of the current urban mobility model, together with negative externalities caused by transport. This author presented some of the principles that should govern a sustainable urban mobility model to improve the quality of life and address climate change, while highlighting the need for an adequate public transport network. Technological advances are highlighted, especially in relation to the storage capacity of batteries in electric vehicles such as bicycles, motorcycles and cars. And finally, modes of collaborative economy are also mentioned, such as the new forms of shared transportation, car sharing, rentals by the day or hour and applications that offer a transportation service based on the user’s geolocation, such as

Uber and Cabify, which are causing great controversy in the traditional taxi sector.

According to Echazarreta and Costa (2018) “Sustainable companies are based on two fundamental principles, which are the environment (renewable energy resources, sustainable development, preservation of the environment, responsible energy consumption, minimizing emissions, eco-efficiency, the circular economy) and mobility (collective public transport, electric vehicles, clean and non-motorized mobility systems).”

(Eguiguren, 2011), Executive Director of The Global Alliance for Banking on Values (GABV), concluded that the management of phenomena such as climate change and economic, social or globalization crises accelerate the search for alternative economic models capable of laying foundations that provide a better response to the shortcomings of the current capitalism-based model. According to Eguiguren, companies are required that act out of a sense of ethics, responsibility, transparency, democracy and participation; companies guided by the corporate values characteristic of a sustainable business culture at an environmental level, inclusive at the social level and wise at the level of using technology to improve quality of life.

To contrast and expand the information summarized in the bibliographic review phase, three forums were held to reflect and debate on sustainable, inclusive and intelligent companies. The first was entitled: “People, the heart of companies”; the second: “Smart companies, generating the future”; and the third: “Sustainable companies, tackling climate change”. In total, some thirty professionals actively participated in the three forums.

The model was presented at different American universities: Harvard University, MIT-Massachusetts Institute of Technology, Emerson College, Boston College and Suffolk University in Boston.

Currently, 50 professionals from different fields are collectively creating a “Valometer”, a tool for measuring 50 business values linked to identity, administration and management, people, sustainability and smart technology in companies.

At the same time, experts in entrepreneurship and business consulting are developing a “Vusiness Plan”, a business plan model with values to guide future entrepreneurs.

II. METHODOLOGY

The 3rd Forum “Sustainable companies, tackling climate change” was held on January 24, 2017 in the SD2 Meeting Room of the UdG’s Faculty of Tourism. Reflection revolved around the unique aspects that make up sustainable companies, which promote values such as equality, transparency, joint responsibility and accessibility, and ultimately improve quality of life.

The following people participated in the forum: Pere Macias, President of the Circle of Infrastructures Foundation and Professor at the Polytechnic University of Catalonia; Imma Pérez, Director of Not topic - RSC, communication and networks; Sara Pizzinato, responsible for energy and climate

change companies at Greenpeace Spain; Joan Barfull, Technical Manager at the Girona SME branch and in charge of sustainability; Marc Casadellà, Director Par 3 Pitch & Putt Gualta and President of the Catalan Pitch and Putt Association, and Josep Serra, viticulturist and entrepreneur at La Vinyeta winery.

The session was organized and run by Dr. Carmen Echazarreta, Assistant Professor of Audiovisual communication and advertising, Director of the Arpa Research Group and expert on gender and publicity issues, and Albert Costa, PhD student at the University of Girona.

III. THE DEBATE

The main aim of the Reflection Forums is for professionals in the business sector to debate and define relevant and significant indicators that facilitate the identification, differentiation and promotion of sustainable companies. The reflection and debate generated in this forum of experts serves to generate qualitative research.

In terms of sustainability, according to the conclusions of research conducted by Echazarreta & Costa (2018), the following assertions can be made:

- Gaps exist in information and research related to climate change.
- The instruments currently used to mitigate its effects are insufficient and inadequate.
- Better governance indexes and a transnational strategy are urgently needed.
- There is a need for sustainable companies that combine business development with the environment and protection of the planet.

According to Eguiguren (2011), the mission of a sustainable company is based on ideals and values committed to the planet, contributing to the common good and at the same time generating a volume of profit similar to other companies.

According to the United Nations Development Program, sustainable companies focus their mission on promoting the following areas: a) Clean water and sanitation; b) Affordable and non-polluting energy; c) Sustainable cities and communities; d) Responsible production and consumption; e) Action for the climate; f) Underwater life; and g) Life of terrestrial ecosystems.

The debate on sustainability in companies was organized around five descriptors that according to Echazarreta & Costa (2018) stand out in the studies mentioned previously: sustainable companies, climate change, the environment, mobility and corporate social responsibility.

IV. SUSTAINABLE COMPANIES

What characteristics identify a sustainable company? What is meant by sustainability? Is there a lack of education on the subject?

Joan Barfull, Technical Manager of the SME Girona branch and responsible for sustainability kicked off the debate: “Sustainability is a cross-cutting issue that must be addressed at the environmental, social and economic levels. A key

indicator is that companies operate causing zero or negative impact on the environment. Although the company is founded with the aim of making money, there is increasing awareness that it must contribute to improving the environment in which it operates, contributing positive values to society.

Josep Serra, viticulturist and entrepreneur at La Vinyeta winery then added that sustainable companies are managed with a short and a long-term vision, internalizing the impacts they have on their environment, making the defense of their interests compatible with solidarity in their environment and thinking of future generations.

Continuing the discussion, Pere Macias, President of the Circle of Infrastructures Foundation and Professor at the Polytechnic University of Catalonia stated the following: “In a similar way, in the world of infrastructures, some forty years ago in the more advanced countries they started to evaluate the environmental impact infrastructures had on the territory. This area has now been overtaken by strategic environmental planning. In the area of sustainability in companies, beyond mitigating impacts, the key lies in sustainable business strategies. For example, if we produce diesel engines, even if we put a lid on it, the mistake lies in manufacturing this type of engine in the first place.” He then underlined the importance of maintaining an industrial culture characterized by capitalizing human teams trained to improve their production chain and make it more sustainable and not reduce costs thinking only of the short term.

Next, Sara Pizzinato, responsible for energy and climate change companies at Greenpeace Spain, defined sustainable companies as having zero or positive impact, taking into account the entire process, analyzing from the outset, for example, how they obtain and transport raw material, until the final consumption of the product. “Dangerous activities for the environment should be limited by legislation. Only sustainable activities should be allowed.” She went on to explain that the problem lies in the fact that voluntary recommendations are not followed by companies. For example, the European association of car manufacturers has been applying pressure for the last twenty years to make compliance with the objectives set out by European regulations regarding CO₂ emissions in cars voluntary.

She noted that: “The fundamental elements of sustainability are measurability and transparency” and gave as an example of the difficulties her organization faces that of obtaining electricity consumption data from large data centers belonging to companies like Facebook, Google or Amazon, which consume large amounts of energy.

Imma Pérez, Director of Not topic - RSC, communication and networks, continued with the theme, stating that sustainability lies in the company operating without harming the environment or society. It is important to differentiate sustainable strategy from “greenwashing”, which consists in companies presenting their services and products as being respectful of the environment even when this is not true. She argued that sustainability brings companies profitability and that other key aspects of sustainability are transparency and ethics.

When companies incorporate sustainable development into their business model, they have workers who are much more committed, innovative and talented, and are more accepted by the community as a whole. Sustainable companies are also collaborative companies, even with their competitors.

In line with this, Sara Pizzinato said that “Sustainable companies use their good practices, their desire to go beyond what is legally binding, to make others do the same. They use their representativeness and influence to promote a sustainable market and a system based on renewable energies that can be useful for all companies.”

For his part, Joan Barfull added that in Spain it is important to differentiate the big energy lobbies that have enormous influence, even in the drafting of regulations, from SMEs, small and medium-sized enterprises that have enormous potential to minimize and compensate all the negative impacts they can have. Despite the system of sanctions, it is necessary to take into account the possibilities offered by environmental certificates, which encourage truly sustainable companies. In this environment, the circular economy means a change of business model, as it seeks to enhance and extend the life cycle of products, materials and energy resources and reduce waste generation. Values increasingly have more market value.

Accordingly, Josep Serra explained that what is desirable is for “Sustainability to be part of company’s competitive advantage, add value and generate differentiation. Differentiation is valued and perceived by consumers. Good products are increasing in value and people are willing to pay a little more for them.”

As a counterargument, Pere Macias noted that becoming sustainable is more complicated in some sectors than others. He gave the example of the country’s meat industry, where there is a lot of competition and it is difficult to improve quality in the process between pig-breeding and meat exportation.

This is the end of the first section, in which the following characteristics of sustainable companies have been highlighted: a) Transparent; b) Ethical; c) Measurable; d) Focused on the environmental, social and economic level; e) Contributors to improving the environment in which they operate; f) With a short and long-term vision, internalizing the impacts they have on their environment and thinking about future generations; g) Managed by means of sustainable business strategies; h) Do not do greenwashing; i) Collaborative, even with their competitors; j) Sustainability arises out of competitive advantage.

V. CLIMATE CHANGE

Global warming is now a fact that is having, and will have more, serious consequences for the climate, atmosphere and biodiversity. How can companies help mitigate the consequences of this change? How can they reverse the situation?

This second section began with Sara Pizzinato stating that: “Climate change requires a State strategy, since an urgent reduction of emissions of between 7% and 8% per year is

needed in order to prevent global warming and try to reduce the average temperature of the planet by 1.5 degrees.” It is the State that must have a strategy and mark society’s priorities with regard to companies: “States must regulate taxation on certain products with greater rigor: airlines should pay taxes on hydrocarbons, diesel should have a higher taxation rate than gasoline and regulations should be provided to make charging points available for electric vehicles.”

She complemented the idea by stating that citizens must internalize the social, environmental and economic costs of activities that pollute. Sustainability has to be a fundamental, basic and obligatory value for any product, while excellence or quality can also make a difference.

In the same line, Joan Barfull said that use should be made of the Mediterranean climate to promote renewable energies. He believes that the government should facilitate the production and consumption of renewable energies, whereas the decree on self-consumption presents an opposite scenario, since it discourages companies from considering investments in this respect.

According to Pere Macias, one of the most important means of intervention available to States is taxation. Thanks to taxes, the State redistributes according to political priorities. The principle of tax disaffection has been applied since the 19th century, which involves taxes not being allocated to the same place they were collected from, but redistributed according to political priorities. It brought an end to the so-called portazgo, a medieval tax on the transit of people, goods or animals.

Macias believes that: “The tax disencumbrance model is in crisis because we need to internalize the social and environmental costs clearly. Only taxes such as water are invested from the first to the last penny in improving the water cycle. Citizens understand that they pay a lot for water because it has to come back clean. In cases such as air, the opposite happens, with diesel, which is more polluting, being cheaper. Transport also needs to internalize costs, promoting payment for use: those who travel have to pay all the costs of their movement, from the physical costs of fixing the road to the environmental costs of the pollution generated by their movement. Education is required for citizens to understand and accept this, since we are talking about transforming taxes, not raising or lowering them.”

Imma Pérez recalled the idea described in the first section, explaining that the circular economy is expanding and that the collaborative economy is also getting stronger. One process that is slower than consumers themselves is the definition of a legal framework for collaborative activities. A change of mentality is required to this end. For example, given the disadvantage of owning a vehicle there are more efficient and cheaper alternatives, such as the use of public transport or car sharing.

Sara Pizzinato continued on the theme of how to tackle climate change, establishing three types of companies.

“The first type of company is the one that has energy generation as its core or main business; these are the major emitters of greenhouse gases, including energy companies,

transport companies and poultry farming. As a country, we cannot continue to have thermal power plants or coal mines, or continue to burn fossil fuel if we want to prevent climate change. If our priority is change, then certain sectors have to be transformed 100%.” It should also be borne in mind that: “Some sectors are changing radically; for example, the biggest revolution in the field of electric vehicles is being headed by the electric battery manufacturer Tesla, and not Volkswagen.”

The second type are companies that do not have such polluting effects in their core business, but use finite energies to provide their services. Here we should highlight companies that are revolutionizing the use of renewable energies; for example, several vineyards in La Rioja have incorporated windmills.

The third block is comprised of companies that set out a long-term strategy and visualize the necessary services in a renewable, efficient and intelligent system: car-sharing services - hourly car rental service, carpooling - shared private transport system, demand management, ecological food and its distribution, etc.

Finally, she emphasized that the government has the responsibility to make the reduction of gas emissions compatible with a healthy economy.

In this second section, different actions were presented that could mitigate climate change: a) A State strategy to reduce emissions by between 7% and 8% per year and reduce the average temperature on the planet by 1.5 degrees; b) Strict fiscal regulation for finite energies; c) Sustainability conceived as a fundamental, basic and obligatory value for any product; d) The Mediterranean climate being favorable in promoting renewable energies; e) Internalization of social and environmental costs; f) Emergence of the collaborative economy; g) Transformation of the energy, transport and poultry sectors as major emitters of GHGs; h) Control of services provided by companies that use finite energy; i) Promotion of long-term sustainable strategies.

VI. ENVIRONMENT

What factors do you consider key in a company to preserve the environment? What measures should be taken?

Joan Barfull started the debate by stating that companies act appropriately from an environmental point of view when they minimize consumed resources and look for ways to reuse them. He also stated: “What the company produces must be easily recyclable or reusable. In addition, they have to make an effort to communicate it to their customers and consumers. Having environmental certifications such as ISO 14001 or the environmental quality label EMAS helps.”

In a complementary sense, according to Barfull: “The development and use of renewable energies at SME level in Spain is legislatively complicated.”

He went on to say that: “Pollution is not free. Regulation always determines the control and penalty system. If there are repeated infractions, companies can even be closed down.” The latest regulations favor the segregation and separate management of each type of waste. He added that the good practices some companies implement should be encouraged in a positive way, via positive taxation.

Pere Macias highlighted two factors: transport and travel. He explained that companies can influence both, starting, for example, with workers’ travel. In France, if you go to work by bicycle you have a higher salary and the company receives public subsidies. Some companies are organized to achieve the highest levels of sustainability even at the level of transportation.

He then argued that historically the use of the territory has consisted in segregating uses and that industrial estates have been separated from cities for this reason, although most operations do not currently require any special kind of segregation. Widely dispersed industrial estates force workers to travel, their geolocation hinders their mobility and the resulting organization of public transport is expensive and inefficient. This indirectly encourages the use of the private car.

Another relevant factor: energy. He explained that historically in Spain there has been much progress in cogeneration but that this model is partly in crisis. For Macias, another revolution is on the way: that of storing energy. Tesla and other manufacturers are applying the latest technological advances to optimize the capacity of batteries to such an extent that cities like New York are building energy storage facilities, which allows the city to operate more efficiently. One of the most revolutionary ways of storing energy is through the use, recycling and reuse of used vehicle batteries. Energy storage should also be considered for shared use on industrial estates.

Josep Serra introduced teleworking as an option that would avoid the environmental costs of transport, contaminants and large consumers of energy resources. He also introduced the concept of the local market, as a counterpoint to the corporate fashion of promoting import and export.

Imma Pérez spoke about energy use, highlighting management by objectives, teleworking and flexible timetables as factors that increase energy savings. There are now apps that report on traceability and environmental emissions by companies, which makes it easier for consumers to decide on their sustainable purchase.

She also noted the Unilever strategy of optimizing the transportation of merchandise by studying routes according to whether or not they require cold storage to emit less CO2 and increase profits.

She also referred to Knoor, which has involved more than 350 farmers in Extremadura in improving its production processes, increasing the amount produced, decreasing water consumption by 20% and making its products more sustainable; the measure has even brought back the local biodiversity.

She explained that in 2008 she had the opportunity to participate in a project that linked equal opportunities to productivity. The aim was for workers to work more efficiently based on their satisfaction. It involved 32 companies simultaneously and had a direct impact on some 3,000 people. More women than men work in the handling plants of many companies in the Vallés area. Due to the constraints of raising children and a lack of public transport, there were high absenteeism rates that ended in penalties and

sackings. On the one hand, the situation had a strong social impact for the families that were unemployed and, in turn, the company lost productivity due to absenteeism and the need to re-incorporate new workers and train them. In the municipalities of Rubí and Barberà del Vallès, the production chain schedules were scaled, making them compatible with those of public bus services. The measures increased loyalty, improved the working environment and increased productivity.

Another aspect highlighted by Pérez is the need to promote guided responsible activism among citizens. Raising awareness through educational actions is key to this end.

According to Sara Pizzinato, it is crucial that companies have a sustainable strategy. One of the aspects that stands out as fundamental is location, as Macias mentioned, to guarantee a sustainable mobility plan.

Regarding the idea that companies collaborate to optimize costs, she explained the case of Google, which agreed with Greenpeace to become 100% renewable. In the Netherlands, in collaboration with Siemens and another company, Google has signed a 25-year contract at a guaranteed price with a group of farmers and ranchers to invest in and receive renewable energy.

Also, with regard to managing energy demand, there are several options even if the company does not have battery storage capacity. Certain production processes can adapt their consumption to increase activity at off-peak times or slow down activity when demand increases.

Finally, she highlighted financing cooperatives, which support projects that have a positive effect on the environment: enhancing photovoltaic panels, purchasing sustainable wood, energy reform in a store, etc.

Measurable and objectifiable criteria are required, since money is not neutral. It is important to know whether a bank invests in coal or in weapons.

She also criticized the role of the State in favoring large electricity companies that do not pay the costs of CO₂ emissions as stipulated by the Kyoto Protocol. Even though they are the ones that make the most use of carbon and gas plants, it is always citizens who end up footing the bill.

Labeling products to inform the consumer is recommended. It would be positive if bad practices could be labeled: "This product has high emissions" or "This product is toxic".

Dr. Carmen Echazarreta, Assistant Professor of Audiovisual communication and advertising and Director of the Arpa Research Group, agreed with regard to labels and added: "I think they are very important in reinforcing the decisions of committed consumers, because they affect the conscience. This type of process leads the consumer to pay a little more if necessary for a sustainable product and at the same time to penalize certain companies, such as some in the textile sector, which have transnationalized their production processes in a perverse way."

In certain cases, the multinationals control the agenda setting of some media in such a way that they manage to hide

bad practices with respect to sustainability, meaning that information is lacking.

This third block highlighted that the key factors in a company when it comes to preserving the environment are: a) minimizing consumed resources and looking for ways to reuse them; b) manufacturing easily recyclable or reusable products; c) having environmental certifications or environmental quality stamps; d) segregating and managing each type of waste separately; e) positive taxation; f) transport, travel and sustainable mobility; g) energy storage; h) energy demand management; i) labeling; j) strategic management of the territory: location of industrial estates, empowering the local market; k) equal opportunities, teleworking and flexible hours; l) communicating sustainable processes to customers and consumers; and m) raising awareness through educational actions.

VII. MOBILITY

Thinking in terms of actions aimed at promoting mobility, which would generate the most impact? Which can be fostered via business initiatives? (collective public transport, electric vehicles, clean and non-motorized mobility systems)

Pere Macias began this section: "I like to define mobility as a historical process. When the railroads first appeared, people discovered that they could move collectively, comfortably, safely, with a certain speed, that they could move goods... Territories with a railroad were very different from those without one. It was the period of "We can move". In the 20th century when Henry Ford began to produce the Ford T on a massive scale, mobility changed. Anyone with a car said "I can move". Society was transformed to the point that people went to live on housing estates, the American system, and not next to the railway station. Now we are in the "I need to move" phase. Faced with this situation, there are some aspects that are the responsibility of society, others the administration and others still, such as mobility or logistics, that fall on companies.

At present, there are battles going on such as the need to organize efficient and affordable public transport systems; technological advances such as electric vehicles can help; energy storage to promote mobility or transport on demand. It is important that everyone assumes their mobility in a wise way, one step beyond smart or intelligent. It is also worth noting the importance of convincing citizens about the use of sustainable means of transport like the bicycle.

The administration has to take decisions such as the development of a large linked-up network so that cyclists can access and park anywhere. "Those societies that know how to build bridges between citizens, administrations and companies are going to advance the most. Sometimes you have to take unpleasant decisions, as the Norwegians and the mayor of Paris did when they banned the entry of diesel vehicles because of the high pollution rate and harmful effects on health."

Imma Pérez stated that "It is important to note that society is increasingly becoming accustomed to car sharing, using bicycles and being a user of public transport. With

regard to public transport, people would especially like to use the train to go to work, but cannot trust it because it is not always on time and the company penalizes them for being late. The administration must make an effort to improve public transport and businesses to promote flexible hours and teleworking.”

She also reflected on the fact that sustainability and social responsibility are related to innovation. In this country, “innovation lives in solitude. First people think you’re weird, and then they copy you”. Committing to collaborative innovation is key for the future. It only requires belief and overcoming resistance to change.

With regard to innovation, Pere Macias believes that there are innovative ecosystems in our country, such as the 22@ District in Barcelona, and that many entrepreneurs are committed to innovation. Although it is true that for some years there has been a certain ideological hegemony of seeking assurances and staying in the comfort zone; in this sense innovation involves risk.

Joan Barfull criticized the fact that there are companies that will not select candidates if they travel to work by train. He also said that mobility plans are only regulated for larger companies. Small and medium-sized companies only have them based on their own convictions.

Sara Pizzinato highlighted that the reality of daily life forces us into an irrational mobility. She also criticized the way in which goods are transported. There are large international agreements for the import and export of certain products that are grown or produced here.

If we analyze greenhouse gas emissions in the different economic sectors, transport is the only sector where they are increasing in Europe, all others are reducing their emissions. Within transport, goods have a very important impact, but so does the mobility of people. Within this, private cars account for almost half of the emissions.

To reduce emissions, the number of kilometers goods and people travel should be reduced. Mobility on demand, public transport, bicycles, etc. also favor the reduction of emissions.

The second aspect is the electrification of transport, feasible for all types of transport and more complicated for aviation and international shipping. Currently in Europe there are 8 million electric bicycles and electric motorcycles. The electric car has autonomy limitations, it should probably be conceived as a mini bus for four people. In Spain, 30% of the train system is pending electrification and still depends on diesel locomotives.

A third aspect is increasing the occupancy of all types of vehicles: buses, trains, bicycles, motorcycles, cars, etc., although this does entail a change of mentality in the system, rethinking the ownership, service and use of vehicles.

A fourth element for reducing emissions is promoting proximity between work and school. It is estimated that 80% of movements by transport are captive. Josep Serra highlighted the need to commit to a balance in the territory, criticizing the overpopulation of cities while everywhere else is

underpopulated. He stated that “If people could live in villages in a deconcentrated way, they could access companies intelligently.”

Marc Casadellà, Director of Par3 Pitch & Putt Gualta, President of the Catalan Pitch and Putt Association and promoter of the *Burricleta*, an electric bicycle used in tourist activities, stated that the number one problem we have is saving the planet. Large doses of social awareness are required.

He explained that, as an industrial engineer, he has applied various measures to his Pitch and Putt course, which is located in a town of 300 inhabitants where he was born. He explained the difficulties that arose when he decided to buy the first electric lawn mower to be used in Spain from the United States. It only had 3 or 4 hours of autonomy, so he added a solar panel on the roof that fed an additional 5% energy and according to his calculations allowed him to save around 90% in consumption. And it did not generate noise pollution. At first he recalls that the biggest problem was with the people who had to drive the machine, because they did not trust it. They also decided to install solar panels to feed the underfloor heating and not to install air conditioning on the premises because it is only used a few specific days each year.

In the fourth section, the following actions aimed at improving mobility were highlighted: a) efficient and affordable public transport; b) electric vehicles; c) bicycle use; d) car sharing; e) transportation and mobility on demand; f) electrified transport; g) energy storage; h) improving freight transport; i) decision making by the administration; j) mobility plans; k) collaborative innovation and innovative ecosystems; l) increased occupancy of vehicles of all types; and m) proximity of work and school.

VIII. SOCIAL RESPONSIBILITY

Corporate social responsibility (CSR) applied to climate change and the environment is in fashion, because it is strategic for many companies, but how should social responsibility for the environment be applied to make it something more than a strategy?

Joan Barfull began by explaining a project centered around SMEs and developed three years ago that aimed to diagnose how they addressed CSR in environmental, economic and social terms. The results indicated that in most cases companies were working on some of the areas of CSR without the need for a quality stamp or certification. In all cases, they did so because it was practical and profitable. They believed that CSR improved the working environment, communication and participation in the company. Initiatives were implemented such as vehicle sharing, timetable flexibility, etc. They also concluded that in none of the cases were the measures communicated to improve their corporate image.

Josep Serra thinks that we have to raise awareness among companies and individuals, because in these times of crisis many of them go in the opposite direction from sustainability. Imma Pérez explained that it is common misconception that CSR is for large companies and expensive. It is important to draw up a strategy linked to concrete actions

and to measure it. It is also worth noting that it generates profitability. Pérez explained that the concept of CSR is being redefined and updated with “Sustainable Development”. Another positive aspect of this type of measure is that: “When companies achieve a good working climate and good economic returns, they attract talent. In five years, the so-called generation Y, also known as the millennial generation, will occupy jobs and we have to attract good people and generate companies heading in the right direction that make money but are sustainable and ethical.”

Finally, she explained the concept of intrapreneurship, which consists in carrying out entrepreneurial activity in the heart of an organization that already exists. Thanks to this, innovative initiatives are implemented to improve the business model, which can be a source of hope and motivation for many people.

Pere Macias criticized the RSC practiced by some of the big corporations, which are merely greenwashing: websites, fantastical reports, etc. He related an anecdote that a petrochemical company in Tarragona had an accident and to alleviate the effects of it wanted to do something for society. The administration ordered them to put up large informative billboards to report their emissions, and they did not like the idea. They ended up making a magnificent book about the landscapes of Tarragona.

He believes that small businesses carry out other types of actions that have a real impact. It is important to value and compensate the environment that allows you to make your products and services and consume them.

Marc Casadellà added the idea of proactivity as an important element in promoting sustainable development. He explained that we sometimes talk about businesspeople and workers as if we were in the midst of the industrial revolution, even though concepts have changed radically: “Today you are one thing and tomorrow another. The difference is between those who believe that the future depends on them and those who believe that their future has to be resolved by someone else. Proactive and passive. On Earth, there are those who dare and those that do not.”

Finally, Sara Pizzinato added the aspect of motivation, which the company has to promote among its workers in order to favor a CSR-friendly environment.

She thinks that companies should guide their CSR strategies in the core business as their main activity - improving it, setting objectives, strategies, etc. “If what you’re doing is compensating, penance, then you’re just greenwashing.”

In this final section, the following key aspects of CSR have been highlighted: a) CSR strategies aimed at the core business, the main activity; b) why they are practical and profitable; c) no need for a seal or certification; d) no need to communicate measures to improve the corporate image; e) they are not expensive; f) they are not only for large companies but for all; g) strategies linked to concrete and measurable actions; h) they attract talent; i) sustainable and ethical actions; j) intrapreneurship; k) proactivity; l) motivation, and the need to compensate the environment that

allows companies to make their products and services and for them to be consumed.

IX. CONCLUSIONS

Based on the results of the forum, a series of differential characteristics of sustainable companies are highlighted in four areas:

➤ *Minimizing consumption and promotion of renewable energies:*

Energy storage;

- A favorable Mediterranean climate to promote renewable energies;
- Communication of sustainable processes to customers and consumers;
- With short and long-term vision, internalizing the impacts it has on its environment and thinking about future generations; Labeling to guide consumers regarding consumption;
- Manufacturing easily recyclable or reusable products;
- Energy demand management;
- Internalizing social and environmental costs;
- Minimizing consumed resources and looking for ways of reusing them;
- Segregation of and separate waste management;
- Sustainability conceived as a fundamental, basic and mandatory value for any product;
- Transforming the energy, transport and poultry sectors as major emitters of GHGs.

➤ *Mobility*

- Energy storage;
- Increasing in occupancy of all types of vehicles;
- Bicycle use;
- Car sharing;
- Electrifying means of transportation;
- Improving freight transport;
- Mobility plans;
- Transportation and mobility on demand;
- Transport, travel and sustainable mobility;
- Electric vehicles.

➤ *Social, economic and environmental business management:*

- Concrete and measurable actions;
- Attracting talent;
- Collaborative actions, even with the competition;
- Contribution to improving the environment in which activities are carried out;
- Collaborative economy;
- Innovative ecosystems;
- Sustainable business strategies;
- Ethics;
- Timetable flexibility;
- Equality of opportunities;
- Collaborative innovation;
- Intrapreneurship;
- Motivation;
- No to greenwashing;
- Proactivity;

- No need to communicate the measures to improve the corporate image;
- Sustainable actions as part of the core business or main activity;
- Teleworking;
- Transparency.

➤ *Public administration*

- Awareness raising through education;
- Monitoring services provided by companies that use finite energy;
- State strategy to achieve a reduction in emissions of between 7% and 8% per year to reduce the average temperature of the planet by 1.5 degrees;
- Positive taxation;
- Strategic management of the territory: location of industrial estates, empowering the local market;
- Promotion of environmental certifications or seals of environmental quality;
- Promoting long-term sustainable strategies;
- Proximity of work and school;
- Rigorous fiscal regulation for finite energies;
- Efficient and affordable public transport.

Defining qualitative and quantitative indicators based on the conclusions of the forum “Sustainable companies, tackling climate change” will provide a tool for the creation, management and business promotion of sustainable management in organizations, minimizing the emissions of finite energies and boosting renewable ones.

In line with that posited by Echazarreta and Costa (2018), we highlight the need for a unifying model, based on the results of the literature review and the discussion forums centered on inclusivity, sustainability, and technology working to improve quality of life. Some experimental studies are also needed to contrast the suitability of the indicators defined by the various professionals in order to identify and support companies with values. Finally, we recommend the development of an easily applied instrument for businesses with the aim of applying the described values in organizations.

As with the first and second forums, the results and conclusions of the current debate need to be confirmed in subsequent research that includes other experts in the field as well as a different research methodology. Faced with these new challenges, research in this field must continue to be both multidisciplinary and systematic.

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Sustainable Companies, Addressing Climate Change. A Theoretical Review

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Abstract

Climate change is an unavoidable threat with potentially irreversible effects. In the current economic context, globalization significantly increases the unbalanced use of finite, non-renewable sources of energy. This study aims to describe the main characteristics of sustainable companies, based on ideals and values that are committed to the development of the planet, consuming fewer resources than those that they create. Sustainable companies are based on fundamental principles such as the environment (renewable energy resources, sustainable development, preservation of the environment, responsible energy use, minimization of emissions, eco-efficiency, and the circular economy) and mobility (collective public transport, electric vehicles, clean non-motorized mobility systems). In light of this situation, a number of improvement actions have been proposed aimed at sustainable business development (smart environmental sensor networks, energy efficiency, integrated water cycle management, efficient lighting, smart metering, smart irrigation, environmental protection, smart waste management, smart public transport, monitoring of tolls and access to restricted areas, traffic management, fleet management, smart parking, and electric vehicles). Following a theoretical review of the main related studies, it is concluded that there are gaps in information and research related to climate change. At the same time, a further conclusion is that the instruments currently used to mitigate its effects are insufficient and inadequate. Greater indexes of governance and transnational strategy are urgently needed. Finally, there is also a need for sustainable companies that combine business development with the environment and the protection of the planet.

Keywords: sustainable companies, environment, climate change, environmental degradation, waste generation, sustainable development, mobility

1. Introduction

According to the Paris Agreement pursuant to the Framework Convention on Climate Change organized by the United Nations, “climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries, and their participation in an effective and appropriate international response, with a view to accelerating the reduction of global greenhouse gas emissions”. The UN therefore proposes “holding the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change”. (United Nations, 2015).

In this respect, according to Kramers, Höjer, Lövehagen, and Wangel (2013), variability in rainfall can put the supply of fresh water at risk, affecting more than 40% of the world population. In addition, the increase in carbon dioxide emissions has harmful effects on all of the planet’s ecosystems. According to Eguiguren (2011), to combat the effects of climate change through the sustainable development of companies: “A sustainable human system or behaviour is required, committed to the harmonious development of the planet and of humanity which, acting out of a full sense of responsibility, contributes to the wealth and the common good and does not consume more resources than it generates”.

The growing threat implicit in a new economic market, marked by the emergence of countries with low production costs, has led companies to adopt ever more competitive strategies. Companies adopt delocalization processes as a means to reduce production costs; however, transport costs and the use of less efficient technology (García, Mora, &

Al  , 2009) result in increased energy consumption. To counteract this form of growth, large reductions in worldwide emissions are needed to urgently confront climate change.

Economic and financial crises are ever more frequent, profound and global, and their effects are felt mainly in social sectors (Hadad Hadad & Vald   Llanes, 2010). Furthermore, climate change is a common concern of humanity; both cases call for measures that respect, promote and take into account obligations on “human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity” (United-Nations, 2015).

In this context, the private sector must adopt measures to combat climate change (Laszlo, 2003). The management of companies requires corporate policies and values that stem from a business culture that is environmentally sustainable. Companies whose mission is based on ideas and values that are committed to the planet contribute to the common good and, at the same time, may produce profits that are similar to other companies (Eguiguren, 2011).

Noting the importance of guaranteeing the integrity of all ecosystems and the protection of biodiversity, business models emerge that are alternatives to capitalist models, such as People, Planet and Profit (3P), developed by Fisk (2010), which suggests that the deficiencies of the current model can be overcome by establishing links between the social, environmental, corporate and economic spheres.

According to Klionsky et al. (2012), sustainable companies act in the market through a sense of responsibility, transparency, democracy, participation and ethics. Additionally, they are created in environments that recognize the need to promote sustainable energies.

This theoretical review aims to show the result of a systematic selection of relevant research into concepts linked with companies and sustainability and to lay the scientific foundations for the definition of an alternative model of creating, leading and managing companies.

2. Sustainable Companies

In 2012 the United Nations carried out a survey to ascertain the opinions held by citizens regarding the challenges facing humanity. This led to world leaders agreeing Sustainable Development Goals (SDG), a set of 17 goals and 169 targets to be met by 2030. On the environmental level, the following stand out: a) Clean water and sanitation; b) Accessible, non-polluting energy; c) Sustainable cities and communities; d) responsible production and consumption; e) Action on climate; f) Underwater life, and; g) The life of terrestrial ecosystems.

In line with such goals, Kramers et al. (2013) proposed that sustainable companies are based on two fundamental principles. The first of these is the environment, defined as the control of the carbon footprint and greenhouse gas emissions (GHG); the monitoring and control of contamination and improvement of air quality; the generation of waste and pollution; environmental sustainability; the efficiency, reuse and recycling of resources; the promotion of renewable energies and improvement of conventional energy; the reduction of water consumption; improvements in air-conditioning and heating; and promotion of green areas. The second is mobility, in the sense of reducing emissions of polluting gases; and efficient, clean and multi-modal transport.

2.1 Environment

The first signs of environmental degradation appeared in Europe towards the end of the 1960s, and this spurred the international community to question an economic model in which industry appropriates the natural world, over-exploiting non-renewable natural resources, and leading to the current environmental situation (Kramers et al., 2013).

Globalization significantly increases the imbalanced use of finite, non-renewable energy sources (fossil fuels such as oil, coal and natural gas; and radioactive isotopes such as uranium and plutonium). Various studies have concluded that, should consumption continue at current rates, finite energy sources will run out in 2050. As a response to this situation, environmental sustainability as the axis of counter-globalization is at the heart of the World Social Forum, held annually by a range of social movements; it celebrates diversity, discusses relevant subjects and seeks solutions to social problems that arise from neo-liberalism and economic globalization (Kuklinski, 2007).

Secondly, as argued Quesada (2009), the sustainability of the planet is further put at risk by climate change. He analyses the main effects of climate change, among which are rising sea-levels, heat waves, violent storms, drought, the extinction of species, disease, and the melting of glaciers. He also highlights government-led measures that favour sustainable development such as the Kyoto Protocol on Climate Change and even make them more ambitious before 2020; the Spanish Government’s National Plan on Emission Allocation; and, most specifically, the Paris Agreement of 11th December 2015 in the Framework Convention on Climate Change.

A third subject that, according to Arroyave Rojas y Garcés Giraldo (2012), should be approached is waste generation, in particular greenhouse gas emissions, highlighting increases in nitrogen oxides, carbon dioxide and methane, along with aspects that cause further problems, such as deforestation. Waste adds an extra cost to the production process, as it implies poor use of raw materials; furthermore, treatment costs and deterioration in the quality of life also result in significant economic, environmental and social impact. The main techniques to minimize waste and prevent pollution can be divided into four groups. These are, the most accurate inventory possible of products; modification of production processes; reduction of volume of waste, and; waste recovery.

Fourthly, the WHO states that atmospheric pollution is the main environmental risk factor in avoidable death. The air we breathe should be as clean as possible; this involves an effort to control the maximum limits of sulphur dioxide, nitrogen dioxide, particles, lead, benzene and carbon monoxide.

Governments first proposed zero growth measures, under which pollution and recycling levels would be the same, contributing to an ecological balance. Numerous policies were introduced creating recycling systems that would be funded by those who polluted. The general public were made aware of the problem by contributing to the cost of recycling, funding this ecological balance.

Such a proposal is, however, technically utopian, as many existing resources can neither be renewed nor recycled; it would thus also result in harm to the environment, albeit slower. The idea of placing a value on natural resources and maintaining sustainable development was consequently discarded (Calomarde Josés 2000).

The World Commission on Environment and Development produced the concept of sustainable development, by which economic progress should meet current energy needs without compromising those of the future. It is, thus, about making management of natural resources, the positive impact on the environment and the promotion and care of nature all compatible with economic development.

In stabilised, balanced natural surroundings, business development should be compatible with the environment and protection of the planet through sustainable development.

According to the guidelines of Eguiguren (2011), sustainable companies should seriously confront a wide range of subjects, that go from the optimisation of natural resources to the handling of waste, to training and raising awareness of staff, clients and suppliers. While this is regulated in most countries, every organisation should constantly assess the environmental impact of their actions.

An organisation can only be considered sustainable if it commits itself to the balanced development of the planet, producing neutral activity; by this we mean that it respects ecosystems and that its activity consumes only those resources strictly necessary and, in no case more than those it generates. The use of the 'three Rs' is recommended: reduction of emissions of CO₂ and other greenhouse gases; recycling of waste for later use in other activities or production processes; and recovery of other resources, fomenting the use of renewable energies (Roseland, 2012).

Actions aimed at preserving the environment will also be important in two areas, such as water consumption and food. There should be research into and promotion of techniques that aid in growing crops that need less water, fewer chemical composts and pesticides. Agriculture could then develop in parts of the planet where there is little water and fertilizer. At the same time, dietary habits need to be changed, away from high-calorie, animal fat and protein based diets to others balanced with vegetable proteins, since these use fewer natural resources and are generally more accessible (Engel, Pagiola, & Wunder, 2008).

In this context, according to Wackernagel y Rees (1998) the ecological footprint is the indicator of the environmental impact of human demand of the resources available in the Earth's different ecosystems. Companies increasingly manufacture products with a large number of parts that can be reused, thus consuming fewer non-renewable materials and energies. There is a growth in the use of renewable vegetal material that requires less fossil fuel in its production.

The corporate ecological footprint is an indicator that can be applied to companies and organizations that can result in a framework for the analysis of bio-productive demand. Data is collected for analysis in variables such as a) energy consumption and intensity, b) natural productivity; c) energy production capacity; d) equivalence factor; e) electricity consumption; f) fuel consumption; g) material consumption (general, in construction and depreciable); h) service consumption, waste emissions and discharges; i) solid waste; j) emissions into the atmosphere and discharges; k) consumption of agricultural resources; l) food; m) consumption of timber resources; n) land use; o) CO₂ emissions and carbon footprint; p) eco-efficiency; q) social and cultural footprint (Barrett & Scott, 2001).

Alongside this, there are a large number of industries who aim to minimise emissions. Symbiotic industries are established where the waste produced by other companies and towns is used as the raw material in other production processes. Water in particular is one of the resources most affected over recent decades; vast resources have been required to mitigate the devastating impact of indiscriminate over-exploitation and gradual pollution.

As a result of the United Nations Framework Convention on Climate Change of Paris, 114 multinationals, among them Enel, Sony, Procter & Gamble, Thalys, Ikea, Carrefour, Kellogg and Wal-Mart have jointly agreed goals to reduce their emission of greenhouse gases in two years, thus keeping global warming at 2 °C.

Sustainable companies increase the use of renewable or alternative natural energy. Such energy is endless or can be naturally regenerated, and includes hydraulic, thermal solar, biomass, solar, wind, geothermal and marine energies.

This context has also seen the emergence of eco-efficiency in the use of fuels such as biomass (timber, agricultural waste, and manure) that can provide energy that substitutes fossil fuels. As fossil fuel use in transport and logistics is highly polluting, policies are called for that realign rural areas and cities. Their transformation into ecologically better balanced systems is vital in order to reduce CO₂ emissions, (Kramers et al., 2013).

Biomass can include liquid agro-fuels such as biodiesel or bio ethanol; gases, such as methane; and solids, like timber. Reaching a balance evidently does not involve using more biomass than that produced by the ecosystem exploited. Developed technologies and recyclable materials should help avoid desertification and contamination of the planet.

A further aspect that should be highlighted is the consumption of eco-efficient materials. An example can be found in construction, where there is an increasing use of materials such as decontaminant cement, natural hydraulic lime, transparent cement, etc. in building and restoration work. Eco-efficient materials normally withstand the weather better, they are logistically cheaper and respect the natural surroundings. On buying such material, the ecological label should be identified and assessed, and the material used in the manufacture of vehicles and computers should taken into account on purchasing them.

When companies provide a service, they should emphasize eco-efficiency in aspects such as waste reduction, land use, the consumption of agricultural, marine, timber and water resources, the analysis of possible water loss and leaks as well as promoting the use of rain water in irrigation (Passetti & Tenucci, 2016).

A notable variable is natural capital. According to Fisk (2010) this refers to those natural resources of the planet and biosphere such as plants, air, oil, animals or minerals that, by producing oxygen, naturally purifying water and preventing erosion and pollination, act as natural ways of producing eco-system goods as they. Examples of natural capital that a company can invest in are a) woodland capital (the natural reduction of CO₂ by forests); b) agricultural capital (sustainable farms, ecological agriculture and energy crops, or; c) marine and fishing capital. The recommendation of the United-Nations (2015) is for the use of “positive incentives for reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks; as well as alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests”.

The sea is also taken to be natural capital, the decline of the fishing industry can be combated through measures for marine development and sustainable fishing.

In the current context, the linear economic model of “take, make, dispose” requires large amounts of energy and other cheap, easily accessible resources; it is, however, reaching the limit of its capacity. In contrast, the circular economy, a model developed by MacArthur (2013), is an alternative based on the principles of “repair and regeneration”; its goal is for products, parts and resources in general to maintain their usefulness and value at all times.

For example, in the linear economy, companies purchase machinery that is amortized over a useful life of four to five years, producing waste that is difficult to reuse and recycle. Under the circular economy, companies purchase the use of machinery. This paradigm shift means that the company supplying the service is responsible for and has the greatest interest in lengthening the useful life of its machinery, through repairs and using longer lasting parts that offer better performance.

The circular economy proposes a continuous cycle of positive development that preserves and improves natural capital, optimizing the use of resources and minimizing the risks of the system through managing a finite quantity of resources and non-renewable flow.

According to Ghisellini, Cialani, y Ulgiati (2016), the circular economy is based on three key principles: to preserve and improve natural capital; optimize resource use; and promote the efficiency of the system. Products are designed so that they can later be taken apart and readapted. As the materials used are non-toxic, they can be easily composted. Artificial materials, polymers or alloys, are designed to be reused with minimum energy and maximum quality. The restorative circular economy means a significant reduction in the energy needed for it to work, in turn permitting the exclusive use of renewable energies. Among the companies that are researching and implementing circular economy systems are Cisco, Google, H&M, King Fisher, Philips, Renault and Unilever. Below are a series of measures linked with key environmental concepts that are developed and applied in sustainable companies (Kramers et al., 2013). (See table 1):

Table 1. Actions of sustainable companies regarding various concepts linked to the environment (Adapted from Barcelona-City-Council (2012))

Joint responsibility: The responsible consumption of goods and services (fair trade, local produce, ecological products, etc.)
Green energy: The saving in natural resources and achievement of maximum efficiency in their production, distribution and use, particularly of water and energy.
Climate change mitigation: The evolution towards a low-emission economy, prioritising the reduction of energy consumption and promoting the use of renewable, lower impact energies.
Emission reduction: The prevention and minimisation of greenhouse effect emissions, reducing them to zero or, should this be impossible, a trend towards energy compensation and self-sufficiency.
Waste reduction: The improvement of waste management, prioritizing in order reduction, reuse and recycling. The increase of compost production.
Noise reduction: The improvement in acoustic comfort. Reduction of noise levels, particularly in the case of motor vehicles.
Sustainable tourism: The advance towards sustainable tourism in balance with the area, and with a positive impact on the local community.
Efficient water use: The saving in natural resources and achievement of maximum efficiency in its production, distribution and use.
Urban green: The increase in urban green areas in industrial estates and other zones.

2.2 Mobility

In order to progress towards an effective logistical and transport system that is safe, sustainable, interlinked, integrated and of low environmental impact, companies will have to gradually renounce those vehicles in their fleet that contaminate, thus contributing to the reduction of industrial pollution (Seisdedos et al., 2015a).

On a global level, the strategic implementation of low-emission industrial zones is needed, as are environmental taxation laws and a range of toll fees that depend on the contamination produced by different vehicles. Such measures promote the introduction into fleets of electric vehicles, or those whose level of emissions is very low; they also contribute to the more widespread use of alternatives to vehicles, such as travelling to and from work by bicycle or public transport (Kramers et al., 2013).

Improving the air that we breathe is an opportunity to reindustrialize the country using the best available technologies, to reduce dependence on oil, foment the electrification of road transport and take the definitive step towards high quality, competitive public transport (Ke et al., 2016).

Kim, Kabir, y Kabir (2015) concludes that road transport is the main source of pollution, both of nitrogen oxides and suspended particles. The increasing amount of traffic and dieselization are the prime causes. An example that was widely reported in the media is that of the accusation made by the Environmental Protection Agency of the USA against Volkswagen of having violated the Clean Air Act. The German car maker was accused of having installed a software system in its four-cylinder diesel vehicles that circumvented regulations on the emissions of certain air-polluting elements, such as carbon dioxide. A number of studies have shown that these vehicles emit pollution up to 40 times above the legal limit.

According to Mollinedo (2014), industrial zones should promote the improvement in conditions of urban mobility and favour rational mobility. Collective public transport (metro, bus, rail, tram, etc.) should be convenient, interconnected with the urban network, frequent and economically competitive. The introduction of special fares is also recommended in order to increase the use of transport and reduce pollution. Users must receive useful, real-time information so that they can save time, change transport easily and contribute to reducing the carbon footprint. Users should also be enabled to give feedback on public transport systems which should then lead to improvements.

Air quality can be improved through a reduction in the number of vehicles on the road and a move towards a low emission mobility model, prioritising electric vehicles as these are currently the only vehicles that produce zero emissions. Measures include rebates in local parking fees, the exemption from paying increased tolls and a rebate in the atmospheric contamination tax, among others.

Buehler and Pucher (2012), say that what is needed is a return to clean, non-motorised systems of mobility for the journeys to and from work, such as by bicycle and on foot. The authors suggest that companies support industrial estates with interconnected infrastructures for daily pedestrian and bicycle traffic.

Ports and airports are fundamental logistical infrastructures, fulfilling commercial, passenger, logistic and energy functions. In such places, the use of Liquefied Natural Gas (LNG) should be fomented along with other fuels as

alternatives to the use of hydrocarbons in boats, heavy goods vehicles and machinery (Dameri & Garelli, 2014).

An example of good practice is Saba, one of Europe's largest operators of car parks. CSR is a central part of its management and promotes a) sustainable mobility (the use of automatic electronic payment), and a mobility management model in urban areas; b) energy efficiency and carbon footprint, c) an integrated waste management and reduced consumption system; d) fleets of electric vehicles, and; e) the integration of disabled people in the workforce.

Below is a series of key mobility-related concepts that are developed and applied in sustainable companies (Kramers et al., 2013). (See table 2):

Table 2. Actions of sustainable companies regarding various concepts linked to mobility

<p>Cleaner air: To improve air quality, particularly regarding nitrogen oxides, suspended particles and allergens. Reduction of motorized traffic, promoting less contaminating fuel and electric vehicles. Promoting the safe use of bicycles. Access to a larger fleet of public transport. Introduction of electric vehicles, prioritising sources of renewable energy.</p> <p>Equitable mobility: To improve universal access to public transport, buildings and spaces, eliminating unnecessary barriers and organising parking. Promotion of non-motorised journeys. Improvement of pedestrian areas.</p> <p>Sustainable mobility: The promotion of strategies that discourage the use of private motorised vehicles. Promotion of efficient driving.</p>
<p>Adapted from Barcelona-City-Council (2012)</p>

2.3 Actions Aimed at Developing Sustainability in Companies

According to Passetti y Tenucci (2016) present and future support for sustainable development opens the way to a new political and business ethics. In this context, a shortage of resources can be combated through **eco-efficiency**, which is the production of more consumer goods and services using fewer resources and creating less waste and pollution. Eco-efficiency can be applied in the use of conventional energy, such as electricity, or in alternative, renewable or green, energies; it can even apply to all energy that does not involve the burning of fossil fuels such as coal, gas and oil. This wide definition also includes nuclear and hydro-electric energy.

Below is a proposal for improvement actions related to a sustainable business management (Seisdedos et al., 2015b). (See Table 3):

Table 3. Actions aimed at developing sustainability in companies

-
- **Smart environmental sensor networks** (automatic detection of noise levels and noise pollution)
 - **Energy efficiency** (use of high energy efficiency equipment - cogeneration, high efficiency boilers, home automation - and solutions that promote energy consumption management in air conditioning, lighting and elevators...)
 - **Management of the entire water cycle** (use of technology to make water a closed cycle: collection, transportation, distribution, sewerage, consumption reading, billing, payment collection, treatment and purification,...)
 - **Efficient lighting** (use of LED technology, smart, on-demand or presence sensing lighting systems)
 - **Smart metering** (telemetry of water, gas and electricity consumption, providing better information that favours savings and efficiency in consumption)
 - **Smart irrigation** (automation of irrigation and sensor networks to measure when and how much irrigation is required)
 - **Environmental protection** (detection of and reaction to environmental emergencies: leaks, fires, etc...)
 - **Smart waste management** (real-time information on fullness levels of garbage containers; dynamic programming according to garbage truck routes, etc...)
 - **Smart public transport** (priority for public transport at traffic lights, integrated management of fares between bus, subway, and suburban rail network, real-time information on incidents and frequencies, digital advisory services for travellers, etc.)
 - **Monitoring of tolls / access to restricted areas** (automatic identification of authorized vehicles, automated charge for using toll roads,...)
 - **Traffic management** (traffic prediction, smart traffic lights, real-time information for drivers, notices about incidents, digital advice services to drivers, etc.)
 - **Fleet management** (ecological propulsion vehicles, real-time GPS localization, digital management and tracking of consumption, performance reports, maintenance management, etc.)
 - **Smart parking** (real-time information on availability of parking spaces, reservation of spaces online, variable parking rates, etc.)
 - **Electric vehicle** (vehicle charging networks, information systems for location and availability, public rental systems for electric vehicles, etc.)
-

Adapted from Barcelona City Council (2012); Seisdedos et al. (2015b)

3. By Way of Conclusion

The conclusion, after having analysed a range of previous studies into sustainable companies, is that they may be a useful alternative with which to overcome the deficiencies presented by the current energy model, providing a progressive and efficient solution to the pressing threat of climate change.

The study assesses the approval of the Paris Agreement on Climate Change by 195 countries, which sets a limit to the emission of greenhouse gases, establishes a funding system, as well as measures to combat climate change. In line with the summit's conclusions, the axes that are deemed determining for the environment and mobility are: "(a) Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change; (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development".

The studies analysed highlight firstly the need for an in-depth analysis of companies that are based on such factors as being smart and inclusive, both of which are necessary complements to sustainability. According to (Seisdedos et al., 2015b), "The challenge for companies is to make economic development, respect for the planet and a better quality of life compatible with one another. As in other sectors, information and communication technologies are giving rise to smart management. Like cities, companies are responsible for most of the environmental impact made by human beings. They are large consumers of natural resources (water, energy, raw materials, ...) and generate huge amounts of waste."

Secondly, in order to create, lead and manage companies that have a value, a smart, sustainable and inclusive integrating model based on joint responsibility, green energy, climate change mitigation, emission, waste and noise reduction, sustainable tourism, efficient water use and urban green. The present theoretical review takes into account the global commitments of the United Nations Framework Convention on Climate Change of Paris (United Nations, 2015); the Kyoto Protocol: International Convention on Preventing Climate Change; models such as *People, Planet Profit*, by Fisk (2010) and Eguiguren (2011) are interesting studies.

Thirdly, scientific studies are needed that define qualitative and quantitative indicators to assess this new model through the use of new technologies which, as Seisdedos et al. (2015b) conclude, may be summarized as follows: a) Smart environmental sensor networks; b) Energy efficiency; c) Integrated water cycle management; d) Efficient lighting; e) Smart metering; f) Smart irrigation; g) Environmental protection; h) Smart waste management; i) Smart public transport; j) Monitoring of tolls and access to restricted areas; k) Traffic management; l) Fleet management; m) Smart parking, and n) Electric vehicles.

Finally, experimental studies are required that can assess the results of the introduction of this model. The development of didactic content and informative and training material is recommended to raise the awareness of and train the public in general as well as staff, suppliers and clients.

The results of this study are preliminary and have to be confirmed through further analysis. Research in this field should be continuous and multi-disciplinary.

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Estudio y conceptualización del “Valómetro”: un sistema de indicadores empresariales para la gestión basada en valores

Study and conceptualization of the “Valometer”: A system of business indicators for values-based management

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Abstracts

[ES] **Introducción.** Ante amenazas y retos económicos y sociales como la globalización, las crisis económicas, el trabajo infantil, el cambio climático y la transformación tecnológica, se presentan los resultados, conclusiones y recomendaciones de un estudio y conceptualización del Valómetro, un sistema de indicadores empresariales para la gestión con valores. **Metodología.** Se centra en el uso de tres técnicas complementarias. La primera fase de diagnosis exhaustiva consta de cuatro revisiones bibliográficas focalizadas en la inclusividad, la sostenibilidad, la tecnología y la comunicación. En la segunda fase, a través de un muestreo intencional teórico se seleccionan 50 profesionales-expertos (científicos y profesores de distintas disciplinas académicas y empresarios, emprendedores, técnicos y asesores de distintos sectores empresariales) que participan en tres grupos de discusión semiestructurados combinados con entrevistas cualitativas en profundidad para conceptualizar conjuntamente el Valómetro. **Resultados.** La herramienta resultante consta de 50 criterios e indicadores construidos científicamente y divididos en 5 ámbitos: A) Identidad; B) Administración y gestión; C) Personas; D) Sostenibilidad y E) Tecnología. **Conclusiones.** Los datos obtenidos en un muestreo reducido de empresas que han utilizado la herramienta en modo piloto sugieren que el Valómetro puede resultar una herramienta útil para la gestión empresarial con valores.

[EN] Introduction. In light of economic and social threats and challenges such as globalization, economic crises, child labor, climate change and technological transformation, this paper presents the results, conclusions and recommendations of a study and conceptualization of the Valometer, a system of business indicators designed to facilitate management with values. **Methodology.** It focuses on the use of three complementary techniques. The first phase comprised the exhaustive diagnosis of four bibliographic reviews focused on inclusiveness, sustainability, technology and communication. In the second phase, theoretical intentional sampling was used to select 50 professionals-experts (scientists and professors from different academic disciplines, businesspeople, entrepreneurs, managers and advisors from different business sectors) to participate in three semi-structured discussion groups combined with qualitative in-depth interviews to jointly conceptualize the Valometer. **Results** The resulting tool consists of 50 criteria and indicators constructed scientifically and divided into 5 spheres: A) Identity; B) Administration and management; C) People; D) Sustainability; and E) Technology. **Conclusions** The data obtained from a small sample of companies that have used the tool in pilot mode suggest that the Valometer may be a useful tool for facilitating business management with values.

Keywords

[ES] Valómetro; “Vusiness”; empresas con valores; indicadores empresariales; gestión con valores.

[EN] Valometer; “Vusiness”; companies with values; business indicators; management with values

Contents

[ES] 1. Introducción. 2 Método. 2.1. Estrategias metodológicas. 2.2. Población y muestra. 2.3. Instrumentos de recogida de información. 2.4. Procedimiento. 3. Resultados. 4. Discusión y conclusiones. 5. Agradecimientos. 6. Referencia bibliográficas.

[EN] Introduction. 2 Method 2.1. Methodological strategies. 2.2. Population and sample. 2.3. Data-gathering instruments. 2.4. Procedure. 3. Results. 4. Discussion and conclusions. 5. Acknowledgments. 6. Bibliographic references.

1. Introducción

Según Echazarreta y Costa (2018b) en la sociedad actual se presentan una serie de problemáticas y retos económicos y sociales como son la globalización, las crisis económicas, el trabajo infantil, el cambio climático y la transformación tecnológica, que deben ser afrontados para un desarrollo global sostenible que permita erradicar las desigualdades y la pobreza, proteger el medio ambiente y garantizar la prosperidad de la sociedad.

En los últimos cuarenta años, la tecnología, que ha transformado la mayor parte de los procesos productivos industriales, y los cambios en los sistemas políticos, se consideran los dos factores determinantes en la aparición de la globalización (de Urdanivia, 2018).

García, Mora y Alés (2009) estiman que “la pérdida de competitividad de la producción local ante el mercado global por los elevados costes salariales, así como la aparición de países con bajos costes de producción, acelera la deslocalización e internacionalización de las empresas. Este fenómeno produce efectos profundos con costes sociales muy elevados, ahondando la brecha entre ricos y pobres. Sobre la globalización afirma Bauman (1999): “Beneficia mucho a muy pocos, a la vez que excluye o margina a dos tercios de la población”.

En segundo lugar, según los autores: “Las crisis económicas y financieras se hacen cada vez más frecuentes, profundas y globales y su repercusión ocurre fundamentalmente en los sectores sociales. En este contexto, la desaceleración económica ha aumentado significativamente el número de personas

en situación de pobreza y exclusión; han disminuido los recursos, los sistemas de protección social así como determinadas prestaciones propias del estado de bienestar.”

Para Rocha y Aragón (2012) en Europa en el período de 2008 a 2012 se han destruido 7,2 millones de puestos de trabajo y creado 2,4 millones, lo cual representa un saldo negativo de casi 4,8 millones de empleos. En España, el crecimiento exponencial de empleabilidad en el sector de la construcción con la posterior burbuja inmobiliaria, así como la política de recortes ante la situación de crisis, ha agravado la situación de grupos sociales que han quedado sin trabajo. En el primer trimestre de 2013 el número de desempleados alcanzó la cifra máxima de 6,2 millones y la tasa de paro el 27,16% (Gómez-Ruiz, 2018).

Respeto al trabajo infantil, afirma Briceño y Pinzón (2004) que: “Más de 246 millones de niños entre los 5 y los 17 años se encuentran actualmente trabajando en todo el mundo y 180 millones se encuentran sometidos a las peores formas de trabajo infantil, como lo son la explotación sexual, las tareas domésticas, el trabajo en minas, en fábricas de fuegos pirotécnicos y en los conflictos armados.” Según los autores destacan tres causas del trabajo infantil como son la pobreza, la creencia que es bueno y la falta de políticas socioeconómicas en contra del trabajo infantil. La edad mínima de admisión al empleo o al trabajo es un concepto clave para alcanzar la abolición efectiva del trabajo infantil.

En cuarto lugar, acerca del cambio climático, según Carballosa (2017) “Los mayores estudiosos del clima del mundo consideran que la actividad humana es muy probablemente la causa principal del aumento de la temperatura registrado desde mediados del siglo XX” y sigue “Dichos cambios en el clima ya están teniendo una considerable repercusión en ecosistemas, la economía de los países, la salud humana y el bienestar de la población y las previsiones; y no se prevé que se reviertan a medio plazo”.

Para revertir esta situación, en coherencia con el Protocolo de Kioto sobre el cambio climático que limita las emisiones y compromete los países firmantes a establecer medidas para reducir las emisiones y fomentar las energías renovables, Echazarreta y Costa (2018c) concluyen: “Las empresas sostenibles se basan en dos principios fundamentales como son el medio ambiente (recursos energéticos renovables, desarrollo sostenible, preservación del medio ambiente, consumo responsable de energía, minimización de emisiones, ecoeficiencia, economía circular) y la movilidad (transporte público colectivo, vehículo eléctrico, sistemas de movilidad limpios y no motorizados)”.

Finalmente, un quinto aspecto clave que provoca cambios significativos en el mercado laboral y en la economía global es la transformación tecnológica. Ceballos (2016) afirma acerca de la industria 4.0: “La confluencia de tecnologías posibilita a la industria inimaginables oportunidades, definiéndose así un nuevo modelo industrial, a partir de la digitalización”. Según dicho estudio el nuevo modelo productivo implicará la desaparición progresiva de la actual producción en masa.

Afirma Recio (2018): “Algunos expertos que han hecho estudios empíricos en países muy industrializados, como Alemania, han encontrado que el desempleo no es el único problema y que aparecen otros fenómenos, como las desigualdades que se crean entre los integrantes del mundo laboral por las diferencias en las retribuciones, que suponen también importantes cambios estructurales en el mercado de trabajo.”

Un estudio de Frey y Osborne (2017) consistente en un análisis exhaustivo de las ocupaciones el mercado laboral de Estados Unidos concluye que el 47% de los trabajos presentan un riesgo elevado de desaparecer como consecuencia de la transformación digital en los próximos veinte años. En un sentido similar, Arntz, Gregory, y Zierahn (2016) estiman un impacto sobre los sitios de trabajo de entre el 25 y el 45%.

En contraposición, afirma Seghezzi (2016) que la robotización de la industria y la digitalización del sector servicios, puede suponer oportunidades de generación de ocupación. Por su lado, Todolí-Signes (2017) reflexiona acerca de la economía colaborativa y su capacidad disruptiva en el mercado virtual gracias a la transformación de la red.

Eguiguren (2011), director ejecutivo de The Global Alliance for Banking on Values (GABV), concluye que la gestión de las problemáticas y retos identificados aceleran la investigación sobre modelos de gestión económica y empresarial alternativos, capaces de ofrecer una mejor alternativa ante las carencias que presenta el actual modelo basado fundamentalmente en el capitalismo. Según el autor, las empresas deben ser lideradas por valores corporativos basados en la sostenibilidad, ética, responsabilidad, transparencia, democracia y participación.

Con el mismo objetivo, la Universitat de Girona promueve un estudio para conceptualizar el Valómetro, un sistema de indicadores empresariales para la gestión con valores, cuya metodología de investigación consiste en cuatro revisiones bibliográficas, tres foros y entrevistas en profundidad. La herramienta se enmarca en el proyecto Vusiness [del inglés Business, negocios, pero con “V” de valores] que pretende promover las empresas sostenibles, inteligentes, abiertas, democráticas e inclusivas, que tienen que inspirar el futuro, impulsado por el Grupo de investigación Arpa (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales) del Departamento de Filología y Comunicación de la Universitat de Girona. El proyecto Vusiness se presenta en distintas universidades americanas: Harvard University, MIT-Massachusetts Institute of Technology, Emerson College, Boston College y Suffolk University de Boston.

Después de una fase de revisión bibliográfica exhaustiva, se llevan a cabo tres foros para reflexionar y debatir acerca de las empresas sostenibles, inclusivas e inteligentes. El primero lleva por título: “Las personas, el centro de las empresas”, el segundo: “Empresas inteligentes, generando futuro” y el tercero: “Empresas sostenibles, afrontando al cambio climático”. La diagnosis de la situación actual concluye con la necesidad de la creación de un modelo de gestión empresarial alternativo al actual.

2. Método

El presente estudio tiene como principal objetivo la conceptualización de una herramienta de gestión empresarial por valores para promover las empresas sostenibles, inteligentes, abiertas, democráticas e inclusivas, que tienen que inspirar el futuro.

2.1. Estrategias metodológicas

Ante un problema de investigación poco estudiado se propone una investigación exploratoria con el objetivo de diseñar los indicadores para la gestión empresarial por valores desde una nueva perspectiva. Distintos estudios coinciden en señalar que las variables más influyentes para la definición de indicadores para medir, evaluar y tomar decisiones en un sector determinado se obtiene de los propios públicos de interés (Nieto-Galan, 2011). Por este motivo, la investigación exploratoria parte de estudios teóricos previos, consistentes en cuatro investigaciones documentales a modo de revisiones bibliográficas con el objetivo de describir el estado actual del conocimiento respecto a la aplicación de la inclusividad, la sostenibilidad, la tecnología y la comunicación en el ámbito empresarial.

A partir de los resultados de las revisiones documentales se ha proseguido con la investigación exploratoria con una aproximación cualitativa que ha combinado los foros de discusión con las entrevistas con preguntas abiertas para confeccionar de forma participativa los indicadores.

2.2. Población y muestra

A través de un muestreo intencional teórico se seleccionan 50 profesionales-expertos (científicos y profesores de distintas disciplinas académicas y empresarios, emprendedores, técnicos y asesores de distintos sectores empresariales). El interés de los foros recae en el hecho de incluir distintos enfoques complementarios sobre un mismo tema para obtener un punto de vista más representativo. La Tabla 1 recoge la ficha técnica del estudio.

Tabla 1. Ficha técnica

Tamaño muestral	50 profesionales-expertos (científicos y profesores de distintas disciplinas académicas y empresarios, emprendedores, técnicos y asesores de distintos sectores empresariales)
Métodos de recogida de la información	4 Revisiones bibliográficas 3 Foros de discusión participativos 21 Entrevistas en profundidad con preguntas abiertas
Procedimiento de muestreo	Muestreo intencional teórico
Fecha de realización	De enero de 2016 a octubre de 2018

2.3. Instrumentos de recogida de información

La compleja situación actual y el amplio espectro de necesidades requiere un conocimiento multidisciplinar. Así pues, resulta evidente que el ejercicio de diseño de una herramienta de indicadores para la gestión empresarial con valores tiene que contar con la participación de distintos puntos de vista desde el inicio. Por este motivo, se propone una metodología para la conceptualización del Valómetro que se estructura en tres herramientas:

En la primera fase se elabora una diagnosis exhaustiva para analizar cuatro ejes clave para el desarrollo de las empresas como son la tecnología, la inclusividad, la sostenibilidad y la comunicación:

- Empresas inclusivas, reinventando la calidad de vida: Una revisión teórica (Echazarreta & Costa, 2018a)
- Empresas sostenibles, afrontando el cambio climático: Una revisión teórica (Echazarreta & Costa, 2018c)
- Empresas inteligentes, inspirando el futuro: Una revisión teórica (Echazarreta & Costa, 2017b)
- Amplificando la voz de los ciudadanos ante la globalización mediática (Echazarreta & Costa, 2016).

Como resultado se obtiene una imagen del objeto de estudio que permite enfocar los procesos posteriores. Después de esta fase descriptiva, para iniciar la fase de exploración cualitativa del concepto se celebraron tres foros con expertos y líderes de opinión. Los grupos focales de discusión se estructuraron en tres ámbitos, de acuerdo con los resultados obtenidos en la fase de diagnosis y revisión bibliográfica: inclusividad, sostenibilidad y tecnología.

Se combinaron de forma complementaria los foros con entrevistas en profundidad, formuladas a través de preguntas abiertas para diseñar los criterios e indicadores que definen el Valómetro sin condicionar previamente los participantes.

2.4. Procedimiento

Los grupos focales de discusión se estructuraron en tres ámbitos, de acuerdo con los resultados obtenidos en la fase de diagnóstico y revisión bibliográfica: “Las personas, el centro de las empresas” sobre inclusividad que se celebra el día 18 de octubre de 2016 con 9 participantes; “Empresas inteligentes, generando futuro” alrededor de la tecnología el día 22 de noviembre de 2016 con 12 participantes, y “Empresas sostenibles, afrontando el cambio climático” sobre sostenibilidad el día 24 de enero de 2017 con 8 participantes. Los foros se estructuran en grupos multidisciplinares formados por 29 profesionales.

En paralelo, de enero de 2016 a octubre de 2018 se han realizado 21 entrevistas con preguntas abiertas para la confección del Valómetro.

A partir de las cuatro revisiones bibliográficas, documentos de trabajo previos como las Smart Cities: La transformación digital de las ciudades por parte de Centro de Innovación del Sector Público de PwC e IE Business School (Seisdedos et al., 2015) o el artículo Industria 4.0, la gran oportunidad (Ceballos, 2016), los tres foros de discusión y las entrevistas en profundidad se ha elaborado la redacción inicial de los indicadores del Valómetro entre junio y octubre de 2018.

A partir de la propuesta inicial, los mismos profesionales-expertos han revisado y reformulado los criterios e indicadores según su conocimiento y especialización en cada uno de los cinco ámbitos a través de reuniones para la reformulación y revisión con el grupo impulsor y a través de tecnologías informáticas.

El primer modelo de Valómetro ha sido experimentado en modo piloto por una muestra reducida de ocho empresas durante el periodo de junio a agosto de 2018 para valorar de forma inicial su utilidad y viabilidad.

3. Resultados

El Valómetro, sistema de indicadores empresariales para la gestión con valores, es una herramienta de aplicación voluntaria diseñada para las empresas. El Valómetro pretende ayudar y guiar a las empresas a controlar y medir los resultados de su gestión en cinco ámbitos utilizando una metodología común comparable.

La herramienta resultante se ilustra a modo de aerogenerador que consta de 50 criterios e indicadores contruidos científicamente y divididos en 5 ámbitos: a) Identidad; b) Administración y gestión; c) Personas; d) Sostenibilidad y e) Tecnología (Ver figura 1).

A continuación, se muestran los criterios, así como los indicadores básicos (Ver tabla 2 a 6).



Figura 1. Secciones que componen el Valómetro

Tabla 2. Sección A: Identidad

SECCIÓN A: IDENTIDAD		
CRITERIOS	Nº DE REFERENCIA DEL INDICADOR	INDICADORES BÁSICOS
A1. EMPRENDEDOR/A. Caracterizado para ser creativo, innovador, comunicativo, sensible, honesto, comprometido, ético, empático, cercano, eficaz, eficiente, con capacidad de liderazgo, transparente y responsable.	A1.1	Porcentaje de los rasgos de personalidad y características del perfil emprendedor del impulsor que determinan si sabe identificar una oportunidad y tiene las habilidades para ponerla en marcha, sobre el total.
A2. MISIÓN. Nuestra razón de ser fundacional, persigue una finalidad noble y loable. Por ej. Educación de calidad; igualdad de género; trabajo decente y crecimiento económico; producción y consumo responsables, etc.	A2.1	Porcentaje de coincidencia entre la razón de ser fundacional de la empresa en comparación con algunos de los 17 retos que definen los Objetivos de Desarrollo Sostenible (ODS) de Naciones Unidas
A3. VISIÓN. La empresa se plantea lograr retos de futuro comprometidos con el desarrollo de las personas y la sostenibilidad del medio.	A3.1	Porcentaje de coincidencia entre los retos de futuro de la empresa en comparación con los retos que definen los Objetivos de Desarrollo Sostenible (ODS) de Naciones Unidas
A4. VALORES. Profundamente comprometidos con valores éticos, sociales, laborales y ambientales para	A4.1	Porcentaje de valores de la empresa relacionados con la ética, sociales o ambientales en comparación con los valores pragmáticos-económicos (eficiencia, calidad,

favorecer al desarrollo armónico del planeta y de la humanidad.		etc.)
A5. SOSTENIBLE. Contribuye a la riqueza y al bien común y no consume, en ningún ámbito, más recursos de los que genera.	A5.1	Porcentaje de recursos energéticos que genera la empresa en comparación con los que consume.
A6. PROGRESO. Actúa sobre el progreso tecnológico y lo redirige para que sea de ayuda para un mundo mejor.	A6.1	Porcentaje de uso de las nuevas tecnologías para promover la calidad de vida en comparación con el uso para eliminar sitios de trabajo.
A7. RESPONSABILIDAD. Actúa desde la plena libertad responsable especialmente hacia la sociedad y el medio ambiente.	A7.1	Porcentaje de productos y/o servicios, producidos o prestados respectivamente, por la empresas que favorecen la sociedad y el medio ambiente, sobre el total.
A8. TRANSPARENCIA. Actúa en el libre mercado de forma absolutamente transparente.	A8.1	Porcentaje de acceso al proceso de toma de decisiones, al acceso libre de documentos, instrucciones, fórmulas, contratos, etc. que afectan a los ciudadanos o al medio ambiente sobre el total.
A9. ÉTICA. No se dedica a actividades especulativas en ningún caso, ni siquiera de forma marginal y extiende el compromiso ético a su cadena de proveedores, distribuidores y clientes.	A9.1	Número de acciones éticas sobre proveedores, distribuidores y clientes en comparación con el total de actividades.
A10. BENEFICIO JUSTO. Aspira a obtener un beneficio suficiente para continuar contribuyendo al desarrollo social y para procurar la lícita compensación de quien arriesga su capital y quien dedica su trabajo.	A10.1	Beneficios que dedica a una lícita compensación por su trabajo y a la mejora de la empresa, a sus empleados o al desarrollo social en comparación con la dedicación a gastos y derroches personales sobredimensionados o innecesarios en euros.

Tabla 3. Sección B: Administración y gestión

SECCIÓN B: ADMINISTRACIÓN Y GESTIÓN		
CRITERIOS	Nº DE REFERENCIA DEL INDICADOR	INDICADORES BÁSICOS
B1. LÍDER TRANSFORMADOR. Caracterizado para ser emprendedor, innovador, inspirador, creativo, sensible, honesto, comprometido, social, ético, empático, cercano, eficaz, eficiente, transparente, discreto, cumplidor y responsable.	B1.1	Porcentaje de los rasgos de personalidad y características del perfil que determinan si es un líder auténtico, inspirador y está capacitado para motivar, cohesionar y favorecer el rendimiento de equipo, sobre el total.
B2. GOBERNANZA. El consejo de administración, la junta general de accionistas, el equipo directivo, el comité de auditoría, etc. se organizan	B421	Número de decisiones estratégicas tomadas de forma ética, responsable y comunicadas en comparación con las que se ocultan y no responden a finalidades nobles.

y toman decisiones para lograr sus legítimos objetivos, actuando siempre de forma absolutamente transparente, ética y responsable.		
B3. ENTORNO Y OPORTUNIDADES. La empresa está atenta ante los retos, oportunidades y necesidades que tiene la sociedad para acontecer más sostenible, desarrollada, justa y equitativa.	B3.1	Porcentaje de productos y/o servicios desarrollados ante retos o necesidades del entorno para favorecer la economía circular, un desarrollo sostenible o una sociedad más justa y equitativa, sobre el total.
B4. PROPUESTA DE VALOR. Producto o servicio que satisface las necesidades racionales de la sociedad.	B4.1	Número de productos y/o servicios necesarios para vivir o que hacen un mundo mejor en comparación con los que responden a mero consumismo.
B5. COLABORADORES. Se relaciona con proveedores, distribuidores e influyentes que tienen determinados principios éticos y valores y los trata de forma justa.	B5.1	Porcentaje de los proveedores, distribuidores e influyentes que comercializan de forma honesta, transparente y justa, sobre el total.
B6. CANALES. Se relaciona con sus clientes de forma honesta, haciendo uso de un marketing que promueve el consumo responsable y no el consumismo y establece relaciones positivas y duraderas.	B6.1	Porcentaje de comunicaciones (campañas, reuniones con clientes, presentaciones de productos, ruedas de prensa, folletos, etc.) basadas en mensajes e información completa, contrastada, veraz, honesta y transparente, sobre el total.
B7. PRECIOS. Acorde con la propuesta de valor, se fijan precios justos que permitan remunerar de forma adecuada la producción o fabricación del producto, especialmente los pequeños productores locales y la remuneración justa de los trabajadores/as que imparten un servicio.	B7.1	Porcentaje de las ventas que se destina a los proveedores, sobre el total.
B8. FINANZAS DE TRIPLE BALANCE. Busca un equilibrio entre el crecimiento y la distribución de la riqueza, incluyendo la aspiración a obtener un beneficio económico suficiente y lícito y a la vez atender la dimensión social y medioambiental.	B8.1	Porcentaje del ingreso en ventas destinado a la mejora de la remuneración de los trabajadores en función de los resultados de la empresa o a proyectos sociales o de mejora del medio ambiente, sobre el total.
B9. LEGALIDAD. Las prácticas legales, mercantiles, fiscales y laborales, son las más adecuadas para llevar a cabo sus nobles finalidades y para contribuir como empresa a la comunidad, en ningún caso para obtener un mejor trato fiscal. Velando para tener comportamiento adecuado en la economía real y no especulativa.	B9.1	Número de prácticas legales, mercantiles, fiscales y laborales adecuadas para llevar a cabo sus nobles finalidades y para contribuir como empresa a la comunidad en comparación con las diseñadas exclusivamente para obtener un mejor trato fiscal.

<p>B10. ROI (RETURN ON INVESTMENT) SOCIAL. Dispone de un sistema de indicadores de evaluación para la mejora continua, relacionados con conceptos potenciadores de la responsabilidad y la transparencia. Busca la mejora continua a través de innovar en sostenibilidad, uso inteligente de la tecnología y cohesionadores del entorno (ocupación, dinamización local, etc.)</p>	<p>B10.1</p>	<p>Retorno social sobre el capital invertido (ROIC. Return on Invested Capital) en euros.</p>
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Tabla 4. Sección C: Personas

SECCIÓN C: PERSONAS		
CRITERIOS	Nº DE REFERENCIA DEL INDICADOR	INDICADORES BÁSICOS
<p>C1. MULTILIDERAZGOS. Fomentar los multiliderazgos: el liderazgo distribuido entre los miembros del equipo y el liderazgo por proyectos para aprovechar las aptitudes individuales. Los líderes deben actuar con iniciativa y actitud pro-activa siendo un motor inspirador y estimulador para que los grupos cumplan su trabajo.</p>	<p>C1.1</p>	<p>Porcentaje de trabajadores con responsabilidades de liderazgo dentro de la plantilla sobre el total de personal.</p>
<p>C2. TRABAJO EN EQUIPO. Desarrollo y cura de los equipos de trabajo a través de valores emocionales como la alegría, la solidaridad y la libertad para potenciar la creatividad, el talento y la innovación, actuando con transparencia, promoviendo la participación activa y creando mecanismos para hacerla real y posible. Incidir en el clima laboral y dando libertad al talento de las personas.</p>	<p>C2.1</p>	<p>Porcentaje habitual de horas de trabajo en equipo respecto el total de horas trabajadas.</p>
<p>C3. DESARROLLO PROFESIONAL. Promover el desarrollo del personal a través del desarrollo profesional, ofreciendo posibilidades de promoción.</p>	<p>C3.1</p>	<p>Porcentaje anual de trabajadores promocionados respecto el total de la plantilla.</p>

<p>C4. CONOCIMIENTO Y FORMACIÓN. Crear mecanismos para traccionar talento y hacer aflorar talento emergente. Potenciar el conocimiento a través de la formación adaptada a los nuevos tiempos y a los retos actuales. Fomentar la transmisión de conocimientos entre trabajadores. Utilización de medios convencionales así como plataformas digitales y de realidad virtual.</p>	<p>C4.1</p>	<p>Número de horas –de media– dedicadas anualmente a la formación de los trabajadores, a sesiones para hacer aflorar su talento o a reuniones específicas para que compartan su conocimiento.</p>
<p>C5. IGUALDAD E INCLUSIÓN. Crear un entorno que respete y fomente la diversidad social, de género, diversidad funcional, diversidad generacional y cultural de la empresa.</p>	<p>C5.1</p>	<p>Número de medidas y proyectos que fomentan la igualdad e inclusión (per ej.: contratación de personas con discapacidad, participación en programas sociales para favorecer la inserción de personas inmigradas, adecuación de las instalaciones para mejorar la accesibilidad, etc.)</p>
<p>C6. CONCILIACIÓN Y TELETRABAJO. Fomenta la conciliación del trabajo con la vida personal y familiar a través de medidas como la flexibilidad horaria y el teletrabajo.</p>	<p>C6.1</p>	<p>Número de medidas y proyectos que fomentan la conciliación y el teletrabajo (por ej. Flexibilidad horaria, transporte discrecional para los trabajadores, posibilidad de teletrabajo, etc.)</p>
<p>C7. REMUNERACIÓN JUSTA. Cumplir las liquidaciones en tiempos y forma y remunerar de acuerdo con las funciones y características del puesto de trabajo, así como las tareas asignadas con concreción, valorando también, la implicación, las capacidades y las habilidades del trabajador. También la inyección moral.</p>	<p>C7.1</p>	<p>Número de beneficios, acuerdos y ventajas adicionales del personal a nivel de remuneración en comparación con lo que determina el estatuto de los trabajadores o los convenios colectivos vigentes.</p>
<p>C8. RED. Fomentar y comunicar las actuaciones de voluntariado corporativo, desarrollo de las habilidades personales de los participantes, donativos a instituciones locales, facilitar visitas de escolares a la propia oficina, etc.</p>	<p>C8.1</p>	<p>Número de medidas y actuaciones que se realizan para fomentar los vínculos con las redes próximas (por ej. Visitas guiadas, posibilidad de prácticas no laborales en empresa, facilidad para contratos en prácticas, colaboración y patrocinio de entidades o asociaciones del barrio, etc.</p>
<p>C9. ATENCIÓN MÉDICA, SALUD Y BIENESTAR. Atención médica y medidas de higiene y seguridad en el trabajo. Servicios de asistencia de salud complementarios a la oferta pública: cardiovascular, diabetes, wellness, gestión del estrés, etc. para mejorar el ambiente de trabajo y fomentar hábitos de vida saludables como la práctica deportiva.</p>	<p>C9.1</p>	<p>Número de supósitos y situaciones que reciben una cobertura médica, de salud o de bienestar adicional a la obligatoria de media por trabajador (por ejemplo: evolución semanal del embarazo, consultas médicas on-line, cobertura dental, cobertura de gafas y lentillas, etc.)</p>
<p>C10. COLABORACIÓN. Fomentar la comunicación y colaboración activa entre los diferentes</p>	<p>C10.1</p>	<p>Número de canales, medios, herramientas y espacios disponibles para fomentar la comunicación y la colaboración (intranet,</p>

departamentos utilizando todos los medios disponibles, y posibilitando la rotación del personal entre los departamentos (reuniones, pantallas de comunicación, azulejos interactivos tipos Ipad, etc.).		mensajería instantánea, correo electrónico, teléfono, espacio de cafetería, etc.)
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Tabla 5. Sección D: Sostenibilidad

SECCIÓN D: SOSTENIBILIDAD		
CRITERIOS	Nº DE REFERENCIA DEL INDICADOR	INDICADORES BÁSICOS
D1. IMPACTO MEDIOAMBIENTAL. Consumos de agua, gas, electricidad así como la detección y reacción ante emergencias medioambientales: escapes, incendios, etc.	D1.1	Porcentaje de superficie de la empresa controlado a través de redes de sensores ambientales inteligentes y smart metering, que permita la detección automática de consumos así como la detección de partículas contaminantes y emisiones provocadas por emergencias ambientales, sobre el total.
D2. CONSUMO Y PRODUCCIÓN DE ENERGÍAS RENOVABLES. Autogeneración de energía a partir de fondos renovables: placas fotovoltaicas, geotermia de baja entalpía, mini eólica, etc.	D2.1	Porcentaje de uso de energías renovables (ej. solar, térmica, fotovoltaica, bioenergía, hidráulica, de las mareas, eólica, del oleaje y geotérmica) en comparación con las finitas (basadas en petróleo, carbón y gas natural)
D3. EFICIENCIA ENERGÉTICA. Permite aumentar eficiencias y mejorar la gestión de energía. Soluciones que promueven la gestión del consumo energético en climatización, ascensores e iluminación.	D3.1	Porcentaje de uso de equipos energéticamente eficientes: de almacenamiento de la energía y de alta eficiencia energética y bajo consumo como la cogeneración y las calderas de alta eficiencia, y la domótica y uso de tecnología led, sistemas de iluminación inteligentes y bajo demanda o mediante sensores de presencia en comparación con medios convencionales no eficientes.
D4. BIOCLIMÁTICA Y EDIFICACIÓN SOSTENIBLE. Edificios de consumo cero. Permiten reducir consumos sin necesidad de instalaciones energéticas más sostenibles.	D4.1	Porcentaje de uso de cierres, ventanas, envolventes de los edificios, etc. en comparación con sistemas que no favorecen la reducción del consumo.
D5. INTEGRACIÓN EN EL PAISAJE Y EL ENTORNO. Para favorecer la integración y naturalidad paisajística y ambiental y promover la reducción térmica a través de sistemas de producción que fomenten la	D5.1	Número de medidas para favorecer la integración en el paisaje y el entorno (Por ej. Vegetar techos, paredes y el entorno de la empresa para crear sombras, humedad y evitar islas de calor, integración cromática de las instalaciones en el entorno, y promover el consumo de productos de proximidad y

biodiversidad y el respeto por la natura en las zonas agrícolas.		respetuosos con el medio ambiente).
D6. GESTIÓN DEL CICLO INTEGRAL DEL AGUA Y RIEGO INTELIGENTE	D6.1	Número de recursos tecnológicos utilizados para favorecer que el agua sea un ciclo cerrado (Por ej. captación, transporte, distribución, alcantarillado, lectura de consumos, facturación, cobro, depuración y potabilización, etc.; jardinería de bajo consumo e integrada en el entorno y automatización de la reguera y redes de sensores para medir cuándo y cuánto es necesario regar).
D7. ECONOMÍA CIRCULAR, REDUCCIÓN, REUTILIZACIÓN, RECICLAJE Y GESTIÓN INTELIGENTE DE LOS RESIDUOS La economía circular implica la generación de productos que mantienen su utilidad y valor y se caracteriza por ser una producción reparadora y regenerativa.	D7.1	Número de medidas adoptadas para favorecer el eco diseño de productos y la reducción, la reutilización, el reciclaje y la gestión inteligente de los residuos más allá del cumplimiento de la legalidad. Por ej. Compra de materiales teniendo en cuenta el ciclo de vida, eco diseño de nuevos productos, uso de productos reciclados y productos con certificación ambiental o eco etiquetas, información en tiempo real sobre el llenado de los contenedores, etc.)
D8. TRANSPORTE PÚBLICO Y RETRIBUCIÓN POR DESPLAZAMIENTOS Favorecer el uso del transporte público para acceder al trabajo	D8.1	Número de medidas para incentivar el uso del transporte público para acceder al trabajo (contribución a los costes de movilidad poligonal, adaptación de horarios al transporte, información en tiempo real de incidencias y frecuencias, asesoramiento digital al viajero, etc.)
D9. MOVILIDAD NO MOTORIZADA Vehículos de propulsión ecológica y fomento del uso de la bicicleta convencional o a pie	D9.1	Número de medidas adoptadas para favorecer el uso de movilidad no motorizada (bicicleta, motocicleta y coche eléctricos, bicicleta convencional o a pie). Por ej.: aparcamiento, acceso en los edificios de las bicicletas plegables, disposición de un espacio de muda y ducha, despliegue de redes de puntos de carga, sistemas de información sobre ubicación y disponibilidad, sistemas de alquiler, etc.
D10. GESTIÓN DEL TRÁNSITO Para disminuir la huella de carbono a través de la gestión de las propias flotas y de favorecer el uso compartido de vehículo	D10.1	Número de medidas que se proponen para favorecer la fluidez del tránsito (cálculo de la huella de carbono de la flota, planes de movilidad, favorecer la plena ocupación de los vehículos de los trabajadores, optimizar el transporte de mercancías, predicción del tránsito, semáforos inteligentes, información al conductor en tiempo real, avisos sobre incidencias, etc.).

Tabla 6. Sección E: Tecnología

SECCIÓN E: TECNOLOGÍA		
CRITERIOS	Nº DE REFERENCIA DEL INDICADOR	INDICADORES BÁSICOS
<p>E1. TRANSFORMACIÓN DIGITAL. Establecer mecanismos para facilitar la incorporación de la tecnología en todos los procesos. Facilitar el cambio de marco mental que implica la digitalización incluyendo las tendencias y avances de campos como la nanotecnología, la genética, y el movimiento maker, la economía colaborativa o la economía circular. Todo ello abordando las cuestiones éticas a favor de las personas y la calidad de vida ante la robotización.</p>	E1.1	Número de horas anuales de media por trabajador que la empresa dedica a sensibilizar, formar y orientar hacia la transformación digital y a abordar las cuestiones éticas ante la robotización.
<p>E2. INTERNET OF THINGS (IOT). Internet de las cosas aplicado a distintos sectores de actividad. Permite conectar objetos entre sí y a Internet.</p>	E2.1	Porcentaje de los productos de la empresa que disponen de sensores y computación embebida que les permite enviar y recibir información en tiempo real, sobre el total.
<p>E3. OPEN DATA. Puesta a disposición de los trabajadores, proveedores y clientes la información en formatos estándar, abiertos e interoperables para fomentar la transparencia.</p>	E3.1	Porcentaje de datos de la empresa que están en formatos abiertos y accesibles para trabajadores, proveedores y clientes, sobre el total.
<p>E4. SISTEMAS CIBERFÍSICOS. Sistemas conectados entre sí y a su vez con el mundo virtual de las redes digitales. Son redes de comunicaciones avanzadas que conforman plataformas integradas para la gestión. Integran capacidades de monitorización, gestión y explotación, facilitando el seguimiento y/o control.</p>	E4.1	Porcentaje de los datos de la empresa monitorizado y controlado a través de alguna plataforma con sistema ciberfísico (infraestructura técnica conectada con estándares abiertos; sistemas conectados a través d'IoT, plataformas definidas por software y plataformas de servicios inteligentes) sobre el total.
<p>E5. 5G, CONECTIVIDAD, CLOUD COMPUTING Y COMERCIO DIGITAL. 5G es la infraestructura de telecomunicaciones que habilita nuevos servicios de base digital (vehículo autónomo, tele asistencia médica remota, operaciones quirúrgicas remotas, etc.).</p>	E5.1	Porcentaje de información de la empresa habilitado en 5G, ubicado en la nube y accesible desde cualquier sitio y en cualquier momento gracias a tecnologías de comunicación que permiten trabajar, comprar y vender, sobre el total.

Cloud computing implica información disponible en cualquier sitio y cualquier momento para trabajadores, clientes y proveedores gracias a la tecnología flexible que permite trabajar ubicando todos los recursos en la nube. Posibilidad que ofrece comprar y vender por Internet.		
<p>E6. TECNOLOGÍA COLABORATIVA Habilitan modelos colaborativos que permiten el nacimiento de nuevos negocios C2B (por ej. Waze, etc.) compartición de capacidad i activos (por ej. Uber, Cabify, AirBnb, Blablacar, etc.) o la integración de clientes i partners en el proceso de negocio, además de nuevas formas de colaboración en los negocios (crow-sourcing de datos, crowd-funding). Aparición de la blockchain y las posibilidades que suscita. Incluye, además, la robótica colaborativa, nueva generación de robots más versátiles, fáciles de programar y manejar.</p>	E6.1	Recursos económicos anuales de la empresa destinados a la tecnología colaborativa en euros.
<p>E7. FABRICACIÓN ADITIVA. O impresión 3D, incluye aquellos dispositivos que producen un objeto 3D a partir de una entrada digital, sin necesidad de moldes ni utillajes de ningún tipo, a través de la deposición de capas de material y su consolidación.</p>	E7.1	Porcentaje de objetos producidos que se fabrican a través de la impresión 3D sobre el total.
<p>E8. INTELIGENCIA ARTIFICIAL. Área multidisciplinar que intenta dotar a las máquinas de procesos cognitivos típicos del razonamiento humano como deducir, razonar y resolver problemas complejos. Incluye la rama de machine learning o aprendizaje automático, que pretende desarrollar técnicas que permitan a las máquinas aprender automáticamente.</p>	E8.1	Recursos económicos anuales de la empresa destinados a la inteligencia artificial en euros.
<p>E9. TECNOLOGÍA INMERSIVA La Realidad aumentada (RA) es la tecnología que ofrece información digital superpuesta a la visión real. La Realidad virtual o simulación (RV) se utiliza en fábrica para recrear un espejo del mundo físico en un modelo virtual. La realidad mixta (RM) es la</p>	E9.1	Recursos económicos anuales de la empresa destinados a la Tecnología Inmersiva en euros.

combinación de realidad virtual y realidad aumentada.		
E10. CIBERSEGURIDAD Y CIBERINTELIGENCIA. Sistemas de protección y anticipación ante ataques a la seguridad en Internet de servicios esenciales para las empresas o que puedan generar perjuicios a los usuarios y clientes. Seguridad física de los datos ante a Ransomware y/o fallos tecnológicos. Protección de datos de carácter personal, dando cumplimiento a la normativa vigente (actualmente el RGPD Reglamento General de Protección de Datos).	E10.1	Número de medidas adoptadas para proteger los datos y los sistemas críticos ante los ciberataques. (Por ej. Sistemas de protección de software, copias de seguridad, protocolos de protección de datos de carácter personal, etc.)

4. Discusión y conclusiones

Según Echazarreta y Costa (2017a): “La destrucción de miles de empleos, la precarización del mercado laboral y la falta de trabajo constituyen factores de riesgo en entornos de exclusión y marginación social. Las víctimas en las sociedades industrializadas suelen ser los trabajadores menos calificados.” Por este motivo, la gestión empresarial con valores puede ser una respuesta progresiva y eficaz ante problemáticas, retos y amenazas derivadas de la globalización, las crisis económicas y financieras, las secuelas del trabajo infantil, la irrupción de la tecnología o el apremiante cambio climático.

El eje de Identidad apuesta por una sociedad más equilibrada ya que según Rocha y Aragon (2012) la sociedad presenta un reparto de la riqueza cada vez más desigual. En un sentido complementario, el eje de Administración y Gestión pretende impulsar modelos de gestión más horizontales y colaborativos, en los que la implicación y fidelización de los proveedores, trabajadores y clientes sea indispensable y determinante para la empresa, en línea de las conclusiones de los estudios de Todolí-Signes (2017).

El eje de Personas del Valómetro está diseñado para prevenir los efectos de las crisis económicas y financieras, ya que según concluyen Hadad Hadad y Valdés Llanes (2010) la crisis precariza el mercado laboral, generado la destrucción de miles de empleos y provocado un aumento de embargos y desahucios que genera un impacto social sobre los colectivos más vulnerables.

Además, se apuesta por poner en valor las personas con el objetivo de valorizar los procesos productivos, frenando los procesos de subcontratación y externalización propios de una cultura globalizada que apuesta por la deslocalización. En línea con las tesis de Mendizabal y Errasti (2006) poner en valor las personas en una organización está demostrado que tiene incidencia directa en el tejido productivo.

En cuarto lugar, el eje de Sostenibilidad se articula para afrontar y dar respuesta al cambio climático, que según Echazarreta y Costa (2018c) representa una amenaza apremiante y con efectos potencialmente irreversibles. La globalización incrementa el uso no equilibrado de recursos

energéticos finitos no renovables, en gran parte debido a los elevados tránsitos de transporte. De ahí la necesidad de modelos de gestión empresarial que compatibilicen el desarrollo y el crecimiento de las empresas con el medio ambiente y la protección del planeta.

Finalmente, el eje de Tecnología está diseñado para facilitar la transición ante los procesos de digitalización y desarrollo de la inteligencia artificial que según Recio (2018) implican un profundo cambio en la organización del trabajo en las empresas.

El sistema de indicadores tiene por objetivo mejorar la gestión empresarial, así como ayudar a determinar las prioridades de actuación. Los datos recogidos durante las fases de elaboración de la herramienta y de prueba a modo piloto apuntan a que solamente programas de gestión integral por valores de las distintas áreas pueden ayudar a superar las carencias del actual modelo de gestión empresarial descrita en las cuatro revisiones bibliográficas.

Los resultados del seguimiento del Valómetro se basan en la autoevaluación, las observaciones, la recopilación de datos de distintas fuentes y el análisis de estos por parte de las empresas. No se fijan valores mínimos que deben alcanzarse ni se proporcionan certificaciones.

Sin embargo, la identificación de indicadores proporciona a las empresas la información básica para hacer un seguimiento de las cinco áreas, lo cual les facilita una gestión más eficaz acorde con valores hacia las personas y el medio ambiente.

A modo de conclusión, a partir de los comentarios recibidos por parte de las empresas, un grupo de expertos de la Universitat de Girona revisará periódicamente el sistema. La edición de 2018 de la herramienta es resultado de la prueba piloto. Esperamos en posteriores ediciones ofrecer un sistema verificado y adecuado.

Se recomienda la creación de un grupo motor para generar cambios y poner en valor la herramienta así como el establecimiento de una estrategia de comunicación unificada de la herramienta, en la misma dirección y con los mismos atributos y valores.

Con el objetivo de sensibilizar en el ámbito empresarial se propone la redacción de un libro blanco de “buenas prácticas” para fomentar la gestión con valores.

A nivel educativo se propone generar materiales didácticos para la educación primaria, secundaria, secundaria post-obligatoria y universitaria. En el ámbito del emprendimiento se recomienda adaptar materiales y formatos para emprendedores/as que exploran e inician su aventura empresarial como un plan de empresa por valores.

Después de analizar distintos estudios sobre la gestión empresarial centrados en las personas, el medio ambiente y el uso de la tecnología, se concluye que el uso del Valómetro pueden ser una herramienta útil para afrontar algunas insuficiencias que presentan los modelos de gestión empresarial de recursos humanos, recursos energéticos y uso de la tecnología.

En el presente estudio con enfoque teórico-conceptual se ha pretendido diseñar un marco de referencia abierto para el estudio, conceptualización inicial y redacción del Valómetro. Los resultados deben de considerarse como preliminares y tienen que ser confirmados en estudios posteriores. La investigación en el ámbito de gestión empresarial con valores debe ser continua y pluridisciplinar.

Finalmente, se requieren estudios experimentales, capaces de valorar los resultados de la utilización del Valómetro, como herramienta de la gestión con valores, en el ámbito empresarial.

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Study and conceptualization of the Valometer: A system of business indicators for values-based management

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Abstract

In light of economic and social threats and challenges such as globalization, economic crises, child labor, climate change and technological transformation, this paper presents the results, conclusions and recommendations of a study and conceptualization of the Valometer, a system of business indicators designed to facilitate management with values. **Methodology.** It focuses on the use of three complementary techniques. The first phase comprised the exhaustive diagnosis of four bibliographic reviews focused on inclusiveness, sustainability, technology and communication. In the second phase, theoretical intentional sampling was used to select 50 professionals-experts (scientists and professors from different academic disciplines, businesspeople, entrepreneurs, managers and advisors from different business sectors) to participate in three semi-structured discussion groups combined with qualitative in-depth interviews to jointly conceptualize the Valometer. **Results** The resulting tool consists of 50 criteria and indicators constructed scientifically and divided into 5 spheres: A) Identity; B) Administration and management; C) People; D) Sustainability; and E) Technology. **Conclusions** The data obtained from a small sample of companies that have used the tool in pilot mode suggest that the Valometer may be a useful tool for facilitating business management with values.

Keywords

Valometer; Vusiness; companies with values; business indicators; management with values

Contents

Introduction. 2 Method 2.1. Methodological strategies. 2.2. Population and sample. 2.3. Data-gathering instruments. 2.4. Procedure. 3. Results. 4. Discussion and conclusions. 5. Acknowledgments. 6. Bibliographic references.

1. Introduction

According to Echazarreta y Costa (2018b), today's society presents a series of economic and social problems and challenges, including globalization, economic crises, child labor, climate change and technological transformation, which must be addressed if we are to achieve a sustainable globalization that will eradicate inequalities and poverty, protect the environment and guarantee prosperity in society.

Over the last forty years, the two most determining factors in the emergence of globalization are considered to be technology, which has transformed most industrial productive processes, and changes in political systems (de Urduña, 2018).

According to García, Mora, y Alés (2009), the loss of competitiveness suffered by local production in the global marketplace due to high wage costs, together with the appearance of countries with low production costs, has accelerated companies' relocation and internationalization. This phenomenon has profound effects, including very high social costs, widening the gap between the rich and poor. Regarding globalization, Bauman (1999): "It greatly benefits very few, while excluding or marginalizing two thirds of the population".

Secondly, according to Echazarreta y Costa (2017a): "Economic and financial crises are becoming increasingly more frequent, profound and global, with repercussions mainly for the social sectors. In this context, the economic slowdown has significantly increased the number of people in a situation of poverty and exclusion; resources, social protection systems and certain benefits specific to the welfare state have all declined".

According to Rocha y Aragon (2012), 7.2 million jobs were destroyed and 2.4 million created in Europe during the period 2008 to 2012, which represents a negative balance of almost 4.8 million jobs. In Spain, the exponential growth of employment in the construction sector followed by the subsequent real estate bubble, added to the policy of cuts in the face of the crisis, aggravated the situation of social groups left without employment. In the first quarter of 2013, the number of unemployed reached a record high of 6.2 million and the unemployment rate 27.16% (Gómez-Ruiz, 2018).

With regard to child labor, Briceño y Pinzón (2004) stated the following, "More than 246 million children between the ages of 5 and 17 are currently working around the world and 180 million are subjected to the worst forms of child labor, such as sexual exploitation, domestic chores, work in mines, pyrotechnic fireworks factories and armed conflicts". According to these authors, there are three main causes of child labor: poverty, the belief that it is positive, and a lack of socio-economic policies to counter child labor. The minimum working age is a key concept in achieving the effective abolition of child labor.

Fourth, regarding climate change, Carballosa (2017) states that "The world's leading climate scholars consider human activity the most likely principal cause for the increase in temperatures since the mid-twentieth century", and "These changes in the climate are already having a considerable impact on ecosystems, countries' economies, human health, the well-being of the population and economic forecasts; and they are not expected to reverse in the medium term".

In order to turn this situation around, bearing in mind the Kyoto Protocol on climate change, which limits emissions and commits the signatory countries to establish measures to reduce emissions and promote renewable energies, Echazarreta y Costa (2018c) conclude that “Sustainable companies are based on two fundamental principles: the environment (renewable energy resources, sustainable development, preservation of the environment, responsible energy consumption, minimizing emissions, eco-efficiency, circular economy) and mobility (collective public transport, electric vehicles, clean and non-motorized mobility systems)”.

Finally, a fifth key aspect that leads to significant changes in the labor market and the global economy is technological transformation. In relation to the 4.0 industry, Ceballos (2016) stated: that “The confluence of technologies allows the industry unimaginable opportunities, thus defining a new industrial model based on digitalization”. According to this author’s study, the new production model will involve the progressive disappearance of current mass production practices.

Recio (2018) states that “Some experts who have carried out empirical studies in highly industrialized countries such as Germany have found that unemployment is not the only problem and that other phenomena can be detected, such as inequalities among those who form part of the world of work due to differences in remuneration, which also represent important structural changes in the labor market”.

A study by Frey y Osborne (2017), which consisted of a comprehensive analysis of occupations in the US labor market, concluded that 47% of jobs present a high risk of disappearance as a result of digital transformation over the next twenty years. In a similar sense, Arntz, Gregory, y Zierahn (2016) estimate an impact on jobs of between 25% and 45%.

In contrast to the above, Seghezzi (2016) stated that the robotization of industry and the digitization of the services sector may lead to opportunities to generate employment. Also, Todolí-Signes (2017) reflected on the collaborative economy and its disruptive capacity in the virtual market thanks to transformation of the network.

Eguiguren (2011), who is executive director of The Global Alliance for Banking on Values (GABV), concluded that management of the problems and challenges identified accelerates research on alternative economic and business management models capable of offering a better alternative to the shortcomings inherent in the current model based fundamentally on capitalism. According to said author, companies should be led by corporate values based on sustainability, ethics, responsibility, transparency, democracy and participation.

With the same objective, the University of Girona promotes a study to conceptualize the Valometer, a system of business indicators for facilitating management with values whose research methodology consists of four bibliographic reviews, three forums and in-depth interviews. The tool forms part of the Vusiness project [from business, but with a “V” for values], which aims to promote sustainable, intelligent, open, democratic and inclusive companies to inspire the future. The project is led by the Arpa Research Group (Analysis group for reception and playback quality of Audio-visual Screens), which belongs to the University of Girona’s Philology and Communication Department, and has been presented at different North American universities: Harvard, MIT-Massachusetts Institute of Technology, Emerson College, Boston College and Suffolk University in Boston.

Following an exhaustive bibliographic review phase, three forums were held to reflect and debate on sustainable, inclusive and intelligent companies. The first was entitled “People, the heart of companies”, the second “Smart companies, generating the future” and the third “Sustainable companies, tackling climate change”. The diagnosis of the current situation led to the conclusion that there is a need to create an alternative business management model to the one currently in place.

2. Method

The main aim of this study is to conceptualize a business value management tool to promote sustainable, intelligent, open, democratic and inclusive companies, which must inspire the future.

2.1. Methodological strategies

Faced with a research problem that has been the object of very few studies, we proposed to carry out an exploratory investigation with the objective of designing indicators for business management by values from a new perspective. Different studies have coincided in pointing out that the most influential variables for defining indicators to measure, evaluate and make decisions in a given sector are obtained from the target public (Nieto-Galan, 2011). For this reason, our exploratory research was based on previous theoretical studies, consisting of four bibliographic reviews aimed at describing the current state of knowledge regarding how inclusiveness, sustainability, technology and communication are applied in today's business environment.

Based on the results of the documentary reviews, our exploratory research continued with the adoption of a qualitative approach that combined discussion forums with interviews using open questions, so as to compile the indicators in a participatory manner.

2.2. Population and sample

A través de un muestreo intencional teórico se seleccionan 50 profesionales-expertos (científicos y profesores de distintas disciplinas académicas y empresarios, emprendedores, técnicos y asesores de distintos sectores empresariales). El interés de los foros recae en el hecho de incluir distintos enfoques complementarios sobre un mismo tema para obtener un punto de vista más representativo. La Table 1 recoge la ficha técnica del estudio.

Fifty professional-experts (scientists and professors from different academic disciplines, businesspeople, entrepreneurs, managers and advisors from different business sectors) were selected by means of theoretical intentional sampling. The appeal of the forums lay in the fact that different complementary approaches on the same topic were included to obtain a more representative overall viewpoint. Table 1 contains the technical data for the study.

Table 1. Study data

Sample size	50 professionals-experts (scientists and professors from different academic disciplines, businesspeople, entrepreneurs, managers and advisors from different business sectors)
Data-gathering methods	4 Bibliographic reviews 3 Participatory discussion forums 21 In-depth interviews with open-ended questions
Sampling procedure	Intentional theoretical sampling
Dates	January 2016 to October 2018

2.3. Data-gathering instruments

The complex current situation and its wide spectrum of needs requires knowledge from different disciplines. Thus, it was clear from the outset that designing a tool of indicators for business management with values had to count on the participation of different points of view. For this reason, a methodology was proposed to conceptualize the Valometer, divided into the three tools listed below.

The first phase entailed conducting a comprehensive diagnosis to analyze the four key axes for developing values-based companies, namely technology, inclusiveness, sustainability and communication.

- Inclusive companies, reinventing quality of life: A theoretical review (Echazarreta & Costa, 2018a)
- Sustainable companies, tackling climate change: A theoretical review (Echazarreta & Costa, 2018c)
- Smart companies, inspiring the future: A theoretical review (Echazarreta & Costa, 2017b)
- Amplifying citizens' voices in the face of media globalization (Echazarreta & Costa, 2016).

As a result of the above, we obtained an image of the object of study that allowed us to focus on subsequent processes. Following this descriptive phase, the qualitative exploration phase entailed three forums with experts and opinion leaders. The focus group discussions were structured in three areas, in accordance with the results obtained from the diagnosis and bibliographic review phase: inclusiveness, sustainability and technology.

In order to design the criteria and indicators that define the Valometer without previously conditioning the participants, the forums were complemented by in-depth interviews using open questions.

2.4. Procedure

The focus groups were structured in three areas, in accordance with the results obtained from the diagnosis and bibliographic review phase: on inclusiveness, "People, the heart of companies", held on 18 October, 2016 with 9 participants; on technology, "Smart companies, generating the future" held on 22 November, 2016 with 12 participants; and on sustainability "Sustainable companies, tackling climate change" held on 24 January, 2017 with 8 participants. In total, the forums comprised 29 professionals in multidisciplinary groups.

In parallel, 21 interviews with open questions were conducted from January 2016 to October 2018.

The initial draft of the Valometer indicators was formulated between June and October 2018 on the basis of the data obtained from the four bibliographical reviews, previous working documents such as Smart Cities: The digital transformation of cities by PwC's and IE Business School's Public Sector Innovation Center (Seisdedos et al., 2015) and the article Industry 4.0, the great opportunity (Ceballos, 2016), the three discussion forums and the in-depth interviews.

Using the initial proposal, the professionals-experts revised and reformulated the criteria and indicators according to their knowledge and specialization in each of the five areas through meetings with the steering group and virtual interviews.

The first Valometer model was tested in pilot mode with a reduced sample of eight companies during the period June to August 2018 in order to assess its initial usefulness and viability.

3. Results

The Valometer, a system of business indicators to facilitate management with values, is a voluntary tool designed for companies. The Valometer aims to help and guide companies to control and measure the results of their management in five areas using a common comparable methodology.

The resulting tool is illustrated as a wind turbine consisting of 50 criteria and indicators constructed scientifically and divided into 5 areas: a) Identity; b) Administration and management; c) People; d) Sustainability; and e) Technology (See Figure 1).

The criteria and basic indicators are provided below (See Tables 2 to 6).

Figure 1. Sections of the Valometer



Valometer, a system of business indicators to facilitate management with values

Table 2. Section A: Identity

SECTION A: IDENTITY		
CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
A1. ENTREPRENEUR. Characterized by being creative, innovative, communicative, sensitive, honest, committed, ethical, empathetic, approachable, effective, efficient, transparent, responsible and possessing leadership skills.	A1.1	Percentage of the entrepreneur's personality traits and characteristics that determine whether he or she knows how to identify an opportunity and has the skills to put it into operation, over the total.
A2. MISSION. Our mission pursues a noble and commendable purpose. For ex. quality education; gender equality; decent working conditions and economic growth; responsible production and consumption, etc.	A2.1	Percentage of coincidence between company's declared mission and some of the 17 challenges defined in the UN's Sustainable Development Goals (SDGs)
A3. VISION. The company aims to achieve future goals aimed at developing people and sustaining the environment.	A3.1	Percentage of coincidence between the future challenges facing the company and those defined by the UN's Sustainable Development Goals (SDGs)
A4. VALUES. Profound commitment to ethical, social, labor and environmental values that favor the harmonious development of the planet and humanity.	A4.1	Percentage of company's ethical, social or environmental values compared to pragmatic-economic values (efficiency, quality, etc.)
A5. SUSTAINABLE. Contributes to wealth and the common good and does not consume more resources than it generates in any sphere.	A5.1	Percentage of energy resources generated by the company compared to those consumed.
A6. PROGRESS. Acts on technological progress and redirects it to be of help for a better world.	A6.1	Percentage of use of new technologies to promote quality of life compared to their use to eliminate jobs.
A7. RESPONSIBILITY. Freely acts out of full responsibility, especially towards society and the environment.	A7.1	Percentage of products and/or services, produced or rendered by the company, respectively, that favor society and the environment, over the total.
A8. TRANSPARENCY. Act in a fully transparent way on the free market.	A8.1	Percentage of access to the decision-making process, free access to documents, instructions, formulas, contracts, etc. that affect citizens or the environment over the total.
A9. ETHICS. Does not engage in any kind of speculative activities, not even marginally, and extends its ethical commitment to its chain of suppliers, distributors and customers.	A9.1	Number of ethical actions taken with regard to suppliers, distributors and customers compared to total activities.

A10. FAIR PROFIT. Aspires to obtain sufficient profit to continue contributing to social development and to provide just compensation to those who risk their capital and who dedicate their work to the company.	A10.1	Profits assigned to employees for just compensation for their work or social development and to improvement of the company in comparison to those assigned to oversized or unnecessary personal expenses or wasteful spending in euros.
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Table 3. Section B: Administration and management

SECTION B: ADMINISTRATION AND MANAGEMENT		
CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
B1. TRANSFORMATIVE LEADER. Characterized by being entrepreneurial, innovative, inspiring, creative, sensitive, honest, committed, social, ethical, empathetic, approachable, effective, efficient, transparent, discreet, reliable and responsible.	B1.1	Percentage of personality traits and profile characteristics that determine whether it is an authentic, inspiring leader capable of motivating, uniting and favoring team performance, over the total.
B2. GOVERNANCE. The board of directors, shareholders, management team, audit committee, etc. are organized and make decisions to achieve their legitimate objectives, always acting in a fully transparent, ethical and responsible manner.	B2.1	Number of strategic decisions taken ethically and responsibly and communicated compared to those that are hidden or do not respond to noble ends.
B3. SOCIO-ECONOMIC CONTEXT AND OPPORTUNITIES. The company is attentive to the challenges, opportunities and needs of society for it to become more sustainable, developed, just and equitable.	B3.1	Percentage of products and/or services developed in response to environmental challenges or needs to favor the circular economy, sustainable development or a more just and equitable society, over the total.
B4. VALUE PROPOSAL. Product or service that satisfies the rational needs of society.	B4.1	Number of products and/or services needed to live or make a better world compared to those that respond to mere consumerism.
B5. PARTNERS. The company relates with suppliers, distributors and influencers who have certain ethical principles and values and treats them fairly.	B5.1	Percentage of suppliers, distributors and influencers that operate honestly, transparently and fairly, over the total.
B6. CHANNELS. Relates to its clients in an honest way, with marketing that promotes responsible consumption and not consumerism and establishes positive and lasting relationships.	B6.1	Percentage of communications (campaigns, meetings with clients, product presentations, press conferences, brochures, etc.) based on complete, verified, truthful, honest and transparent messages and information, over the total.

<p>B7. PRICES. In accordance with the proposal for value, fair prices are established that allow adequate remuneration for the production or manufacture of the product, especially for small local producers, and fair remuneration of workers who provide a service.</p>	<p>B7.1</p>	<p>Percentage of sales allocated to suppliers, over the total.</p>
<p>B8. TRIPLE BALANCE FINANCE. Seeks a balance between growth and the distribution of wealth, including the aspiration to obtain a sufficient and just economic profit while attending to the social and environmental dimension.</p>	<p>B8.1</p>	<p>Percentage of sales revenue allocated to improving the remuneration of workers based on the company's results or social projects or improving the environment, over the total.</p>
<p>B9. LEGALITY. The legal, mercantile, fiscal and labor practices employed are the most adequate for achieving the company's noble ends and contributing to the community as a company, and under no circumstances are aimed at obtaining better fiscal treatment. Ensuring correct behavior in the real economy and not for speculative ends.</p>	<p>B9.1</p>	<p>Number of legal, mercantile, fiscal and labor practices suitable for carrying out its noble aims and contributing to the community as a company in comparison with those designed exclusively to obtain a better fiscal treatment.</p>
<p>B10. SOCIAL ROI (RETURN ON INVESTMENT). Has a system of evaluation indicators aimed at continuous improvement and related to concepts that enhance responsibility and transparency. Seeks continuous improvement through innovation in sustainability, intelligent use of technology and practices cohesive with preserving the environment (local employment, community focus, etc.)</p>	<p>B10.1</p>	<p>Social return on invested capital (ROIC. Return on Invested Capital) in euros.</p>

Table 4. Section C: People

SECTION C: PEOPLE		
CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
<p>C1. JOINT LEADERSHIP. Encourages joint leadership distributed among team members and project leadership to take advantage of individual skills. Leaders must show initiative and a pro-active attitude, acting as an inspiring and</p>	<p>C1.1</p>	<p>Percentage of workers with leadership responsibilities within the workforce over the total number of personnel.</p>

stimulating driving force for groups to carry out their work.		
C2. TEAMWORK. Development of and care for work teams through emotional values such as joy, solidarity and freedom to enhance creativity, talent and innovation, acting transparently, promoting active participation and creating mechanisms to make it real and possible. Influences the working environment and gives free rein to people's talent.	C2.1	Percentage of usual hours of teamwork compared to total hours worked.
C3. PROFESSIONAL DEVELOPMENT. Promotes staff development through professional development, offering promotion possibilities.	C3.1	Annual percentage of workers promoted compared to total workforce.
C4. KNOWLEDGE AND TRAINING. Creates mechanisms to attract talent and bring through emerging talent. Enhances knowledge through training adapted to new times and current challenges. Promotes the transmission of knowledge among workers. Uses conventional media as well as digital and virtual reality platforms.	C4.1	Annual average number of hours dedicated to training workers, sessions to enhance their talent or specific meetings to share knowledge.
C5. EQUALITY AND INCLUSION. Creates an environment that respects and promotes social diversity, gender, functional diversity, generational and cultural diversity in the company.	C5.1	Number of measures and projects that promote equality and inclusion (for example, hiring people with disabilities, participation in social programs to promote the workplace insertion of immigrants, adaptation of facilities to improve accessibility, etc.)
C6. CONCILIATION AND TELEWORKING. Promotes the reconciliation of work with personal and family life through measures such as flexible hours and teleworking.	C6.1	Number of measures and projects that promote conciliation and teleworking (e.g. flexible working hours, discretionary transport for workers, possibility of teleworking, etc.)
C7. FAIR REMUNERATION. Makes payments correctly and on time and remunerates according to the specific functions and characteristics of the job as well as assigned tasks, also valuing the worker's involvement, skills and abilities. Also includes motivation.	C7.1	Number of benefits, agreements and additional advantages of personnel at the level of remuneration compared to that determined by the current status of workers' or collective agreements.

<p>C8. NETWORK. Encourages and communicates corporate volunteer activities, the development of participants' personal skills, donations to local institutions, facilitates school visits to the workplace, etc.</p>	<p>C8.1</p>	<p>Number of measures and actions taken to promote links with nearby networks (e.g. guided tours, possibility of non-work placements in companies, ease of internship contracts, collaboration and sponsorship of entities or neighborhood associations, etc.)</p>
<p>C9. MEDICAL ATTENTION, HEALTH AND WELFARE. Medical care and health and safety measures in the workplace. Health assistance services complementary to public services: cardiovascular, diabetes, wellness, stress management, etc. to improve the work environment and encourage healthy habits such as sports.</p>	<p>C9.1</p>	<p>Number of cases and situations that receive medical, health or welfare coverage in addition to the mandatory average for each worker (for example: weekly check-ups for pregnant women, online medical consultations, dental coverage, coverage of glasses and contact lenses, etc.)</p>
<p>C10. COLLABORATION. Encourages communication and active collaboration between different departments using all available means, and allowing staff rotation between departments (meetings, communication screens, interactive Ipad tiles, etc.).</p>	<p>C10.1</p>	<p>Number of channels, media, tools and spaces available to encourage communication and collaboration (intranet, instant messaging, email, telephone, cafeteria space, etc.)</p>

Table 5. Section D: Sustainability

SECTION D: SUSTAINABILITY		
CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
<p>D1. ENVIRONMENTAL IMPACT. Consumption of water, gas, electricity, detection and reaction to environmental emergencies: leaks, fires, etc.</p>	<p>D1.1</p>	<p>Percentage of the company's premises controlled via networks of intelligent environmental sensors and smart metering that allows consumption as well as pollutant particles and emissions caused by environmental emergencies to be automatically detected, over the total</p>
<p>D2. CONSUMPTION AND PRODUCTION OF RENEWABLE ENERGIES. Self-generation of energy from renewable sources: photovoltaic plates, low enthalpy geothermics, mini wind turbines, etc.</p>	<p>D2.1</p>	<p>Percentage of renewable energy use (e.g. solar, thermal, photovoltaic, bioenergy, hydraulic, tidal, wind, wave and geothermal) compared to finite energy use (based on oil, coal and natural gas)</p>
<p>D3. ENERGY EFFICIENCY. Allows efficiencies to be increased and energy management improved. Solutions that promote energy consumption management in air conditioning, elevators and lighting.</p>	<p>D3.1</p>	<p>Percentage use of energy efficient equipment: for energy storage, high-energy efficiency and low consumption, such as cogeneration and high-efficiency boilers, automation and LED technology, smart and on-demand lighting systems or presence sensors in comparison with conventional non-efficient means.</p>

<p>D4. BIOCLIMATICS AND SUSTAINABLE BUILDING. Zero consumption buildings, allowing reduced consumption without the need for more sustainable energy installations.</p>	D4.1	Percentage use of sealants, windows, building covers, etc. in comparison with systems that do not favor reduced consumption.
<p>D5. INTEGRATION IN THE LANDSCAPE AND THE ENVIRONMENT. To favor integration in the natural landscape and environment and promote thermal reduction through production systems that promote biodiversity and respect for nature in agricultural areas.</p>	D5.1	Number of measures designed to favor integration in the landscape and the environment (e.g. plants and vegetation on roofs, walls and company premises to create shade, air moisture and avoid heat islands, color integration of facilities in the environment, and promoting the consumption of local products that are respectful of the environment).
<p>D6. MANAGEMENT OF INTEGRAL WATER CYCLE AND INTELLIGENT IRRIGATION</p>	D6.1	Number of technological resources used to favor water being a closed cycle (e.g. catchment, transportation, distribution, sewage, consumption meters, invoicing, collection, purification and treatment, etc.; low-energy gardening integrated into the environment and automated sprinkler and sensor networks to measure when and how much to irrigate).
<p>D7. CIRCULAR ECONOMY, REDUCTION, REUSE, RECYCLING AND INTELLIGENT WASTE MANAGEMENT The circular economy involves generating products that maintain their usefulness and value and is characterized as being reparative and regenerative production.</p>	D7.1	Number of measures adopted to favor the ecodesign of products and the reduction, reuse, recycling and intelligent management of waste above and beyond legal compliance. For ex., purchasing materials taking into account the life cycle, eco design in new products, the use of recycled products and products with environmental certification or eco labels, real-time information on container levels, etc.)
<p>D8. PUBLIC TRANSPORTATION AND REMUNERATION FOR TRAVEL Encourages employees' use of public transport to go to work</p>	D8.1	Number of measures encouraging employees' use of public transport to get to work (contribution to the costs of polygonal mobility, adaptation of transport schedules, real-time information on incidents and frequencies, digital advice to the traveler, etc.)

<p>D9. NON-MOTORIZED MOBILITY Ecologically-propelled vehicles and promotion of the use of conventional bicycles or walking</p>	<p>D9.1</p>	<p>Number of measures adopted to favor the use of non-motorized mobility (electric bicycle, motorcycle and car, conventional bicycle or on foot). For example: parking, access to buildings for folding bicycles, provision of a space for changing and showering, availability of charging networks, information systems on location and availability, rental systems, etc.</p>
<p>D10. TRANSIT MANAGEMENT Reducing the carbon footprint via the management of company fleets and promote vehicle sharing</p>	<p>D10.1</p>	<p>Number of measures proposed to favor the flow of traffic (calculation of company fleet's carbon footprint, mobility plans, favoring car sharing for workers' vehicles, optimizing the transport of goods, traffic forecasting, smart traffic lights, real-time driver information, warnings about incidents, etc).</p>

Table 6. Section E: Technology

SECTION E: TECHNOLOGY		
CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
<p>E1. DIGITAL TRANSFORMATION. Establishes mechanisms to facilitate the incorporation of technology in all processes. Facilitates the change of mindset that digitalization involves, including trends and advances in fields such as nanotechnology, genetics, and the maker movement, the collaborative economy and the circular economy. All this while addressing ethical issues in favor of people and quality of life over robotization.</p>	<p>E1.1</p>	<p>Average number of annual hours per worker the company allocates to raising awareness, training and guiding employees towards digital transformation and to addressing ethical questions in the face of robotization.</p>
<p>E2. INTERNET OF THINGS (IOT). Internet of things applied to different sectors of activity, allows objects to be to connected to each other and to the Internet.</p>	<p>E2.1</p>	<p>Percentage of the company's products that have sensors and embedded computing that allows them to send and receive information in real time, over the total.</p>
<p>E3. OPEN DATA. Makes information available to workers, suppliers and customers in standard, open and interoperable formats to promote transparency.</p>	<p>E3.1</p>	<p>Percentage of the company's data that are in open and accessible formats for workers, suppliers and customers, over the total.</p>

<p>E4. CYBER PHYSICAL SYSTEMS. Systems connected to each other and in turn to the virtual world of digital networks. These are advanced communications networks that comprise integrated platforms for management. They integrate monitoring, management and operation capabilities, facilitating supervision and/or control.</p>	<p>E4.1</p>	<p>Percentage of company data monitored and controlled via a platform with a cyber physical system (technical infrastructure connected to open standards; systems connected via the IoT; software-defined platforms and smart service platforms), over the total.</p>
<p>E5. 5G, CONNECTIVITY, CLOUD COMPUTING AND DIGITAL COMMERCE. 5G is the telecommunications infrastructure that enables new digital-based services (autonomous vehicle, remote medical assistance, remote surgical operations, etc.). Cloud computing makes information available to workers, clients and suppliers anywhere and any time thanks to flexible technology that allows all resources to be stored in the cloud. Offers the possibility of buying and selling online.</p>	<p>E5.1</p>	<p>Percentage of company information enabled in 5G, stored in the cloud and accessible from anywhere and at any time thanks to communication technologies used for working, buying and selling, over the total.</p>
<p>E6. COLLABORATIVE TECHNOLOGY Enables collaborative models that allow the birth of new C2B businesses (e.g. Waze, etc.) capacity and asset sharing (e.g. Uber, Cabify, AirBnb, Blablacar, etc.) or the integration of customers and partners in the business process, in addition to new forms of collaboration in business (crowdsourcing data, crowd-funding). Appearance of the blockchain and the possibilities it offers. Also includes collaborative robotics, a new generation of more versatile robots, easy to program and manage.</p>	<p>E6.1</p>	<p>Company's annual financial resources allocated to collaborative technology in euros.</p>
<p>E7. ADDITIVE MANUFACTURING. Or 3D printing, includes those devices that produce a 3D object from a digital input, without the need for molds or tools of any kind, through the depositing of layers of material and its consolidation.</p>	<p>E7.1</p>	<p>Percentage of produced objects that are manufactured through 3D printing, over the total.</p>

<p>E8. ARTIFICIAL INTELLIGENCE. Multidisciplinary area that aims to equip machines with cognitive processes typical of human reasoning such as deducing, reasoning and solving complex problems. Includes the branch of machine learning or automatic learning, which seeks to develop techniques that allow machines to learn automatically.</p>	<p>E8.1</p>	<p>Company’s annual financial resources allocated to artificial intelligence in euros.</p>
<p>E9. IMMERSIVE TECHNOLOGY Augmented Reality (AR) is the technology that offers digital information superimposed on real vision. Virtual reality or simulation (VR) is used in the factory to recreate a mirror of the physical world in a virtual model. Mixed reality (MR) is the combination of virtual reality and augmented reality.</p>	<p>E9.1</p>	<p>Company’s annual financial resources allocated to Immersive Technology en euros.</p>
<p>E10. CYBERSECURITY AND CYBERINTELLIGENCE. Systems for protection and warning of attacks on Internet security of essential services for companies or that can cause damage to users and clients. Physical security of data in the face of Ransomware and/or technological failure. Protection of personal data, complying with current regulations (currently the GDPR, General Data Protection Regulation).</p>	<p>E10.1</p>	<p>Number of measures taken to protect data and critical systems from cyber attacks (e.g., software protection systems, backup copies, personal data protection protocols, etc.)</p>

4. Discussion and conclusions

According to Echazarreta and Costa (2017a): “The destruction of thousands of jobs, precarious labor market conditions and a lack of work are risk factors in environments of exclusion and social marginalization. Victims in industrialized societies tend to be the least qualified workers”. Business management with values may provide a progressive and effective response to these problems, challenges and threats arising from globalization and economic and financial crises, the consequences of child labor, the irruption of technology and severe climate change.

The axis of Identity is committed to creating a more balanced society since, according to Rocha and Aragon (2012), modern society is presenting an increasingly unequal distribution of wealth. In a complementary sense, the axis of Administration and Management aims to promote more horizontal and collaborative management models, in which the involvement and loyalty of suppliers, workers and customers is essential and decisive for the company, in line with the conclusions of studies by Todolí-Signes (2017).

The Valometer’s axis of People is designed to prevent the effects of economic and financial crises since, according to Hadad Hadad and Valdés Llanes (2010), crises create precarious labor markets,

causing the destruction of thousands of jobs and an increase in embargoes and evictions that have a social impact on the most vulnerable groups.

In addition, it shows a commitment to awarding value to people, with the aim of enhancing productive processes and slowing down the outsourcing of processes characteristic of a globalized culture committed to offshoring. In line with the theories posited by Mendizabal and Errasti (2006), awarding people value in an organization is shown to have a direct impact on the productive fabric.

Fourthly, the axis of Sustainability is designed to address and respond to climate change, which according to Echazarreta and Costa (2018c) represents a pressing threat with potentially irreversible effects. Globalization increases the unbalanced use of non-renewable finite energy resources, largely due to high transport transits. Hence the need for business management models that combine the development and growth of companies with protection of the environment and the planet.

Finally, the axis of Technology is designed to facilitate the transition to the processes of digitization and artificial intelligence development, which according to Recio (2018) entail a profound change in how companies organize their work.

The purpose of the indicator system is to improve business management and help determine priorities for action. The data collected during the phases of tool development and pilot testing suggest that only comprehensive management programs using values in the different areas can help overcome the shortcomings of the current business management model described in the four bibliographic reviews.

The results of using the Valometer are based on self-evaluation, observations, data collection from different sources and the analysis of these data by companies. No minimum values were established and no certifications provided.

However, identifying indicators provides companies with the basic information to monitor in the five areas, which facilitates more effective management according to values towards people and the environment.

By way of conclusion, based on the comments received from the companies involved in this study, a group of experts from the University of Girona will periodically review the system. The 2018 edition of the tool is the result of the pilot test. It is our hope that later editions will offer a verified and suitable system.

We recommend a steering group be created to make changes and award value to the tool and a unified communication strategy be established for the tool, in the same direction and with the same attributes and values.

With the aim of raising awareness of it in the business world, it is proposed that a White Paper be drafted on “good practices” to encourage management with values.

At the educational level, it is proposed that teaching materials be generated for elementary, secondary, post-secondary and university education. In the field of entrepreneurship, it is recommended that materials and formats be adapted for entrepreneurs to explore and start their business venture with a business plan aimed at values.

After analyzing different studies on business management focused on people, the environment and the use of technology, we conclude that the Valometer can serve as a useful tool to address some shortcomings presented by business management models aimed at human resources, energy resources and the use of technology.

The aim of this study, which adopted a theoretical-conceptual approach, was to design an open reference framework for the study, initial conceptualization and drafting of the Valometer. The results

should be considered preliminary and need to be confirmed by later studies. Research in the field of business management with values must be ongoing and multidisciplinary.

Finally, experimental studies are needed that are capable of evaluating the results of using the Valometer as a tool for management with values in the business environment.

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Workshop: Empresas Con Valores

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Abstract

International financial crises have a strong impact on economic activity, destroying thousands of jobs, increasing unemployment and causing a deterioration in social conditions. Globalization is increasing the unbalanced use of non-renewable finite energy resources and is not contributing to the equitable distribution of wealth, but rather generating macroeconomic imbalances. Automation and robotization can involve the massive destruction of jobs. Climate change represents a pressing threat with potentially irreversible effects. These aspects highlight the vulnerability of the current economic system and the need for companies with values: open, democratic, sustainable, inclusive and technologically intelligent companies that inspire the future. Given this situation, this workshop draws together 30 to 50 people to work on and debate companies with values in a participatory, active manner in working groups, with the aim of overcoming myths, prejudices and stereotypes and finding solutions related to different areas of business.

Keywords: workshop, companies with values, sustainability and inclusiveness

1. Introducción

Las crisis financieras internacionales vuelven a poner de manifiesto la vulnerabilidad del actual sistema económico. La onda recesiva se hace cada vez más frecuente, profunda y global y ha agravado la pobreza, la inseguridad y la exclusión fundamentalmente en los sectores sociales (Hadad Hadad and Valdés Llanes 2010).

El empleo, la distribución de la riqueza y los equilibrios macroeconómicos están fuertemente influidos por las relaciones con el sistema internacional. La globalización plantea interrogantes fundamentales de cuya resolución dependen el desarrollo y la integración. La recesión ha impactado en la actividad económica destruyendo miles de empleos, aumentando el paro y provocando un deterioro significativo de las condiciones de vida de una parte significativa de la población (Commoner 2015).

En el entorno actual las empresas están adoptando cada vez más estrategias relacionadas con la deslocalización de la producción en países con bajos costes de producción, fomentando un tipo de empleo sin calidad que no garantiza a los trabajadores escapar de la pobreza. Estudios recientes estiman que 168 millones de niños trabajan en el mundo, la mitad arriesgando su vida, y muchos de ellos lo hacen en regiones devastadas por conflictos y catástrofes (United-Nations 2015).

Según Echazarreta and Costa (2018) el cambio climático representa una amenaza apremiante y con efectos potencialmente irreversibles. En el entorno económico actual, la globalización incrementa de forma significativa el uso no equilibrado de recursos energéticos finitos no renovables. Se aumenta de forma alarmante los consumos energéticos debido a los costes de transporte y del uso de tecnología menos eficiente. En contraposición al actual modelo de crecimiento económico, se requieren con urgencia fuertes reducciones de las emisiones mundiales para hacer frente al cambio climático y promover el desarrollo. De lo contrario, la incertidumbre asociada a la evolución tecnológica nos puede llevar a la ruina ecológica.

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Lombardero (2015) afirma que “La tecnología es el gran desencadenante del progreso económico. A principios de la actual década, las tecnologías digitales emergentes - movilidad, Cloud Computing, Big Data, Internet de todas las cosas (IoE), Smart Cities o Industria 4.0 – forman el grupo de tecnologías que hacen posible la transformación digital de las empresas tradicionales de la industria y los servicios que ocupan el 90% del empleo, y con ello están dando lugar a la Cuarta Revolución Industrial o Era Digital. La era digital [...] va a permitir el desarrollo de un nuevo modelo económico para Europa que nos permita salir de la actual crisis.”

Aunque cabe constatar que, se estima que el 47 por ciento de los puestos de trabajo actuales puede ser susceptible de ser sustituido por la automatización, factor que puede generar una situación muy grave, socialmente alarmante, de dimensiones desconocidas. Razón por la cual, según Álvarez (2017) se convierte en una necesidad y un reto “la creación de empleo en nuevos sectores, productos o servicios ante la destrucción masiva de puestos de trabajo consecuencia de la automatización y el advenimiento de una era robotizada; los cambios en el modelo de ocupación tradicional manifestados en una nueva dirección de los recursos humanos con el riesgo de una más acusada individualización y de una perpetua disponibilidad horaria; o los obstáculos para la viabilidad de los sistemas de seguridad y bienestar sociales ante la insuficiencia de las cotizaciones”.

Los estudios de Eguiguren (2011) concluyen que la situación económica y social ha acelerado la búsqueda de modelos económicos alternativos, que minimicen los efectos de las crisis y superen las carencias del actual sistema. Según el autor, se requieren empresas que actúen en el mercado con sentido de responsabilidad, transparencia, democracia, participación y ética; empresas lideradas con políticas y valores corporativos propios de una cultura empresarial sostenible a nivel social, económico y medioambiental

En este contexto nace el modelo Vusiness [del inglés “Business”, negocios, con “V” de valores] que promueve las empresas abiertas, democráticas, sostenibles, inclusivas y que hacen un uso inteligente de la tecnología, que tienen que inspirar el futuro, impulsado por el Grupo de Investigación ARPA (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales) del Departamento de Filología i Comunicación de la Universitat de Girona.

Este entorno requiere de empresas sostenibles capaces de erradicar y minimizar los efectos de las crisis y superar las carencias que presenta el actual modelo económico. Por eso, nuestra misión es acelerar la transición necesaria hacia un mundo más justo y equitativo.

Para elaborar el corpus teórico que sustenta el modelo Vusiness se está llevando a cabo de forma estructurada y metódica desde 2015 una exhaustiva revisión bibliográfica para seleccionar los estudios más relevantes, con el objetivo de sentar las bases científicas para la creación del modelo alternativo de empresas con valores.

Al mismo tiempo se han llevado a cabo tres Foros de reflexión y debate alrededor de las empresas inclusivas, abiertas y democráticas. El primero llevaba por título: “Las personas, el centro de las empresas”, el segundo: “Empresas inteligentes, generando futuro” y el tercero: “Empresas sostenibles, afrontando al cambio climático”. En cada uno de ellos una decena de expertos de distintas instituciones y empresas han reflexionado alrededor de cada eje central: inclusividad, tecnología y sostenibilidad.

El modelo se ha presentado en distintas universidades para proponer colaboraciones: Harvard University, MIT-Massachusetts Institute of Technology, Emerson College, Boston College y Suffolk University de Boston. Actualmente, 50 profesionales están creando de forma colectiva un Valómetro, una herramienta para medir 50 valores empresariales relacionados con la identidad, la administración y gestión, las personas, la sostenibilidad y la tecnología inteligente en las empresas.

2. Descripción del workshop

El workshop reúne entre 30 i 50 personas para trabajar y debatir de forma participativa, activa y en grupos de trabajo, sobre las empresas con valores, superando mitos, prejuicios y estereotipos y alcanzando soluciones relacionadas con distintas áreas de las empresas: identidad, administración y la gestión, personas, sostenibilidad y tecnología.

2.1. Objetivo general del modelo

En consonancia Stafford-Smith, et al. (2017) y tomando en consideración los retos definidos en la nueva agenda de desarrollo sostenible aprobada por Naciones Unidas en septiembre de 2015 se proponen los siguientes objetivos generales del Modelo Vusiness:

- Promover el crecimiento económico sostenido, inclusivo y sostenible, el empleo pleno y productivo y el trabajo decente para todos.
- Promover la industrialización inclusiva y sostenible y fomentar la innovación
- Garantizar modalidades de consumo y producción sostenibles.
- Garantizar una educación inclusiva, equitativa y de calidad y promover oportunidades de aprendizaje durante toda la vida para todos.
- Lograr la igualdad entre los géneros.
- Adoptar medidas urgentes para combatir el cambio climático y sus efectos.
- Garantizar el acceso a una energía asequible, segura, sostenible y moderna.
- Promover sociedades justas e inclusivas.

2.2. Objetivos específicos del workshop

El principal objetivo específico del workshop es sensibilizar acerca de la posibilidad de generar un modelo de empresas con valores que actúen como una alternativa capaz de superar las insuficiencias que presenta el actual modelo económico que ha desencadenado crisis económicas y financieras globales. Concretamente por área se especifican una serie de objetivos específicos.

Inclusividad

A nivel de inclusividad, acorde con las conclusiones de Echazarreta and Costa (2017a) se proponen los siguientes objetivos específicos:

- Superar el actual sistema económico fuente de desigualdad y exclusión.
- Fomentar las empresas inclusivas que generan oportunidades para el desarrollo y tienen por objetivo mejorar la calidad de vida de las personas que sufren exclusión social.
- Describir las principales características de las empresas inclusivas que se basan en cuatro principios fundamentales como son los valores, la gestión de equipos, la responsabilidad social corporativa y el marketing responsable.
- Fomentar las empresas inclusivas que contribuyan al bien común, abanderadas por líderes que promuevan el uso de la tecnología de la información y la comunicación como medio para mejorar la calidad de vida de los ciudadanos.

Sostenibilidad

A nivel de medio ambiente y movilidad, acorde con las conclusiones Echazarreta and Costa (2018) se propone como objetivos:

- Describir las principales características de las empresas sostenibles, sustentadas en ideales y valores comprometidos con el desarrollo del planeta, consumiendo menos recursos de los que generan.
- Fomentar a nivel de medio ambiente los recursos energéticos renovables, desarrollo sostenible, preservación del medio ambiente, consumo responsable de energía, minimización de emisiones, ecoeficiencia y la economía circular
- Fomentar a nivel de movilidad el transporte público colectivo, vehículo eléctrico, sistemas de movilidad limpios y no motorizados.
- Potenciar las empresas sostenibles que compatibilicen el desarrollo empresarial con el medio ambiente y la protección del planeta.

Tecnología Smart

A nivel de un uso inteligente de la tecnología, siguiendo un estudio de Echazarreta and Costa (2017b) el taller tiene como objetivos:

- Informar sobre los efectos de las crisis económicas y financieras globales que han acelerado la búsqueda de modelos empresariales alternativos.
- Describir las principales características de las smartcompanies o empresas inteligentes, capaces de superar las carencias que presenta el actual sistema económico.
- Promover las empresas inteligentes abanderadas por líderes que promuevan el uso de la tecnología de la información y la comunicación como medio para mejorar la calidad de vida de los ciudadanos.
- Fomentar empresas y consumidores que actúen en el libre mercado de forma responsable, ética, solidaria y justa, capaces de hacer compatible su crecimiento económico con la distribución de la riqueza.

2.3. Metodología

Presentación

Los dinamizadores inician el taller dando la bienvenida y las gracias a los asistentes. Con la ayuda de una presentación Power Point [Se anexa el archivo Power Point del taller completo] los dinamizadores se presentan de forma breve y explican el proyecto Vusiness haciendo énfasis en qué el proyecto promueve las empresas con valores como un modelo de negocios sostenible, necesario ante fenómenos como la globalización, las crisis económicas y financieras, el trabajo infantil y el cambio climático. [Se anexa un archivo PDF de presentación del taller y del modelo Vusiness. Descargar fichero] (Tiempo estimado: Unos 10 minutos).

Introducción al concepto Vusiness

A continuación se invita a los asistentes a participar en una partida de Kahoot!, una herramienta on-line muy útil para aprender conceptos de forma entretenida, como si fuera un concurso a través responder cada participante con su Smartphone las 20 preguntas tipo test que aparecen proyectadas en la pantalla y que dan pie a la discusión y debate. El juego del taller se denomina “Vusiness ModelPresentation” y se accede a la partida después de tramitar el alta a la plataforma www.kahoot.com.

Por su parte, los asistentes acceden a la misma a través de la web kahoot.it. La gamificación permite hacer un recorrido rápido alrededor de datos sorprendentes y alarmantes relativos a los ámbitos que motivan la creación del proyecto Vusiness. Kahoot! recompensa a quienes progresan en las respuestas con una mayor puntuación de aciertos y rapidez situándolos a lo más alto del ranking, la cual cosa siempre despierta la atención y fomenta la participación de la mayor parte de la sala. (Tiempo estimado: Unos 20 minutos).

Mitos

Una vez la partida ha concluido, los participantes se dividen en 5 grupos. Se recomiendan grupos de 5 o 6 personas para facilitar la participación de todos los miembros. Al azar, se asigna a cada grupo un documento con mitos sobre el medio ambiente, las mujeres, la inmigración, la tecnología y las personas emprendedoras. A partir de la discusión y reflexión inspirada por los mitos, los miembros del grupo tienen que escribir, en un post-it, una oportunidad o un problema para las empresas y negocios sobre cada tema. Se recomienda usar un solo post-it amarillo para escribir un solo reto o problema. A los veinte minutos se invita a un representante de cada grupo a que exponga cuáles son los principales retos o problemas para las empresas detectados en un ámbito [Se anexa1 documentopdf con los mitos.Descargar fichero]. (Tiempo estimado: Unos 30 minutos).

Categorías Vusiness

Con el mismo grupo, coge cada post-it con una oportunidad o problema y pégalo en la categoría en el que se incluya mejor: identidad, administración y gestión, inclusividad, sostenibilidad y tecnología inteligente. [Se anexa 1 documentopdf con el nombre de las categorías para poder pegarlas en una cartulina. En la cartulina con las categorías es donde los participantes podrán pegar los post-its con los retos o problemas. Descargar fichero]. (Tiempo estimado: Unos 5 minutos).

Soluciones

A cada grupo se le asigna, al azar, una cartulina con la categoría identidad, administración y gestión, inclusividad, sostenibilidad o tecnología inteligente. A partir de ahí el grupo tiene que proponer soluciones por cada oportunidad o problema. Se recomienda usar un solo post-it de color distinto al amarillo, para cada solución. Puedes escribir más de una solución para cada problema. A los veinte minutos se invita a un representante de cada grupo a que exponga cuáles son las soluciones propuestas ante cada reto o problema. (Tiempo estimado: Unos 30 minutos).

Reflexión y debate

Después de compartir las soluciones, los dinamizadores exponen el Valómetro, un instrumento que sirve para medir los valores de las empresas elaborado a través de un foro de 50 profesionales de distintos ámbitos y sectores de actividad dentro del proyecto Vusiness. Durante la exposición de esta herramienta, los dinamizadores establecen comparaciones y paralelismos entre las soluciones propuestas por los participantes ante los retos y los indicadores que define el Valómetro. A partir de ahí se abre un espacio de debate y reflexión entre los asistentes (Tiempo estimado: Unos 25 minutos).

Propuestas de colaboración

Con el objetivo de ampliar la base de personas interesadas en contribuir a sensibilizar, formar, difundir o generar conocimiento alrededor del modelo de empresas con valores, los dinamizadores proponen cinco formas de participación:

- Miembros nucleares: Participar como miembro en el proyecto y ser proactivo y dinámico proponiendo nuevas líneas y actividades.
- Investigación: Participar en líneas de investigación concretas.
- Proyectos: Participar activamente en proyectos de educación, emprendimiento y negocios.
- Acuerdo: Participar activamente en campañas, comunicaciones, creando material para ser aplicado, transferencia a la sociedad.
- Comité científico: Posibilidad de ser invitado por otras universidades como un profesor invitado, revisando artículos, participando puntualmente en algunas investigaciones.

2.4. Duración

El workshop tiene una duración aproximada de unas dos horas.

2.5. Público objetivo

El perfil del público objetivo para el workshop puede ser:

- Estudiantes de secundaria a partir de alguna asignatura de empresa
- Personas emprendedoras
- Empresarios/as
- Profesorado
- Población en general con interés en el ámbito de las empresas

3. Resultados

Cada grupo plantea libremente las soluciones a los retos y problemas surgidos a partir de las reflexiones ante los mitos y prejuicios de la primera parte del workshop. En caso de que el grupo no esté inspirado para plantear soluciones, el dinamizador/a del workshop puede sugerir algunas soluciones a modo de ejemplo. Habitualmente en los talleres, las soluciones planteadas por ámbitos suelen ser indicadores tales como:

- Identidad: propuesta de valor, emprendedor/a, misión, visión, valores, beneficios, responsabilidad, relaciones con el entorno, transparencia y ética.
- Administración y gestión: solución, ventaja, segmento del mercado (cliente), canales, indicadores, recursos de los que dispones, indicadores, costos e ingresos.
- Personas: liderazgo, trabajo en equipo, remuneración justa, igualdad, atención médica y de salud, colaboración, actualización y reciclaje, desarrollo profesional, relaciones con la comunidad y programas de salud y bienestar.
- Sostenibilidad: medio ambiente (generación de energía con placas fotovoltaicas, redes de sensores ambientales inteligentes y smartmetering, eficiencia energética, gestión del ciclo integral del agua y riego inteligente, alumbrado eficiente, protección ambiental, reducción, reutilización, reciclaje y gestión inteligente de los residuos) y movilidad (transporte público inteligente, control de peajes, acceso a zonas restringidas y parking inteligente, gestión del tránsito y gestión de flotas, movilidad no motorizada, vehículo eléctrico, uso compartido, acceso a los edificios con bicicletas plegables).
- Tecnología: open data, plataforma de gestión de servicios y productos, comercio digital, marketing digital, red de comunicaciones avanzadas, social wifi y seguridad (video vigilancia, emergencias, protección del patrimonio e infraestructuras y ciberseguridad).

4. Conclusiones

Tras las intervenciones de todos los participantes en los distintos workshops desarrollados a partir del modelo Vusiness de empresas con valores, podemos extraer una serie de conclusiones:

A través de los workshops se puede profundizar en conceptos como la sostenibilidad, la inclusividad y la tecnología Smart para combatir mitos y prejuicios alrededor del medio ambiente, las mujeres, la inmigración, la tecnología y las personas emprendedoras.

El workshop concluye con una aproximación a las empresas con valores, que aportan soluciones a los retos que plantea la globalización, las crisis financieras Internacionales, la automatización y la robotización o el cambio climático.

Primeramente, se pone de relieve la necesidad de detectar empresas con valores, sostenibles, inclusivas que hagan un uso inteligente de la tecnología, para disponer de un análisis descriptivo y en profundidad que facilite la comprensión del nuevo modelo.

En segundo lugar, los presentes resultados y conclusiones pretenden representar algunas formas de sensibilizar y visualizar la necesidad y posibilidad de transformar el actual modelo económico generador de desequilibrios y desigualdades sociales. Los resultados tienen que ser considerados como preliminares y requieren ser confirmados en workshops posteriores. La investigación en este ámbito debería ser constante y pluridisciplinar.

En tercer lugar, se requieren estudios descriptivos que definan indicadores cuantitativos y cualitativos sobre empresas con valores para facilitar la concreción y así sensibilizar, informar, asesorar, formar y consolidar emprendedores/as, empresarios/as y la población en general con mayor facilidad. Posteriormente, se necesitan estudios con diseños experimentales, capaces de valorar los resultados del modelo.

Finalmente, se recomienda continuar desarrollando materiales didácticos y contenidos informativo y formativo del nuevo modelo integrador, con distintos formatos y traducido a varios idiomas, con el fin de sensibilizar, formar y asesorar sobre las empresas con valores: abiertas, democráticas, sostenibles, inclusivas y tecnológicamente inteligentes que inspiren el futuro.

Las presentaciones y documentos de texto necesarios para desarrollar el workshop están en la página web de la Society for Applied Anthropology.

Workshop: Vusiness [Business & Values]

PhD. Carmen Echazarreta Soler¹, Pd.D. Student. Albert Costa Marcé² &
 Mr. Xavier Altimir Echazarreta³

Abstract

International financial crises have a strong impact on economic activity, destroying thousands of jobs, increasing unemployment and causing a deterioration in social conditions. Globalization is increasing the unbalanced use of non-renewable finite energy resources and is not contributing to the equitable distribution of wealth, but rather generating macroeconomic imbalances. Automation and robotization can involve the massive destruction of jobs. Climate change represents a pressing threat with potentially irreversible effects. These aspects highlight the vulnerability of the current economic system and the need for companies with values: open, democratic, sustainable, inclusive and technologically intelligent companies that inspire the future. Given this situation, this workshop draws together 30 to 50 people to work on and debate companies with values in a participatory, active manner in working groups, with the aim of overcoming myths, prejudices and stereotypes and finding solutions related to different areas of business.

Keywords: workshop, companies with values, sustainability and inclusiveness

1. Introduction

International financial crises are once again revealing the vulnerability of the current economic system. The wave of recessions is becoming increasingly frequent, profound and global, which is exacerbating poverty, insecurity and exclusion in society (Hadad Hadad & Valdés Llanes, 2010). Employment, the distribution of wealth and macroeconomic equilibria are strongly influenced by relations with the international system. Globalization raises fundamental questions, the resolution of which depends on development and integration. The recession has impacted economic activity by destroying thousands of jobs, increasing unemployment and causing a significant deterioration in the living conditions of a significant part of the population (Commoner, 2015).

In the current environment, companies are increasingly adopting strategies related to the relocation of production in countries with low production costs, fostering a type of zero-quality employment that does not guarantee workers escape from poverty. Recent studies estimate that 168 million children work in the world, half risking their lives, and many of them do so in regions devastated by conflicts and catastrophes (United-Nations, 2015).

According to Echazarreta and Costa (2018), climate change represents a pressing threat with potentially irreversible effects. In the current economic environment, globalization significantly increases the unbalanced use of non-renewable finite energy resources. Energy consumption has increased dramatically due to transportation costs and the use of less efficient technology. In contrast to the current economic growth model, strong reductions in global emissions are urgently needed to address climate change and promote development. Otherwise, the uncertainty associated with technological evolution may lead to ecological ruin.

Lombardero (2015) has stated that: “Technology is the great trigger of economic progress. At the beginning of the current decade, emerging digital technologies –mobility, Cloud Computing, Big Data, the Internet of Everything (IoE), Smart Cities and Industry 4.0– comprise the group of technologies that make digital transformation possible for

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the traditional industrial and services companies that provide 90% of employment, and with this they are paving the way to the Fourth Industrial Revolution or the Digital Age. The digital age [...] is going to allow the development of a new economic model for Europe that will allow us to escape from the current crisis.”

However, it is important to note that estimates calculate 47 percent of current jobs may be susceptible to replacement by automation, a factor that could lead to a very serious and socially alarming situation of unknown dimensions. This is why, according to Álvarez (2017), there now exists a need and a challenge to “create employment in new sectors, products or services in the face of the massive destruction of jobs resulting from automation and the advent of a robotic era; make changes to the traditional employment model manifested in a new direction of human resources with the risk of a more pronounced individualization and perpetual availability of time; and address obstacles to the viability of social security and welfare systems in the face of insufficient contributions”.

Research by Eguiguren (2011) concludes that the current economic and social situation has accelerated the search for alternative economic models that minimize the effects of the crises and overcome the shortcomings of the current system. According to this author, companies are required that act in the marketplace with a sense of responsibility, transparency, democracy, participation and ethics; companies led by corporate policies and values based on of a sustainable business culture at a social, economic and environmental level”.

It is within this context that the **Vusiness model [that is, “Business” with a “V” for values]** has been conceived. A model promoting open, democratic, sustainable, inclusive companies that make intelligent use of technology, and which must serve to build a better world. The project is promoted by the ARPA Research Group (*Grupo de Análisis de la Recepción de las Pantallas Audiovisuales*), which belongs to the University of Girona’s Philology and Communications Department.

The current environment requires sustainable companies capable of eradicating and minimizing the effects of crises and overcoming the shortcomings of the current economic model. That is why our mission is to accelerate the necessary transition towards a more just and equitable world.

In order to compile the theoretical corpus that supports the Vusiness model, since 2015 we have been conducting a thorough, structured and methodical bibliographic review to select the most relevant studies, with the aim of laying the scientific basis for the creation of this alternative model of companies with values.

During this period, three Forums for reflection and debate have been held on the subject of inclusive, open and democratic companies. The first was entitled “People, the core of companies”, the second “Smart companies, generating future” and the third “Sustainable companies, facing up to climate change”. In each of these, a dozen experts from different institutions and companies reflected on each central axis: inclusiveness, technology and sustainability.

The model has been presented at different universities to propose collaborations: Harvard University, MIT-Massachusetts Institute of Technology, Emerson College, Boston College and Suffolk University in Boston. Currently, 50 professionals are jointly creating a Valometer, a tool to measure 50 business values linked to identity, administration and management, people, sustainability and smart technology in companies.

2. Description of the workshop

The workshop brings together 30 to 50 people to work on and debate companies with values in a participatory, active manner in working groups, with the aim of overcoming myths, prejudices and stereotypes and finding solutions related to different areas of business: identity, administration and management, people, sustainability and technology.

2.1. General aim of the model

In line with Stafford-Smith, et al. (2017) and taking into consideration the challenges defined in the new sustainable development agenda approved by the United Nations in September 2015, the following general aims are proposed for the Vusiness Model:

- To promote sustained, inclusive and sustainable economic growth, full and productive employment and dignified work for all.
- To promote inclusive and sustainable industrialization and foster innovation.
- To guarantee sustainable consumption and production patterns.
- To guarantee inclusive, equitable and quality education and promote lifelong learning opportunities for all.
- To achieve gender equality.
- To adopt urgent measures to combat climate change and its effects.

- To guarantee access to affordable, safe, and sustainable modern energy.
- To promote fair and inclusive societies.

2.2. Specific aims of the workshop

The main specific aim of the workshop is to raise awareness about the possibility of generating a model for companies with values that act as an alternative capable of overcoming the shortcomings of the current economic model, which has unleashed global economic and financial crises. A series of concrete aims are specified for different areas of business.

Inclusivity

At the level of inclusivity, in line with the conclusions of Echazarreta and Costa (2017a), the following specific aims are proposed:

- To overcome the current economic system, which is a source of inequality and exclusion.
- To promote inclusive businesses that generate opportunities for development and aim to improve the quality of life of people who suffer from social exclusion.
- To describe the main characteristics of inclusive companies, which are based on four fundamental principles: values, team management, corporate social responsibility and responsible marketing.
- To promote inclusive businesses that contribute to the common good, championed by leaders that promote the use of information technology and communication as a means to improve citizens' quality of life.

Sustainability

Regarding the environment and mobility, in line with the conclusions of Echazarreta and Costa (2018), the following aims are proposed:

- To describe the main characteristics of sustainable companies, based on ideals and values committed to developing the planet, consuming fewer resources than are generated.
- To promote renewable energy resources, sustainable development, preservation of the environment, responsible energy consumption, minimization of emissions, eco-efficiency and the circular economy at the environmental level
- With regards to mobility, to promote collective public transport, electric vehicles, clean and non-motorized mobility systems.
- To promote sustainable companies that combine business development with that of the environment and the protection of the planet.

Smart Technology

At the level of smart use of technology, in line with a study by Echazarreta and Costa (2017b), the workshop aims to:

- Inform attendees on the effects of the global economic and financial crises that have accelerated the search for alternative business models.
- Describe the main characteristics of smart companies capable of overcoming the shortcomings of the current economic system.
- Promote smart companies championed by leaders that promote the use of information technology and communication as a means of improving citizens' quality of life.
- Nurture companies and consumers that act in the free market in a responsible, ethical, supportive and fair manner, capable of making their economic growth compatible with the distribution of wealth.

2.3. Methodology

Presentation

The facilitators will start the workshop by welcoming and thanking attendees.

With the aid of a PowerPoint presentation [complete workshop attached as a PowerPoint file], the facilitators will **briefly introduce themselves and explain the Vusiness project**, emphasizing that it promotes companies with values as a sustainable business model, and the need for this in the face of phenomena such as globalization, economic and financial crises, child labor and climate change. [A PDF file is attached with the workshop presentation and the Vusiness model. Download file]. (Estimated time: around 10 minutes).

Introduction to the Vusiness concept

Next, participants will be invited to participate in a **game of Kahoot!**, a very useful on-line tool for learning concepts in an entertaining way. The game entails each participant answering the 20 test questions that appear projected on the screen with their Smartphone; these then lead to discussion and debate. The workshop game is called “Vusiness Model Presentation” and can be accessed after filling out the platform’s registration form at www.kahoot.com. Attendees access the game via the website kahoot.it. It allows a quick tour via some surprising and alarming data related to the areas that motivated the creation of the Vusiness project. Kahoot! rewards those who achieve a higher score for successful answers and speed by placing them at the top of the ranking, which always engages attendees and encourages participation (estimated time: around 20 minutes).

Myths

Once the game has finished, participants will be divided into 5 groups. Groups of 5 or 6 are recommended to facilitate the participation of all members. At random, each group is then assigned a document with **myths about the environment, women, immigration, technology and entrepreneurs**. By discussing and reflecting on these myths, the members of the group write an opportunity or a problem for companies and businesses related to each topic on a post-it. A single yellow post-it is recommended for each challenge or problem. After twenty minutes, a representative from each group is invited to explain the main challenges or problems for companies detected in a specific field [PDF document is attached with the myths. Download file]. (Estimated time: around 30 minutes).

Vusiness Categories

In the same groups, the following instructions are given: *take each post-it with an opportunity or problem and attach it to the category where it fits best: identity, administration and management, inclusiveness, sustainability and smart technology*. [PDF document is attached with the names of the categories to stick to a piece of cardboard. The participants attach the post-its with the challenges or problems to the card with the categories. Download file]. (Estimated time: around 5 minutes).

Solutions

Each group is randomly assigned a card with a category: **identity, administration and management, inclusiveness, sustainability** or **smart technology**. From there, the group has to propose solutions for each opportunity or problem. A single post-it of a color other than yellow is recommended for each solution. More than one solution can be given for each problem. After twenty minutes, a representative of each group is invited to explain the proposed solutions to each challenge or problem. (Estimated time: around 30 minutes).

Reflection and debate

After sharing solutions, the facilitators present the **Valometer**, an instrument used to measure companies’ values designed by a forum of 50 professionals from different fields and sectors of activity within the Vusiness project. During the presentation of this tool, the facilitators establish comparisons and parallels between the solutions proposed by the participants before the challenges and indicators defined by the Valometer. This opens a space for debate and reflection among the attendees (estimated time: around 25 minutes).

Collaboration proposals

In order to expand the base of people interested in contributing to raising awareness, training, disseminating or generating knowledge around the model of companies with values, the facilitators propose five forms of participation:

- **Core members:** Participate as a member in the project and be proactive and dynamic proposing new lines and activities.
- **Research:** Participate in specific research lines.
- **Projects:** Actively participate in educational, entrepreneurship and business projects.
- **Agreement:** Participate actively in campaigns, communication, creating material to be applied, knowledge transfer to society.
- **Scientific Committee:** Possibility of being invited by other universities as a visiting professor, reviewing articles, occasionally participating in research.

2.4. Length

The workshop has an approximate length of two hours.

2.5. Target audience

The profile of the target audience for the workshop would be:

- High school students taking a business subject
- Entrepreneurs
- Businesspeople
- Faculty
- Members of the public with an interest in the company sphere

3. Results

Each group presents the solutions to the challenges and problems arising from the reflections on the myths and prejudices in the first part of the workshop. If a group is not inspired to propose solutions, the workshop facilitator can suggest some solutions as an example. The solutions usually proposed by business area include the following:

- **Identity:** value proposition, entrepreneur, mission, vision, values, benefits, responsibility, relationships with the environment, transparency and ethics.
- **Administration and management:** solution, benefit, market segment (customer), channels, indicators, available resources, indicators, costs and revenues.
- **People:** leadership, teamwork, fair remuneration, equality, medical and health care, collaboration, updating and recycling, professional development, relations with the community and health and welfare programs.
- **Sustainability:** environment (energy generation with photovoltaic panels, smart environmental sensor networks and smart metering, energy efficiency, integrated water cycle management and smart irrigation, efficient lighting, environmental protection, reduction, reuse, recycling and smart waste management) and mobility (smart public transport, toll control, access to restricted areas and smart parking, traffic management and fleet management, non-motorized mobility, electric vehicles, shared use, access to buildings with folding bicycles).
- **Technology:** open data, service and product management platform, digital commerce, digital marketing, advanced communications networks, social wifi and security (video surveillance, emergencies, heritage protection and infrastructures and cybersecurity).

4. Conclusions

Based on the interventions of all participants in the different workshops held using the Vusiness model of companies with values, we can draw the following conclusions:

- The workshop gives participants a more in-depth look at concepts such as sustainability, inclusiveness and smart technology for combatting myths and prejudices around the environment, women, immigration, technology and entrepreneurs. The workshop concludes by proposing an approach to companies with values, which provide solutions to the challenges posed by globalization, international financial crises, automation and robotization and climate change.
- First of all, it highlights the need to seek out companies with sustainable, inclusive values that make an intelligent use of technology, in order to provide for a descriptive and in-depth analysis that facilitates understanding of the new model.
- Secondly, the results and conclusions are intended to represent some ways of raising awareness of and visualizing the need and possibility for transforming the current economic model, which generates such social imbalance and inequality. The results should be considered as preliminary and require confirmation in subsequent workshops. Research in this field should be constant and multidisciplinary.
- Thirdly, descriptive studies are needed that define quantitative and qualitative indicators on companies with values to facilitate their analysis and thus more easily raise awareness among, inform, advise, train and consolidate entrepreneurs, businesspeople and the population in general. Studies with experimental designs will then be needed to assess the results of the model.
- And finally, we recommend further development of didactic materials and informative and training contents for the new integrating model, in different formats and translated into several languages, in order to raise awareness, train and advise people on companies with values that are open, democratic, sustainable, inclusive, technologically smart and inspire the future.

The presentations and text documents necessary to carry out the workshop are available on the Society for Applied Anthropology website.

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VALOMETER

EUROPEAN SYSTEM OF BUSINESS
INDICATORS FOR VALUE-BASED
MANAGEMENT



Universitat de Girona
Consell Social

Universitat
de Girona

Universitat de Girona
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i Comunicació

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ARPA research group
(Analysis group for reception and playback quality of Audio-visual Screens)
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Introduction

The Valometer, European system of business indicators for value-based management, is a voluntarily applied management tool specially designed for companies by the University of Girona. It aims to promote sustainable, intelligent, open, democratic and inclusive companies that are equipped to face the challenges of the future.

From the ARPA research group (Analysis group for reception and playback quality of Audio-visual Screens), which belongs to the University of Girona's Department of Philology and Communication, is born Vusiness [from business, with a v for values], a business model for creativity and management based on values. It offers an alternative to the current model, as it is designed to address phenomena and challenges such as climate change, economic and social crises, globalization, precarious labour conditions and digital transformation.

The aim of the Valometer is to help and guide companies to monitor and measure the results of their management in areas such as identity, administration and management, people, sustainability and technology using a comparable common methodology.

The results of monitoring are based on self-evaluation, observations, data collection from different sources and their analysis by companies. No minimum values are set that must be achieved, and nor are certifications awarded. That said, identifying indicators provides companies with the basic information to monitor the aforementioned five areas, thereby facilitating more efficient management in accordance with values oriented towards people and the environment.

The Valometer is based on fifty indicators, divided into the following five categories:

- a) Identity
- b) Administration and management
- c) People
- d) Sustainability
- e) Technology

Methodologically, the initial draft of the Valometer indicators was based around the use of three complementary techniques. First of all, an exhaustive diagnosis was performed of four bibliographical reviews focusing on inclusiveness, sustainability, technology and communication.

Secondly, fifty professional experts (scientists, professors from different academic disciplines, business people, entrepreneurs, managers and advisors from different business sectors) were selected, and they participated in three focus groups. And thirdly, in-depth interviews were conducted with these experts to obtain a joint vision of the Valometer.

The utility and viability of the Valometer as a value-based business management tool was tested through the application of a pilot experience. To this end, companies were invited to help test the tool and provide the University of Girona with information about their experience.

The first edition is the result of the pilot test. Based on the comments received, a group of experts from the University of Girona will periodically review the system. We hope, through subsequent editions, to offer a verified and suitable system.



The aim of the Valometer is to help and guide companies to monitor and measure the results of their management in areas such as identity, administration and management, people, sustainability and technology using a comparable common methodology.

Table of contents

05	Prologue
06	Companies with values
08	The Valometer. European system of business indicators for value-based management
08	What is the European system of business indicators for value-based management?
08	Why measure and monitor indicators on the basis of values?
08	Which companies can apply it?
09	Why apply the European system of business indicators for value-based management?
09	What are the main advantages of applying the Valometer?
09	How does the European system of business indicators for value-based management work?
10	Guide to the application of the European system of business indicators for value-based management in seven steps
10	Step 1: Awareness raising
10	Step 2: Defining the scope of intervention
10	Step 3: Setting up the steering group
10	Step 4: Functions, responsibilities and planning
11	Step 5: Data collection
11	Step 6: Results and analysis
11	Step 7: Innovation and continuous improvement
12	Basic indicators
14	Identity
15	Administration and management
16	People
17	Sustainability
18	Technology
19	Acknowledgments



Prologue

If a well-posed problem is already a half-solved one, then this Valometer is most welcome. It has two elements that seem fundamental to me.

The first is that its purpose is not to value or judge, but to provide companies with indicators to help them progress. The important thing is not the score, but seeing a gradual improvement. After all, that is how people have made societies better.

The second is that there are no valid and simple tricks. For example, Kantian ethics states: “act in such a way that your conduct can be raised to a universal standard.” This, in the Catholic tradition, would be: “love and do not do to your brothers what you do not wish for yourself.” If we applied these principles to each decision, surely we would be able to amend a good part of the current system's failures. But a system of indicators greatly simplifies this process and serves as a systematic reminder, a very useful tool for companies and organizations where there can be a constant flow of people, managers, etc.

The Valometer therefore fits the modern science of business management, which is distancing itself from the control of the last century to embrace a new way of doing things; that is, creating the working and market conditions for people, customers and clients to relate to the company by bringing out the maximum potential of all involved. No one is ever going to put a check on creativity, and this Valometer is not designed to put a check on current values. It might seem obvious to say so, but that is not the general tonic. We do not have to teach companies and organizations anything. We do not have the truth. We can only inspire it.

The Valometer does not impose heavy burdens on companies and organizations that limit their growth or place them in a less competitive position than others.

Great news. If improving or evolving the values of companies and organizations limits their competitiveness, profitability or growth capacity, then we are destroying the aim with the premises. Small, medium-sized and large companies and organizations are the ones that should be attracted by modernity and the motor of change that the Valometer represents. If values represent a brake, they will only attract certain sectors, companies and organizations, where size is not key, and this will inevitably lead to a far

more reduced social impact and a very slow capacity for feedback.

We have often heard that the current economic system “must change” for different reasons. Perhaps, in reality, we do not need to break with a system that has brought many good things, but rather help it evolve. Yes, as the educator Captain Lettuum said, “small changes are powerful”; this Valometer can promote many small changes that result in a much more Valuable society.

Dr. Carles Torrecilla

Associate Professor of the Marketing Management Department at ESADE



The Valometer therefore fits the modern science of business management, which is distancing itself from the control of the last century to embrace a new way of doing things; that is, creating the working and market conditions for people, customers and clients to relate to the company by bringing out the maximum potential of all involved.



Companies with values

The global economy has suffered a serious and rapid slowdown that particularly affects the most vulnerable, generating high unemployment rates and temporary work with precarious conditions.

As a result, unemployment has increased and quality employment has been destroyed, leading to a significant deterioration in living and working conditions. In just four years, almost five million jobs have been lost in Europe. In Spain, the real estate bubble has meant that the economic crisis has hit particularly hard. In addition, the policy of cuts has aggravated the effects of the crisis for the most disadvantaged groups.

Increasingly, family incomes are not reaching the minimum wage, which is accentuating the situation and the risk of poverty. Difficulties in accessing housing, whether rented or owned, are due to the growing indebtedness of working families, the loss of their purchasing power, the difficulty of accessing a loan, and in particular a more unequal distribution of wealth.

In the midst of the current transition to the fourth industrial revolution, digital transformation and the development of artificial intelligence have generated profound change for companies. A number of studies have indicated that

employment in the industry and services sectors is set to become 90% digitalized. This change may be viewed as either an opportunity if it is used to develop a new economic model to facilitate an exit from the crisis or as a huge concern if it involves the destruction of thousands of jobs.

Disruptive changes in technology have resulted in a new globalized economic environment, where companies subcontract and outsource processes to companies located in developing countries with very low salaries. Here, we must also highlight the estimated two hundred million jobs that children aged between five and seventeen do around the world, as they are subject to the worst forms of child labour, related to arms, household chores or child exploitation.

Another problem that must be addressed is climate change, most likely caused by human activity leading to a rise in temperatures. The effects of climate change are having devastating effects on ecosystems and the health and well-being of the population; what is more, they are not expected to improve in the medium term.

To overcome the deficiencies of the current economic system, which is a source of inequality and exclusion, companies that are committed to value-based management have the main aim of reinventing themselves and evolving

towards a business concept in which the cooperation, participation and involvement of employees are both indispensable and decisive.

According to Marcos Eguiguren, executive director of Global Alliance for Banking on Values (GABV), among other factors, the management of economic and social crises, offshoring, globalization and climate change are promoting and accelerating the search for alternative economic models capable of establishing more solid foundations and providing a better response to the shortcomings of the current capitalist model. Eguiguren points out that companies are needed in the global marketplace with a sense of ethics, responsibility, transparency, democracy and participation; companies led with corporate values characteristic of an inclusive business culture in the social sphere, environmentally sustainable and wise with regard to the use of technology in the service of quality of life.

In this context, the ARPA research group (Analysis group for reception and playback quality of Audio-visual Screens) which belongs to the University of Girona's Department of Philology and Communication, has launched the Vusiness Project [from business, with a v for values]. The project promotes open, democratic, sustainable, inclusive companies that make an intelligent use of technology with the aim of serving as inspirational models in the fields of research, education, entrepreneurship and business.

In order to establish the scientific foundations for the creation of an alternative model based on companies with values in the framework of the Vusiness Project, a thorough bibliographic review has been carried out in a structured and methodical way to select the conclusions of the most relevant studies since 2015.

With the aim of contrasting and expanding the information gathered during the bibliographic review phase, three forums were held to reflect and debate on inclusive, open and democratic companies. The first was entitled "People, at the center of business"; the second, "Smart businesses, anticipating the needs of the environment, creating the future", and the third, "Sustainable companies, addressing climate change". In addition, in-depth interviews were conducted with professionals from different disciplines.

The model has been presented at several North-American universities, including Harvard University, MIT-Massachusetts

Institute of Technology, Emerson College, Boston College and Suffolk University in Boston.

Below we present the Valometer, the European system of business indicators for value-based management, conceptualized by fifty professional experts (scientists, professors from different academic disciplines, business people, entrepreneurs, managers and advisers from different business sectors).



The ARPA research group (Analysis group for reception and playback quality of Audio-visual Screens) which belongs to the University of Girona's Department of Philology and Communication, has launched the Vusiness Project [from business, with a v for values]. The project promotes open, democratic, sustainable, inclusive companies that make an intelligent use of technology with the aim of serving as inspirational models in the fields of research, education, entrepreneurship and business.

The Valometer. European system of business indicators for value-based management



What is the European system of business indicators for value-based management?

The Valometer is a management supervision tool for the self-employed and micro, small, medium-sized and large companies. It is designed as a process driven by the heads of companies to collect and analyze data to improve management of the company.

The aim of the Valometer is to contribute to improving management based on values and, specifically, inclusive, sustainable management that makes a smart use of technology in companies. The tool is designed to facilitate the measurement of management processes in five areas, monitoring their performance and measuring their progress.

The model has been inspired in the European Tourism Indicators System (ETIS) and the document “Smart cities: the digital transformation of cities”, produced by PwC's Center of Innovation for the Public Sector and IE Business School.

Why measure and monitor indicators on the basis of values?

The self-employed and heads of micro, small, medium-sized and large companies often make decisions based on a limited set of balance sheet data, or even out of inertia or habit. Financial data do not represent the company in its entirety. The compilation and analysis of data in five key areas for company development ensure business growth and consolidation that is respectful of collaborators and their surroundings.

Which companies can apply it?

Any company can apply the Valometer, regardless of number of workers and turnover volume. It is also recommended that companies with outsourced processes (production, transportation, administration, etc.) submit those companies that provide that product or service to the evaluation.

Thus, for example, self-employed people who use a transport company to perform their logistics and distribution service can analyse their sustainability axis through the transport company. It should be borne in mind that customers are increasingly aware of the devastating effects of the carbon footprint, that is, the amount of greenhouse gas emissions, and choose companies whose products and services pollute less.

Why apply the European system of business indicators for value-based management?

The Valometer is a tool for value-based management and not a certification system. It was conceptualized to facilitate the evaluation and improvement of business management on five axes to make companies more open, inclusive, sustainable and technologically intelligent.

By using the European system of business indicators for value-based management, companies can evaluate and analyze their performance and develop strategic plans and actions to improve their values in the short, medium and long term.

The tool guides companies with regard to its application. Through the awareness and participation of the company as a whole, it is intended to generate positive effects on a quantitative and qualitative scale, which can be measured, collected and analyzed to promote continuous improvement.

It is recommended that companies create multidisciplinary working teams to prioritize specific axes and actions, stimulate and promote the participation of all company staff, take the appropriate strategic decisions to favour consolidation of the company, apply and measure the impact of activities, and promote continuous improvement.

What are the main advantages of applying the Valometer?

The aim of applying the European system of business indicators for value-based management is to compile information and data from increasingly strategic and essential areas for decision-making, such as people, sustainability and technology.

The tool allows companies to prioritize projects and intervention actions and establish comparative results.

Another aspect worth noting is the improvement of the work environment as a consequence; on the one hand, improvements in personnel management, and, on the other, more active participation by employees in managing the company as a whole. In parallel, the system also promotes improved relationships with stakeholders.

A third key aspect are the positive effects implementing the Valometer has on the environment and the planet.

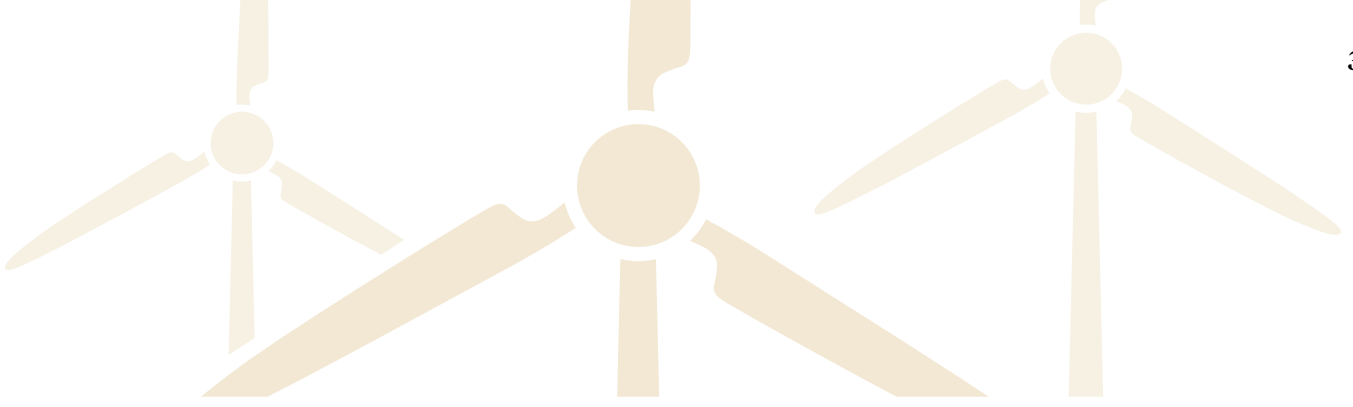
Finally, and no less important, it improves customers' experience, perception and loyalty towards the company.

How does the European system of business indicators for value-based management work?

The Valometer is a comprehensive management process based on five axes: identity, administration and management, people, sustainability and technology.

It contains fifty basic indicators that can be used individually, by axes or in its entirety, depending on the company's needs for improvement. At the same time, the indicators can be integrated into other business management systems that already exist in companies. Being able to choose the criteria and indicators according to the particular need of the company provides the tool and the flexible system necessary to increase the viability of its application and its consequent performance.

The European system of business indicators for value-based management is designed to be applied collectively, involving all staff. To ensure its success, decision-making and responsibilities must be shared between the different members of the steering group.



Guide to the application of the European system of business indicators for value-based management in seven steps

Step 1: Awareness raising

Once the company management team has decided to implement the Valometer system, it is important to communicate this decision to the employees as a whole so as to increase their commitment, foster active participation and promote the implementation of actions and activities in accordance with the objectives established by the different criteria.

It is common procedure to create a steering group to apply and develop the European system of business indicators for value-based management.

Internal communication, through tools such as email or instant messaging and the use of social networks, can be useful to ensure that communication is fast and fluid among all the people involved in the process.

If the initiative to implement the system for value-based management comes from the employees themselves, it is advisable that they have the support and explicit commitment of the management team.

Step 2: Defining the scope of intervention

First, the strategic axes where it will be applied must be defined. It is recommendable to start with identity and continue with administration and management. If these two are considered to be consolidated, then people, sustainability and technology can follow. Although it is advisable to use the ten criteria with their respective indicators, it is also possible to use and adapt those that best suit the needs or challenges of the individual company. The tool can be downloaded from the website www.vusiness.com.

Step 3: Setting up the steering group

To implement the European system of business indicators for value-based management, it is recommendable that a working group be set up of between eight and twelve members. Obviously, if we are dealing with a micro or small company, this number will be lower. The steering group must be composed of representatives from the company's different departments interested in implementing the system as a tool to promote change in the organization (production, logistics, administration, quality, sales, etc.).

The group must be led and coordinated by the business owner, director or general manager, or a member who is delegated these responsibilities and functions.

This person's active role will allow the design and initiation of an action strategy. Through a first meeting, business challenges will be jointly identified and the most appropriate criteria and indicators chosen. From here, it is advisable to discuss how the data may be obtained based on the knowledge and experience of the members.

Step 4: Functions, responsibilities and planning

It is important that the first meeting is used to determine the responsibilities of each member of the steering group, what data are to be gathered, how and over what period. Flexibility is key throughout this process.

Delegating responsibilities triggers a sense of commitment and adhesion. By way of example, the person who is responsible for logistics might collect data related to the consumption of finite resources based on petroleum, coal and natural gas, and compare this with renewable energy such as solar, thermal, bio or hydraulic energy.



Step 5: Data collection

Data collection must initially take place in a continuous and fluid way, so that each criterion can be rigorously evaluated and possible improvements detected during the subsequent follow-up phase.

As mentioned above, it is important that each company choose the most relevant criteria and indicators according to their needs and challenges.

It is recommendable that even if data are collected and compiled by different units, they are centralized to obtain a global and, at the same time, detailed overview of the process. In some criteria, information must be obtained through the conducting of surveys, interviews, discussion groups or other tools.

Depending on the company, the types of data to collect and the time or costs involved in obtaining them, it is recommendable that each steering group decide the appropriate timing cycles for data collection for each criterion and indicator.

Step 6: Results and analysis

The collected and processed data can then be analyzed and discussed with the objective of establishing a strategic plan of actions to improve the criteria. The steering group, convened by the coordinator, meets to analyze the results and take decisions. Together, they define realistic goals and agree on the best actions for achieving them.

Once the results are analyzed, it is recommendable to establish priorities and the most appropriate measures for achieving the objectives. Areas that are considered urgent must be addressed immediately, deciding who initiates the action plan, how and when.

Step 7: Innovation and continuous improvement

Guaranteeing the successful implementation of the European system of business indicators for value-based management requires a well-defined strategy, a steering group with the capability to maintain the system in use and the constant communication of results.

When the improvement system is under way, the design of a long-term improvement strategy - from three to five years - should be considered. Each unit comprising the steering group must take responsibility for one area and generate and feel responsible for changes in the company.

The criteria and indicators must be reviewed periodically. In addition, the gradual extension of the criteria will allow companies to have a broader view of their situation.

It is also important to verify whether the company has optimal financing to continue implementing improvement plans.

It is recommendable that companies disseminate both the results and success stories through different communication mechanisms. This information may be useful to address the long-term strategy.

Finally, application of the Valometer is expected to maximize social and economic benefits for the company.

Basic indicators

The basic indicators compile the company's key and fundamental data to describe, measure and compare its performance and improvement in five strategic axes.

The fifty basic indicators incorporate the most important aspects of identity, administration and management, people, sustainability and technology.

Their measurement facilitates comparisons in the short, medium and long term to assess whether the action plan achieves the expected results. The periodic collection of data and tracking of selected indicators is recommendable.

When the company has established a clear system for measuring and monitoring the chosen key indicators, additional indicators may be added to collect complementary data adapted to specific problems, needs or challenges of the company.

It is important to clearly specify the data collection method and indicators to ensure that any member of the company can collect reliable and valid data for their subsequent evaluation and comparison.

The following figure shows the Valometer represented as a wind turbine (a generator of electric power driven by wind power).



VALOMETER

European system of business indicators for value-based management

There follows a list of criteria, references and basic indicators organized into the five strategic areas mentioned above.

IDENTITY

ADMINISTRATION AND MANAGEMENT

PEOPLE

SUSTAINABILITY

TECHNOLOGY



SECTION A: IDENTITY

CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
A1 ENTREPRENEUR · Characterized by being creative, innovative, communicative, sensitive, honest, committed, ethical, empathetic, approachable, effective, efficient, transparent, responsible and possessing leadership skills.	A1.1	Percentage of the entrepreneur's personality traits and characteristics that determine whether he or she knows how to identify an opportunity and has the skills to put it into operation, over the total.
A2 MISSION · Our mission pursues a noble and commendable purpose. For ex. quality education; gender equality; decent working conditions and economic growth; responsible production and consumption, etc.	A2.1	Percentage of coincidence between company's declared mission and some of the 17 challenges defined in the UN's Sustainable Development Goals (SDGs).
A3 VISION · The company aims to achieve future goals aimed at developing people and sustaining the environment.	A3.1	Percentage of coincidence between the future challenges facing the company and those defined by the UN's Sustainable Development Goals (SDGs).
A4 VALUES · Profound commitment to ethical, social, labor and environmental values that favor the harmonious development of the planet and humanity.	A4.1	Percentage of company's ethical, social or environmental values compared to pragmatic-economic values (efficiency, quality, etc.)
A5 SUSTAINABLE · Contributes to wealth and the common good and does not consume more resources than it generates in any sphere.	A5.1	Percentage of energy resources generated by the company compared to those consumed.
A6 PROGRESS · Acts on technological progress and redirects it to be of help for a better world.	A6.1	Percentage of use of new technologies to promote quality of life compared to their use to eliminate jobs.
A7 RESPONSIBILITY · Freely acts out of full responsibility, especially towards society and the environment.	A7.1	Percentage of products and/or services, produced or rendered by the company, respectively, that favor society and the environment, over the total.
A8 TRANSPARENCY · Act in a fully transparent way on the free market.	A8.1	Percentage of access to the decision-making process, free access to documents, instructions, formulas, contracts, etc. that affect citizens or the environment over the total.
A9 ETHICS · Does not engage in any kind of speculative activities, not even marginally, and extends its ethical commitment to its chain of suppliers, distributors and customers.	A9.1	Number of ethical actions taken with regard to suppliers, distributors and customers compared to total activities.
A10 FAIR PROFIT · Aspires to obtain sufficient profit to continue contributing to social development and to provide just compensation to those who risk their capital and who dedicate their work to the company.	A10.1	Profits assigned to employees for just compensation for their work or social development and to improvement of the company in comparison to those assigned to oversized or unnecessary personal expenses or wasteful spending in euros.

SECTION B: ADMINISTRATION AND MANAGEMENT

CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
B1 TRANSFORMATIVE LEADER · Characterized by being entrepreneurial, innovative, inspiring, creative, sensitive, honest, committed, social, ethical, empathetic, approachable, effective, efficient, transparent, discreet, reliable and responsible.	B1.1	Percentage of personality traits and profile characteristics that determine whether it is an authentic, inspiring leader capable of motivating, uniting and favoring team performance, over the total.
B2 GOVERNANCE · The board of directors, shareholders, management team, audit committee, etc. are organized and make decisions to achieve their legitimate objectives, always acting in a fully transparent, ethical and responsible manner.	B2.1	Number of strategic decisions taken ethically and responsibly and communicated compared to those that are hidden or do not respond to noble ends.
B3 SOCIO-ECONOMIC CONTEXT AND OPPORTUNITIES · The company is attentive to the challenges, opportunities and needs of society for it to become more sustainable, developed, just and equitable.	B3.1	Percentage of products and/or services developed in response to environmental challenges or needs to favor the circular economy, sustainable development or a more just and equitable society, over the total.
B4 VALUE PROPOSAL · Product or service that satisfies the rational needs of society.	B4.1	Number of products and/or services needed to live or make a better world compared to those that respond to mere consumerism.
B5 PARTNERS · The company relates with suppliers, distributors and influencers who have certain ethical principles and values and treats them fairly.	B5.1	Percentage of suppliers, distributors and influencers that operate honestly, transparently and fairly, over the total.
B6 CHANNELS · Relates to its clients in an honest way, with marketing that promotes responsible consumption and not consumerism and establishes positive and lasting relationships.	B6.1	Percentage of communications (campaigns, meetings with clients, product presentations, press conferences, brochures, etc.) based on complete, verified, truthful, honest and transparent messages and information, over the total.
B7 PRICES · In accordance with the proposal for value, fair prices are established that allow adequate remuneration for the production or manufacture of the product, especially for small local producers, and fair remuneration of workers who provide a service.	B7.1	Percentage of sales allocated to suppliers, over the total.
B8 TRIPLE BALANCE FINANCE · Seeks a balance between growth and the distribution of wealth, including the aspiration to obtain a sufficient and just economic profit while attending to the social and environmental dimension.	B8.1	Percentage of sales revenue allocated to improving the remuneration of workers based on the company's results or social projects or improving the environment, over the total.
B9 LEGALITY · The legal, mercantile, fiscal and labor practices employed are the most adequate for achieving the company's noble ends and contributing to the community as a company, and under no circumstances are aimed at obtaining better fiscal treatment. Ensuring correct behavior in the real economy and not for speculative ends.	B9.1	Number of legal, mercantile, fiscal and labor practices suitable for carrying out its noble aims and contributing to the community as a company in comparison with those designed exclusively to obtain a better fiscal treatment.
B10 SOCIAL ROI (RETURN ON INVESTMENT) · Has a system of evaluation indicators aimed at continuous improvement and related to concepts that enhance responsibility and transparency. Seeks continuous improvement through innovation in sustainability, intelligent use of technology and practices cohesive with preserving the environment (local employment, community focus, etc.)	B10.1	Social return on invested capital (ROIC. Return on Invested Capital) in euros.

SECTION C: PEOPLE

CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
C1 JOINT LEADERSHIP · Encourages joint leadership distributed among team members and project leadership to take advantage of individual skills. Leaders must show initiative and a pro-active attitude, acting as an inspiring and stimulating driving force for groups to carry out their work.	C1.1	Percentage of workers with leadership responsibilities within the workforce over the total number of personnel.
C2 TEAMWORK · Development of and care for work teams through emotional values such as joy, solidarity and freedom to enhance creativity, talent and innovation, acting transparently, promoting active participation and creating mechanisms to make it real and possible. Influences the working environment and gives free rein to people's talent.	C2.1	Percentage of usual hours of teamwork compared to total hours worked.
C3 PROFESSIONAL DEVELOPMENT · Promotes staff development through professional development, offering promotion possibilities.	C3.1	Annual percentage of workers promoted compared to total workforce.
C4 KNOWLEDGE AND TRAINING · Creates mechanisms to attract talent and bring through emerging talent. Enhances knowledge through training adapted to new times and current challenges. Promotes the transmission of knowledge among workers. Uses conventional media as well as digital and virtual reality platforms.	C4.1	Annual average number of hours dedicated to training workers, sessions to enhance their talent or specific meetings to share knowledge.
C5 EQUALITY AND INCLUSION · Creates an environment that respects and promotes social diversity, gender, functional diversity, generational and cultural diversity in the company.	C5.1	Number of measures and projects that promote equality and inclusion (for example, hiring people with disabilities, participation in social programs to promote the workplace insertion of immigrants, adaptation of facilities to improve accessibility, etc.)
C6 CONCILIATION AND TELEWORKING · Promotes the reconciliation of work with personal and family life through measures such as flexible hours and teleworking.	C6.1	Number of measures and projects that promote conciliation and teleworking (e.g. flexible working hours, discretionary transport for workers, possibility of teleworking, etc.)
C7 FAIR REMUNERATION · Makes payments correctly and on time and remunerates according to the specific functions and characteristics of the job as well as assigned tasks, also valuing the worker's involvement, skills and abilities. Also includes motivation.	C7.1	Number of benefits, agreements and additional advantages of personnel at the level of remuneration compared to that determined by the current status of workers' or collective agreements.
C8 NETWORK · Encourages and communicates corporate volunteer activities, the development of participants' personal skills, donations to local institutions, facilitates school visits to the workplace, etc.	C8.1	Number of measures and actions taken to promote links with nearby networks (e.g. guided tours, possibility of non-work placements in companies, ease of internship contracts, collaboration and sponsorship of entities or neighborhood associations, etc.)
C9 MEDICAL ATTENTION, HEALTH AND WELFARE · Medical care and health and safety measures in the workplace. Health assistance services complementary to public services: cardiovascular, diabetes, wellness, stress management, etc. to improve the work environment and encourage healthy habits such as sports.	C9.1	Number of cases and situations that receive medical, health or welfare coverage in addition to the mandatory average for each worker (for example: weekly check-ups for pregnant women, online medical consultations, dental coverage, coverage of glasses and contact lenses, etc.)
C10 COLLABORATION · Encourages communication and active collaboration between different departments using all available means, and allowing staff rotation between departments (meetings, communication screens, interactive lpad tiles, etc.).	C10.1	Number of channels, media, tools and spaces available to encourage communication and collaboration (intranet, instant messaging, email, telephone, cafeteria space, etc.)

SECTION D: SUSTAINABILITY

CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
D1 ENVIRONMENTAL IMPACT · Consumption of water, gas, electricity, detection and reaction to environmental emergencies: leaks, fires, etc.	D1.1	Percentage of the company's premises controlled via networks of intelligent environmental sensors and smart metering that allows consumption as well as pollutant particles and emissions caused by environmental emergencies to be automatically detected, over the total.
D2 CONSUMPTION AND PRODUCTION OF RENEWABLE ENERGIES · Self-generation of energy from renewable sources: photovoltaic plates, low enthalpy geothermic, mini wind turbines, etc.	D2.1	Percentage of renewable energy use (e.g. solar, thermal, photovoltaic, bioenergy, hydraulic, tidal, wind, wave and geothermal) compared to finite energy use (based on oil, coal and natural gas).
D3 ENERGY EFFICIENCY · Allows efficiencies to be increased and energy management improved. Solutions that promote energy consumption management in air conditioning, elevators and lighting.	D3.1	Percentage use of energy efficient equipment: for energy storage, high-energy efficiency and low consumption, such as cogeneration and high-efficiency boilers, automation and LED technology, smart and on-demand lighting systems or presence sensors in comparison with conventional non-efficient means.
D4 BIOCLIMATICS AND SUSTAINABLE BUILDING · Zero consumption buildings, allowing reduced consumption without the need for more sustainable energy installations.	D4.1	Percentage use of sealants, windows, building covers, etc. in comparison with systems that do not favor reduced consumption.
D5 INTEGRATION IN THE LANDSCAPE AND THE ENVIRONMENT · To favor integration in the natural landscape and environment and promote thermal reduction through production systems that promote biodiversity and respect for nature in agricultural areas.	D5.1	Number of measures designed to favor integration in the landscape and the environment (e.g. plants and vegetation on roofs, walls and company premises to create shade, air moisture and avoid heat islands, color integration of facilities in the environment, and promoting the consumption of local products that are respectful of the environment).
D6 MANAGEMENT OF INTEGRAL WATER CYCLE AND INTELLIGENT IRRIGATION	D6.1	Number of technological resources used to favor water being a closed cycle (e.g. catchment, transportation, distribution, sewage, consumption meters, invoicing, collection, purification and treatment, etc.; low-energy gardening integrated into the environment and automated sprinkler and sensor networks to measure when and how much to irrigate).
D7 CIRCULAR ECONOMY, REDUCTION, REUSE, RECYCLING AND INTELLIGENT WASTE MANAGEMENT · The circular economy involves generating products that maintain their usefulness and value and is characterized as being reparative and regenerative production.	D7.1	Number of measures adopted to favor the ecodesign of products and the reduction, reuse, recycling and intelligent management of waste above and beyond legal compliance. For ex., purchasing materials taking into account the life cycle, eco design in new products, the use of recycled products and products with environmental certification or eco labels, real-time information on container levels, etc.)
D8 PUBLIC TRANSPORTATION AND REMUNERATION FOR TRAVEL · Encourages employees' use of public transport to go to work.	D8.1	Number of measures encouraging employees' use of public transport to get to work (contribution to the costs of polygonal mobility, adaptation of transport schedules, real-time information on incidents and frequencies, digital advice to the traveler, etc.)
D9 NON-MOTORIZED MOBILITY · Ecologically-propelled vehicles and promotion of the use of conventional bicycles or walking.	D9.1	Number of measures adopted to favor the use of non-motorized mobility (electric bicycle, motorcycle and car, conventional bicycle or on foot). For example: parking, access to buildings for folding bicycles, provision of a space for changing and showering, availability of charging networks, information systems on location and availability, rental systems, etc.
D10 TRANSIT MANAGEMENT · Reducing the carbon footprint via the management of company fleets and promote vehicle sharing.	D10.1	Number of measures proposed to favor the flow of traffic (calculation of company fleet's carbon footprint, mobility plans, favoring car sharing for workers' vehicles, optimizing the transport of goods, traffic forecasting, smart traffic lights, real-time driver information, warnings about incidents, etc.).

SECTION E: TECHNOLOGY

CRITERIA	INDICATOR REFERENCE NUMBER	BASIC INDICATORS
E1 DIGITAL TRANSFORMATION · Establishes mechanisms to facilitate the incorporation of technology in all processes. Facilitates the change of mindset that digitalization involves, including trends and advances in fields such as nanotechnology, genetics, and the maker movement, the collaborative economy and the circular economy. All this while addressing ethical issues in favor of people and quality of life over robotization.	E1.1	Average number of annual hours per worker the company allocates to raising awareness, training and guiding employees towards digital transformation and to addressing ethical questions in the face of robotization.
E2 INTERNET OF THINGS (IOT) · Internet of things applied to different sectors of activity, allows objects to be connected to each other and to the Internet.	E2.1	Percentage of the company's products that have sensors and embedded computing that allows them to send and receive information in real time, over the total.
E3 OPEN DATA · Makes information available to workers, suppliers and customers in standard, open and interoperable formats to promote transparency.	E3.1	Percentage of the company's data that are in open and accessible formats for workers, suppliers and customers, over the total.
E4 CYBERPHYSICAL SYSTEMS · Systems connected to each other and in turn to the virtual world of digital networks. These are advanced communications networks that comprise integrated platforms for management. They integrate monitoring, management and operation capabilities, facilitating supervision and/or control.	E4.1	Percentage of company data monitored and controlled via a platform with a cyber physical system (technical infrastructure connected to open standards; systems connected via the IoT; software-defined platforms and smart service platforms), over the total.
E5 5G, CONNECTIVITY, CLOUD COMPUTING AND DIGITAL COMMERCE · 5G is the telecommunications infrastructure that enables new digital-based services (autonomous vehicle, remote medical assistance, remote surgical operations, etc.). Cloud computing makes information available to workers, clients and suppliers anywhere and any time thanks to flexible technology that allows all resources to be stored in the cloud. Offers the possibility of buying and selling online.	E5.1	Percentage of company information enabled in 5G, stored in the cloud and accessible from anywhere and at any time thanks to communication technologies used for working, buying and selling, over the total.
E6 COLLABORATIVE TECHNOLOGY · Enables collaborative models that allow the birth of new C2B businesses (e.g. Waze, etc.) capacity and asset sharing (e.g. Uber, Cabify, AirBnb, Blablacar, etc.) or the integration of customers and partners in the business process, in addition to new forms of collaboration in business (crowdsourcing data, crowd-funding). Appearance of the blockchain and the possibilities it offers. Also includes collaborative robotics, a new generation of more versatile robots, easy to program and manage.	E6.1	Company's annual financial resources allocated to collaborative technology in euros.
E7 ADDITIVE MANUFACTURING · Or 3D printing, includes those devices that produce a 3D object from a digital input, without the need for molds or tools of any kind, through the depositing of layers of material and its consolidation.	E7.1	Percentage of produced objects that are manufactured through 3D printing, over the total.
E8 ARTIFICIAL INTELLIGENCE · Multidisciplinary area that aims to equip machines with cognitive processes typical of human reasoning such as deducing, reasoning and solving complex problems. Includes the branch of machine learning or automatic learning, which seeks to develop techniques that allow machines to learn automatically.	E8.1	Company's annual financial resources allocated to artificial intelligence in euros.
E9 IMMERSIVE TECHNOLOGY · Augmented Reality (AR) is the technology that offers digital information superimposed on real vision. Virtual reality or simulation (VR) is used in the factory to recreate a mirror of the physical world in a virtual model. Mixed reality (MR) is the combination of virtual reality and augmented reality.	E9.1	Company's annual financial resources allocated to Immersive Technology in euros.
E10 CYBERSECURITY AND CYBERINTELLIGENCE · Systems for protection and warning of attacks on Internet security of essential services for companies or that can cause damage to users and clients. Physical security of data in the face of Ransomware and/or technological failure. Protection of personal data, complying with current regulations (currently the GDPR, General Data Protection Regulation).	E10.1	Number of measures taken to protect data and critical systems from cyber attacks (e.g., software protection systems, backup copies, personal data protection protocols, etc.)

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IDENTITY

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- 03 **Francesc Ventura Ribal**, Director of the Department of Interculturality and Social Cohesion at La Caixa Banking Foundation.
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- 03 **Andreu Mas-Colell**, Professor of Economics and Business at Pompeu Fabra University. Formerly Professor of Economics at Harvard University, Professor of Economics and Mathematics at the University of California (Berkeley) and President of the Barcelona Graduate School of Economics (2006-10).
- 04 **Jordi Úbeda**, Marketing Manager at Abacus Cooperative.
- 05 **Aniol Barnadas Sánchez**, Strategic Analyst at Cobega.
- 06 **Xavier Costa**, retired Financial Directorat Francisco Pagès Valentí, SA
- 07 **Marc Teixidor**, Engineer, Consultant and serial entrepreneur.
- 08 **Ferran Roderó**, Delegate for ACCIÓ, the Catalan Government's Agency for Enterprise Competitiveness in Girona.
- 09 **Marc Genés**, Economist and Tourism Manager for Baix Empordà County Council.
- 10 **Katarzyna Watras**, law graduate, advises companies in the fields of internationalization and exports.

PEOPLE

- 01 **Sandra Jiménez**, Human Resources, International Recruitment at Mango.
- 02 **Cristina Toll**, Environment, Health and Safety Manager at Danone.
- 03 **Jaume Vilella**, Technical Director of Barcelona FC Wheelchair Basketball and Director of the AFA School.
- 04 **Agustín Matía**, Down Spain Manager.
- 05 **Esther Carreras**, External Relations Manager for "La Fageda" Cooperative.
- 06 **Gema Guzmán**, Head of Professional Development Projects at the Princesa Foundation in Girona.
- 07 **Mohamed El Amrani**, project coordinator at SUARA Cooperative and Princesa Foundation Social Award winner 2014.
- 08 **Núria Valls**, Employment Manager for Baix Empordà County Council.
- 09 **Imma Pérez**, Director of Nottopic - RSC, communication and networks.
- 10 **Isabel Godoy**, Inclusive Tourism Manager for the Costa Brava - Pirineu de Girona Tourist Board.

SUSTAINABILITY

- 01 **Pere Macías**, President of the Circle of Infrastructures Foundation and Professor at the University Polytechnic of Catalonia.
- 02 **Josep Serra**, Viticulturist and entrepreneur of La Viñeta winery.
- 03 **Eduard Adrobau**, Environmental Manager.
- 04 **Narcís Vicens**, Biologist and Manager of the Environment for Girona Regional Council.
- 05 **Joan Nasplesa**, Doctor of Biological Sciences
- 06 **Ainhoa Azorín i Solé**, founding partner of Toc de Gestió SCP and Engega't. Freelance partner for organizations in sustainability and continuous improvement.
- 07 **Albert Masclans**, Environmental sciences graduate, specialized in monitoring the environmental impact of works and monitoring the environmental vectors in chemical industry.
- 08 **Marc Casadellà**, Entrepreneur and Director of Par 3 Pitch & Putt Gualta.
- 09 **Sara Pizzinato**, Responsible for Greenpeace Spain's energy and climate change campaigns.
- 10 **Joan Barfull**, Technical Manager of the PIMEC Girona delegation and sustainability.

TECHNOLOGY

- 01 **Carlos Grau**, Director of the Mobile World Congress.
- 02 **Carlos Cuffi**, Director of the 5G Program at the Mobile World Capital.
- 03 **Dídac Lee**, Serial entrepreneur, founder of more than 15 companies and CEO of Inspirit, a group of technological and innovative companies.
- 04 **Xavier López**, Technical Director of Systems at Hartmann.
- 05 **Mariona Serra**, Co-founder and CEO at GoodGut.
- 06 **Joan Duran**, Strategy Department of the Secretariat of Telecommunications, Cybersecurity and Digital Society for the Government of Catalonia.
- 07 **Antoni Sudrià**, professor emeritus at the UPC and former director of CITCEA.
- 08 **Joan Battle y Grabulosa**, Former Principal of the University of Girona from 2002 to 2005 and Professor in the Department of Computer Architecture and Technology.
- 09 **Meius Ferrés**, Head of the Communication and Institutional Relations Department at the University of Girona.
- 10 **Xavier Bach-Esteve**, Coordinator of the Computing Department for Baix Empordà County Council and Consultant to the Open University of Catalonia.



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VALÓMETRO

SISTEMA EUROPEO DE INDICADORES
EMPRESARIALES PARA LA GESTIÓN
BASADA EN VALORES



Universitat de Girona
Consell Social

Universitat
de Girona

Universitat de Girona
Departament de Filologia
i Comunicació

arpa
Research Group
Universitat de Girona



Más información sobre el proyecto Vusiness en:
www.vusiness.com

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 Análisis de la Recepción de las Pantallas Audiovisuales
 V1. Noviembre 2018

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Introducción

El Valómetro, Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores, es una herramienta de gestión de aplicación voluntaria diseñada especialmente para las empresas por la Universitat de Girona. Tiene como objetivo promover las empresas sostenibles, inteligentes, abiertas, democráticas e inclusivas, preparadas para encarar el futuro.

A través del Grupo de investigación Arpa (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales) del Departamento de Filología y Comunicación de la Universitat de Girona, ha nacido Vusiness [del inglés Business, negocios, con “V” de valores], un modelo empresarial de creación y gestión basada en valores, alternativo al actual, diseñado para afrontar fenómenos y retos como el cambio climático, las crisis económicas y sociales, la globalización, el trabajo precario y la transformación digital.

El Valómetro pretende ayudar y guiar a las empresas a controlar y medir los resultados de su gestión en ámbitos como la identidad, administración y gestión, personas, sostenibilidad y tecnología, utilizando una metodología común comparable.

Los resultados del seguimiento se basan en la autoevaluación, las observaciones, la recopilación de datos de distintas fuentes y el análisis de estos por parte de las empresas. No se fijan valores mínimos que deben alcanzarse ni se proporcionan certificaciones. Sin embargo, la identificación de indicadores proporciona a las empresas la información básica para hacer un seguimiento de las cinco áreas, lo cual les facilita una gestión más eficaz acorde con valores orientados a las personas y el medio ambiente.

El Valómetro se basa en cincuenta indicadores divididos en cinco categorías:

- a) Identidad
- b) Administración y gestión
- c) Personas
- d) Sostenibilidad
- e) Tecnología

Metodológicamente, la redacción inicial de los indicadores del Valómetro ha partido del uso de tres técnicas complementarias. En primer lugar se ha realizado una diagnosis exhaustiva conformada por cuatro revisiones bibliográficas focalizadas en la inclusividad, la sostenibilidad, la tecnología y la comunicación.

En segundo lugar, se han seleccionado 50 profesionales expertos (científicos y profesores de distintas disciplinas académicas y empresarios, emprendedores, técnicos y asesores de distintos sectores empresariales) que han participado en tres grupos de discusión combinados con entrevistas en profundidad para conceptualizar conjuntamente el Valómetro.

La utilidad y viabilidad del Valómetro como herramienta de gestión empresarial basada en valores se ha aplicado en una experiencia piloto. En este punto invitamos a las empresas a poner a prueba la herramienta y facilitar a la Universitat de Girona información sobre su experiencia.

A partir de los comentarios recibidos, un grupo de expertos de la Universitat de Girona revisará periódicamente el sistema. La primera edición es el resultado de la prueba piloto. Esperamos en posteriores ediciones ofrecer un sistema verificado y adecuado.



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Índice

05	Prólogo
06	Empresas con Valores
08	El Valómetro. Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores
08	¿Qué es el Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores?
08	¿Por qué medir y hacer un seguimiento de los indicadores basados en valores?
08	¿Qué empresas lo pueden aplicar?
09	¿Por qué aplicar el Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores?
09	¿Cuáles son las principales ventajas de aplicar el Valómetro?
09	¿Cómo funciona el Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores?
10	Guía de aplicación del Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores en 7 etapas
10	Etapa 1: Sensibilización
10	Etapa 2: Delimitar el ámbito de intervención
10	Etapa 3: Constitución del grupo motor
10	Etapa 4: Funciones, responsabilidades y calendarización
11	Etapa 5: Recogida de datos
11	Etapa 6: Resultados y análisis
11	Etapa 7: Innovación y mejora continua
12	Indicadores básicos
14	Identidad
15	Administración y gestión
16	Personas
17	Sostenibilidad
18	Tecnología
19	Agradecimientos



Prólogo

Si un problema bien planteado es un problema medio resuelto, este Valómetro nace adecuadamente. Hay dos elementos que me parecen capitales.

El primero motivo es que no pretende evaluar o juzgar, sino dotar de unos indicadores de autoayuda para las empresas. Lo importante no es la nota, sino poder mejorar poco a poco. Al fin y al cabo esta es la manera como las sociedades se han hecho mejores para las personas.

El segundo, es que no existen trucos muy válidos y sencillos. Por ejemplo, la ética kantiana reza: “actúa de forma que tu conducta pueda ser elevada a norma universal”. Esto, en la tradición católica, sería: “ama y no hagas a tus hermanos lo que no querrías para ti”. Si en cada decisión aplicáramos estas máximas seguramente enderezaríamos una buena parte de carencias del sistema actual. Pero un sistema de indicadores simplifica enormemente el proceso y sirve, a su vez, de recordatorio sistemático, cosa muy útil a las empresas y organizaciones donde puede haber movimiento de personas, responsables, etc.

El Valómetro, por lo tanto, se ajusta a la ciencia más moderna de la dirección de empresas, que se aleja del control en que se basaba en el siglo pasado para abrazar una nueva manera de hacer consistente en crear las condiciones laborales y de mercado para que las personas y los clientes y clientas se relacionen con la empresa sacando el máximo potencial de cada cual. Ya a nadie se le ocurre fiscalizar la creatividad, como tampoco este Valómetro pretende fiscalizar los valores vigentes. Parece evidente, pero no es la tónica general. No tenemos que enseñar nada a las empresas y organizaciones. No tenemos la verdad. Únicamente la podemos inspirar.

No impone losas pesadas sobre las empresas y organizaciones que las limiten a la hora de crecer o las sitúen en una posición menos competitiva que otros.

Gran noticia. Si mejorar o hacer evolucionar los valores de las empresas y organizaciones limita su competitividad, rentabilidad o capacidad de crecimiento, estamos destruyendo el objetivo con las premisas. Pequeñas, medianas y grandes empresas y organizaciones son las que se tienen que sentir atraídas por la modernidad y el motor de cambio que puede significar el Valómetro. Si los valores suponen un freno, solo atraerán a determinados sectores, empresas y organizaciones donde la medida no sea clave, y

esto se derivará inevitablemente en un impacto social mucho más reducido y en una capacidad de retroalimentarse muy lenta.

Mucho se ha repetido que el sistema económico actual “se tiene que cambiar” por diferentes motivos. Quizás, en realidad, no hay que romper con un sistema que ha traído muchas cosas buenas, sino contribuir a su evolución. Si, como decía el educador Capità Enciam, “los pequeños cambios son poderosos”, este Valómetro puede promover muchos pequeños cambios que deriven en una sociedad mucho más Valiosa.

Dr. Carles Torrecilla

Profesor titular del Departamento de Dirección de Màrketng de ESADE



El Valómetro, por lo tanto, se ajusta a la ciencia más moderna de la dirección de empresas, que se aleja del control en que se basaba en el siglo pasado para abrazar una nueva manera de hacer consistente en crear las condiciones laborales y de mercado para que las personas y los clientes y clientas se relacionen con la empresa sacando el máximo potencial de cada cual.



Empresas con Valores

La economía mundial ha sufrido una deceleración grave y rápida que afecta especialmente a las personas más vulnerables, generando índices de desempleo elevados y trabajo temporal en condiciones precarias.

Como consecuencia el paro ha aumentado y se ha destruido empleo de calidad, incidiendo en un deterioro significativo de las condiciones de vida y de trabajo. En tan solo cuatro años, en Europa se han perdido casi cinco millones de empleos. En España, la crisis económica ha incidido especialmente debido a la burbuja inmobiliaria. Además, la política de recortes ha agravado los efectos de la crisis sobre los colectivos más desfavorecidos.

Cada vez más familias en cómputo anual no llegan al salario mínimo interprofesional, acentuando la situación y el riesgo de pobreza. Las dificultades para acceder a una vivienda en alquiler o en propiedad se deben al creciente endeudamiento de las familias trabajadoras, su pérdida de poder adquisitivo y la dificultad para acceder a un crédito y, muy especialmente, a un reparto más desigual de la riqueza.

En tránsito hacia la cuarta revolución industrial, la transformación digital y el desarrollo de la inteligencia artificial generan un profundo cambio en las empresas. Diversos estudios indican que el empleo relacionado con los

sectores de la industria y los servicios se digitalizará en un 90%. Este cambio puede suponer una oportunidad si se aprovecha para desarrollar un nuevo modelo económico para facilitar la salida de la crisis o una enorme preocupación si implica la destrucción de miles de puestos de trabajo.

Los cambios disruptivos en la tecnología facilitan un nuevo entorno económico globalizado que facilita que las empresas generalicen los procesos de subcontratación y externalización a empresas localizadas en países en vías de desarrollo con salarios muy bajos. Ahí cabe sumar el trabajo que en el mundo se estima que cerca de doscientos millones de niños entre 5 y 17 años se encuentran sometidos a las peores formas de trabajo infantil relacionadas con armamento, tareas domésticas o explotación infantil.

Otra problemática a afrontar es el cambio climático provocado muy probablemente por la actividad humana, origen del aumento de la temperatura. Los efectos del cambio climático están generando repercusiones devastadoras en los ecosistemas, la salud y el bienestar de la población y no se espera que mejoren a medio plazo.

Para superar las carencias que presenta el actual sistema económico fuente de desigualdad y exclusión, las empresas

que apuestan por una gestión basada en valores tienen como principal objetivo reinventarse y evolucionar hacia un concepto de negocios en los que la colaboración, la participación y la implicación de los empleados sean indispensables y determinantes.

Según Marcos Eguiguren, director ejecutivo de The Global Alliance for Banking on Values (GABV), la gestión de las crisis económicas, sociales, la deslocalización, la globalización o el cambio climático entre otros, promueven y aceleran la búsqueda de modelos económicos alternativos, capaces de sentar unas bases más sólidas y que den una mejor respuesta a las carencias del actual modelo capitalista. Apunta Eguiguren que se necesitan empresas que actúen en el mercado global con sentido de ética, responsabilidad, transparencia, democracia y participación; empresas lideradas con valores corporativos propios de una cultura empresarial inclusiva a nivel social, sostenible a nivel ambiental y sabia a nivel del uso de la tecnología al servicio de la calidad de vida.

En este entorno, desde el Grupo de Investigación ARPA (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales) del Departamento de Filología y Comunicación de la Universitat de Girona, se impulsa el Proyecto Vusiness [del inglés "Business", negocios, con "V" de valores] que promueve las empresas abiertas, democráticas, sostenibles, inclusivas y que hacen un uso inteligente de la tecnología con el objetivo de servir de modelo inspirador en los ámbitos de investigación, educación, emprendimiento y empresa.

Con el fin de sentar las bases científicas para la creación de un modelo alternativo basado en las empresas con valores en el marco del proyecto Vusiness, se ha llevado a cabo de forma estructurada y metódica una exhaustiva revisión bibliográfica desde 2015 para seleccionar las conclusiones de los estudios más relevantes.

Con el objetivo de contrastar y ampliar la información recopilada en la fase de revisión bibliográfica se llevan a cabo tres foros para reflexionar y debatir acerca de las empresas inclusivas, abiertas y democráticas. El primero lleva por título: "Las personas, el centro de las empresas", el segundo: "Empresas inteligentes, generando futuro" y el tercero: "Empresas sostenibles, afrontando al cambio climático". Además, se llevan a cabo varias entrevistas en profundidad a profesionales de varias disciplinas.

El modelo se presenta en distintas universidades americanas como Harvard University, MIT-Massachusetts Institute of Technology, Emerson College, Boston College y Suffolk University de Boston.

A continuación les presentamos el Valómetro, un Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores, conceptualizado por 50 profesionales-expertos: científicos y profesores de distintas disciplinas académicas y empresarios, emprendedores, técnicos y asesores de distintos sectores empresariales.



Desde el Grupo de Investigación ARPA (Grupo de Análisis de la Recepción de las Pantallas Audiovisuales) del Departamento de Filología y Comunicación de la Universitat de Girona, se impulsa el Proyecto Vusiness (del inglés «Business», negocios, con "V" de valores) que promueve las empresas abiertas, democráticas, sostenibles, inclusivas y que hacen un uso inteligente de la tecnología con el objetivo de servir de modelo inspirador en los ámbitos de investigación, educación, emprendimiento y empresa.

El Valómetro. Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores



¿Qué es el Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores?

El Valómetro es una herramienta de gestión y supervisión destinada a los autónomos y a las empresas micro, pequeñas, medianas y grandes. Está diseñado como un proceso impulsado por la dirección de las empresas para recopilar y analizar datos para mejorar la gestión.

El objetivo del Valómetro es contribuir a mejorar la gestión basada en valores y, específicamente, la gestión inclusiva, sostenible y con un uso inteligente de la tecnología en las empresas. La herramienta está diseñada con la finalidad de facilitar la medición de los procesos de gestión centrados en cinco ámbitos, para supervisar su rendimiento y medir los progresos.

El modelo se ha inspirado en el Sistema Europeo de Indicadores Turísticos de Europa (ETIS) y en el documento Smart Cities: La transformación digital de las ciudades por parte de Centro de Innovación del Sector Público de PwC e IE Business School.

¿Por qué medir y hacer un seguimiento de los indicadores basados en valores?

Los autónomos y empresarios de pequeñas, medianas y grandes empresas a menudo toman sus decisiones basados en un conjunto limitado de datos del balance o incluso por inercia o costumbre. Los datos financieros no representan la empresa en su totalidad. La recopilación y análisis de información sobre cinco ejes claves para el desarrollo de las empresas ayudará sin duda al crecimiento y a una consolidación empresarial respetuosa con los colaboradores y con su entorno.

¿Qué empresas lo pueden aplicar?

Cualquier empresa, independientemente del número de trabajadores y del volumen de facturación lo puede aplicar. Se recomienda que en aquellas que tienen procesos externalizados (producción, transporte, administración, etc.) se sometan a evaluación las empresas que realizan aquel producto o servicio.

Así por ejemplo, si un autónomo utiliza una compañía de transporte para realizar el servicio de logística y reparto, puede analizar el eje de sostenibilidad sobre la empresa de envíos. Cabe tener en cuenta que los clientes cada vez toman más conciencia de los efectos devastadores de la huella de carbono, es decir, de la cantidad de emisiones de gases de efecto invernadero (GEI) y escogen empresas que con sus productos y servicios contaminan menos.

¿Por qué aplicar el Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores?

El Valómetro es una herramienta para la gestión basada en valores y no un sistema de certificación. Está conceptualizado para facilitar la evaluación y mejora de la gestión empresarial sobre 5 ejes para que las empresas sean más abiertas, inclusivas, sostenibles y tecnológicamente inteligentes.

Con el uso del Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores las empresas pueden evaluar y analizar su rendimiento y desarrollar planes estratégicos y de acciones para mejorar sus valores a corto, medio y largo plazo.

La herramienta orienta a las empresas para su aplicación. A través de la concienciación y la participación del conjunto de la empresa se pretende generar efectos positivos a nivel cuantitativo y cualitativo que se pueden medir, recopilar y analizar para promover una mejora continua.

Se recomienda a las empresas que constituyan grupos de trabajo multidisciplinares para priorizar ejes y acciones concretas, estimular y promover la participación de todo el personal de la empresa, tomar las decisiones estratégicas adecuadas para favorecer la consolidación de la empresa, aplicar y medir el impacto de las actividades y promover la mejora continua.

¿Cuáles son las principales ventajas de aplicar el Valómetro?

Con la aplicación del Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores se pretende recopilar información y datos de ámbitos cada vez más estratégicos e imprescindibles para la toma de decisiones como son las personas, la sostenibilidad y la tecnología.

Gracias a la herramienta se pueden priorizar proyectos y acciones de intervención así como establecer comparativas de resultados.

Otro aspecto a destacar es la mejora del clima laboral como consecuencia, por una parte de las mejoras en la gestión de personal y por otra, por su participación más activa en la gestión del conjunto de la empresa. En paralelo, el sistema también promueve la mejora de la relación con los stakeholders.

Un tercer aspecto clave es el referente a los efectos positivos que se generan sobre el medio ambiente y el planeta.

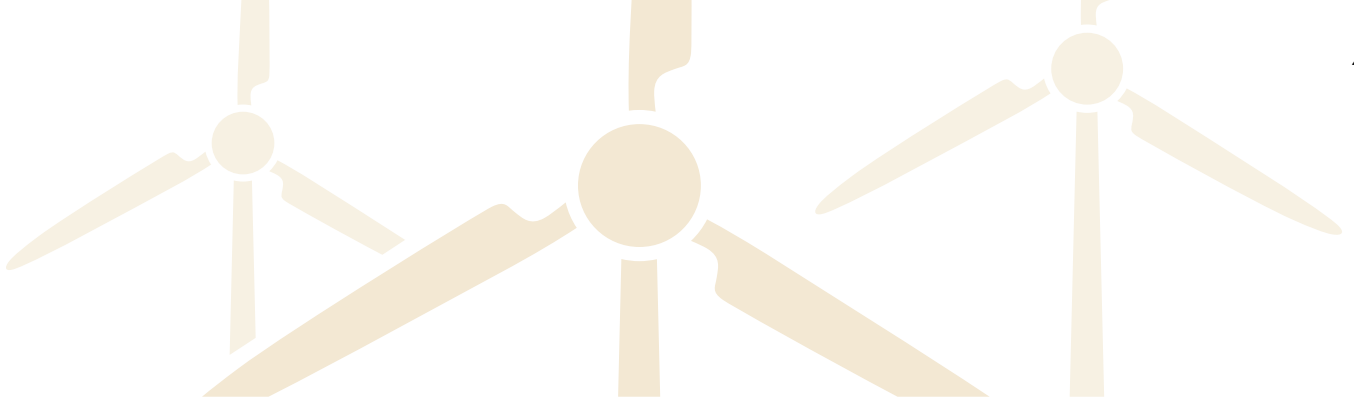
Finalmente, y no por ello menos importante, mejora la experiencia, percepción y fidelización de los clientes hacia la empresa.

¿Cómo funciona el Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores?

El Valómetro es un proceso de gestión integral basado en cinco ejes: identidad, administración y gestión, personas, sostenibilidad y tecnología.

Contiene 50 indicadores básicos que se pueden utilizar individualmente, por ejes o en su totalidad, en función de las necesidades de mejora. A la vez, los indicadores se pueden integrar en otros sistemas de gestión empresarial ya existentes en las empresas. El hecho de poder elegir los criterios e indicadores según la necesidad particular de la empresa dota la herramienta y el sistema de la flexibilidad necesaria para aumentar la viabilidad de aplicación y su consecuente rendimiento.

El Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores está pensado para ser aplicado de forma colectiva implicando a todo el personal. Para garantizar el éxito, la toma de decisiones y el reparto de responsabilidades debe ser compartido entre los distintos integrantes del grupo motor.



Guía de aplicación del Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores en 7 etapas

Etapa 1: Sensibilización

Una vez la dirección de la empresa ha decidido usar el sistema Valómetro, es importante comunicar la decisión al conjunto de trabajadores para aumentar el compromiso, propiciar la participación activa y fomentar el desarrollo de acciones y actividades acorde con los objetivos marcados en los distintos criterios.

Habitualmente se estructura un grupo motor para aplicar y desarrollar el Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores.

La comunicación interna a través de herramientas como el correo electrónico o la mensajería instantánea y el uso de las redes sociales pueden ser útiles para garantizar que la comunicación sea rápida y fluida entre todos los participantes en el proceso.

Si la iniciativa de la implantación del sistema para la Gestión basada en Valores procede de los propios trabajadores, es recomendable que dispongan del apoyo y compromiso explícito por parte de la dirección.

Etapa 2: Delimitar el ámbito de intervención

Es necesario delimitar los ejes estratégicos en qué se incidirá. Se recomienda empezar por el de identidad y proseguir con el de administración y gestión. Si estos dos se consideran consolidados se puede continuar con el de personas, sostenibilidad y tecnología. Aunque se aconseja utilizar los 10 criterios con sus respectivos indicadores, también es posible utilizar y adaptar los que más se ajusten a las necesidades o retos de la empresa. La herramienta puede descargarse desde de la web de www.vusiness.com.

Etapa 3: Constitución del grupo motor

Para implantar el Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores se recomienda constituir un grupo de trabajo de entre 8 y 12 miembros. Evidentemente, si se trata de una micro o empresa pequeña el número será menor. El grupo motor debe de estar integrado por representantes de los distintos departamentos de la empresa (producción, logística, administración, calidad, comercial, etc.) interesados en la implantación del sistema como herramienta para fomentar el cambio en la organización.

El grupo debe de estar liderado y coordinado directamente por el propio empresario, el director general o un miembro a quién deleguen dichas responsabilidad y función.

Su rol activo permitirá diseñar una estrategia de acción y ponerla en marcha. A través de una primera reunión se identificarán conjuntamente los retos empresariales a conseguir y se escogerán los criterios e indicadores más afines. A partir de ahí, es aconsejable abordar como se podrían obtener los datos basándose en los conocimientos y la experiencia de los integrantes.

Etapa 4: Funciones, responsabilidades y calendarización

Es importante que en la reunión se acuerden las responsabilidades de cada miembro del grupo motor, qué datos y cómo se obtendrán y en qué plazo. La flexibilidad es clave en todo el proceso.

El hecho de discernir responsabilidades desencadena un sentimiento de adhesión y compromiso. Por ejemplo, el responsable de logística debe de recopilar datos en relación con el consumo de recursos finitos basados en petróleo, carbón y gas natural comparado con energías renovables como la solar, la térmica, la bioenergía o la hidráulica.



Etapa 5: Recogida de datos

La recopilación de datos debe producirse inicialmente de forma continua y fluida, para poder evaluar con rigurosidad cada criterio, así como para detectar posibles mejoras durante la fase posterior de seguimiento.

Es importante, como ya se ha mencionado anteriormente, que cada empresa escoja los criterios e indicadores más relevantes según sus necesidades y retos.

Se recomienda que aunque los datos sean recogidos y recopilados por distintas unidades, se centralicen para obtener una imagen global y a la vez detallada del proceso. En algunos criterios, la información debe obtenerse a través de la realización de encuestas, entrevistas, grupos de discusión u otro tipo de herramientas.

En función de la empresa, de los tipos de datos a recabar, así como del tiempo o costes para obtenerlos, se recomienda que cada grupo motor decida los ciclos de temporalización adecuados de recogida de datos para cada criterio e indicador.

Etapa 6: Resultados y análisis

A partir de los datos recabados y procesados, se puede avanzar procediendo a su análisis y discusión con el objetivo de establecer un plan estratégico de acciones para mejorar los criterios. El grupo motor, convocado por el coordinador, se reunirá para analizar los resultados y tomar decisiones. Conjuntamente definirán objetivos realistas y acordarán las mejores actividades para conseguirlas.

Con los resultados analizados, se recomienda establecer prioridades, así como las medidas más adecuadas para conseguir los objetivos. Los ámbitos que se consideren urgentes deberán ser abordados con inmediatez, decidiendo quién, cómo y cuándo poner en marcha el plan de acción.

Etapa 7: Innovación y mejora continua

Para garantizar el éxito de la implantación del Sistema Europeo de Indicadores Empresariales para la Gestión basada en Valores se requiere una estrategia bien definida, un grupo motor con capacidades para mantener el uso del sistema así como la comunicación constante de los resultados.

Cuando el sistema de implantación de mejoras está en marcha, se debe pensar en diseñar una estrategia de mejora a largo plazo, de entre 3 y 5 años. Cada unidad que compone el grupo motor debe responsabilizarse de un área y debe ser generador y sentirse corresponsable de los cambios en la empresa.

Los criterios e indicadores deben ser revisados periódicamente. Además, la ampliación gradual de los criterios a valorar por parte de las empresas les permitirá tener una visión más amplia.

También es importante aclarar si la empresa dispone de la financiación óptima para continuar implantando planes de mejora.

Se recomienda que las empresas puedan difundir los resultados así como los casos de éxito a través de distintos mecanismos de comunicación. Esta información puede ser útil para disipar la estrategia a largo plazo.

Finalmente, se espera que la aplicación del Valómetro incida en maximizar el beneficio social y económico de la empresa.

Indicadores básicos

Los indicadores básicos recopilan la información clave y fundamental de la empresa para describir, medir y comprar su rendimiento y mejora en cinco ejes estratégicos.

Los 50 indicadores básicos incorporan los aspectos más destacados de la identidad, la administración y gestión, de las personas, la sostenibilidad y la tecnología.

Su medición facilita las comparaciones a corto, medio y largo plazo para poder valorar si el plan de acciones consigue los resultados esperados. Se recomienda recopilar datos y realizar un seguimiento periódico de los indicadores escogidos.

Cuando su empresa haya establecido un sistema claro para la medición y seguimiento de los indicadores clave escogidos, puede añadir indicadores adicionales para recabar información complementaria adaptada a sus problemáticas, necesidades o retos específicos.

Es importante especificar con claridad la metodología de recopilación de datos y los indicadores para garantizar que cualquier integrante de la empresa pueda recoger datos con fiabilidad y validez para su posterior evaluación y comparación.

La siguiente figura muestra el Valómetro representado en un aerogenerador, generador de energía eléctrica accionado por la fuerza renovable del viento.



VALÓMETRO

Sistema de Indicadores Empresariales para la Gestión basada en Valores

**A continuación se describe la relación de criterios,
números de referencia e indicadores básicos
organizados en los mencionados cinco ejes estratégicos.**

IDENTIDAD

ADMINISTRACIÓN Y GESTIÓN

PERSONAS

SOSTENIBILIDAD

TECNOLOGÍA



SECCIÓN A: IDENTIDAD

CRITERIOS	NÚMERO DE REFERENCIA DEL INDICADOR	INDICADORES BÁSICOS
A1 EMPRENDEDOR/A · Caracterizado para ser creativo, innovador, comunicativo, sensible, honesto, comprometido, ético, empático, cercano, eficaz, eficiente, con capacidad de liderazgo, transparente y responsable.	A1.1	Porcentaje de los rasgos de personalidad y características del perfil emprendedor del impulsor que determinan si sabe identificar una oportunidad y tiene las habilidades para ponerla en marcha, sobre el total.
A2 MISIÓN · Nuestra razón de ser fundacional, persigue una finalidad noble y loable. Por ej. Educación de calidad; igualdad de género; trabajo decente y crecimiento económico; producción y consumo responsables, etc.	A2.1	Porcentaje de coincidencia entre la razón de ser fundacional de la empresa en comparación con algunos de los 17 retos que definen los Objetivos de Desarrollo Sostenible (ODS) de Naciones Unidas
A3 VISIÓN · La empresa se plantea lograr retos de futuro comprometidos con el desarrollo de las personas y la sostenibilidad del medio.	A3.1	Porcentaje de coincidencia entre los retos de futuro de la empresa en comparación con los retos que definen los Objetivos de Desarrollo Sostenible (ODS) de Naciones Unidas
A4 VALORES · Profundamente comprometidos con valores éticos, sociales, laborales y ambientales para favorecer al desarrollo armónico del planeta y de la humanidad.	A4.1	Porcentaje de valores de la empresa relacionados con la ética, sociales o ambientales en comparación con los valores pragmáticos-económicos (eficiencia, calidad, etc.)
A5 SOSTENIBLE · Contribuye a la riqueza y al bien común y no consume, en ningún ámbito, más recursos de los que genera.	A5.1	Porcentaje de recursos energéticos que genera la empresa en comparación con los que consume.
A6 PROGRESO · Actúa sobre el progreso tecnológico y lo redirige para que sea de ayuda para un mundo mejor.	A6.1	Porcentaje de uso de las nuevas tecnologías para promover la calidad de vida en comparación con el uso para eliminar sitios de trabajo.
A7 RESPONSABILIDAD · Actúa desde la plena libertad responsable especialmente hacia la sociedad y el medio ambiente.	A7.1	Porcentaje de productos y/o servicios, producidos o prestados respectivamente, por la empresa que favorecen la sociedad y el medio ambiente, sobre el total.
A8 TRANSPARENCIA · Actúa en el libre mercado de forma absolutamente transparente.	A8.1	Porcentaje de acceso al proceso de toma de decisiones, al acceso libre de documentos, instrucciones, fórmulas, contratos, etc. que afectan a los ciudadanos o al medio ambiente sobre el total.
A9 ÉTICA · No se dedica a actividades especulativas en ningún caso, ni siquiera de forma marginal y extiende el compromiso ético a su cadena de proveedores, distribuidores y clientes.	A9.1	Número de acciones éticas sobre proveedores, distribuidores y clientes en comparación con el total de actividades.
A10 BENEFICIO JUSTO · Aspira a obtener un beneficio suficiente para continuar contribuyendo al desarrollo social y para procurar la lícita compensación de quien arriesga su capital y quien dedica su trabajo.	A10.1	Beneficios que dedica a una lícita compensación por su trabajo y a la mejora de la empresa, a sus empleados o al desarrollo social en comparación con la dedicación a gastos y derroches personales sobredimensionados o innecesarios en euros.

SECCIÓN B: ADMINISTRACIÓN Y GESTIÓN

CRITERIOS

NÚMERO DE REFERENCIA DEL INDICADOR

INDICADORES BÁSICOS

CRITERIOS	NÚMERO DE REFERENCIA DEL INDICADOR	INDICADORES BÁSICOS
B1 LÍDER TRANSFORMADOR · Caracterizado para ser emprendedor, innovador, inspirador, creativo, sensible, honesto, comprometido, social, ético, empático, cercano, eficaz, eficiente, transparente, discreto, cumplidor y responsable.	B1.1	Porcentaje de los rasgos de personalidad y características del perfil que determinan si es un líder auténtico, inspirador y está capacitado para motivar, cohesionar y favorecer el rendimiento de equipo, sobre el total.
B2 GOBERNANZA · El consejo de administración, la junta general de accionistas, el equipo directivo, el comité de auditoría, etc. se organizan y toman decisiones para lograr sus legítimos objetivos, actuando siempre de forma absolutamente transparente, ética y responsable.	B2.1	Número de decisiones estratégicas tomadas de forma ética, responsable y comunicadas en comparación con las que se ocultan y no responden a finalidades nobles.
B3 ENTORNO Y OPORTUNIDADES · La empresa está atenta ante los retos, oportunidades y necesidades que tiene la sociedad para acontecer más sostenible, desarrollada, justa y equitativa.	B3.1	Porcentaje de productos y/o servicios desarrollados ante retos o necesidades del entorno para favorecer la economía circular, un desarrollo sostenible o una sociedad más justa y equitativa, sobre el total.
B4 PROPUESTA DE VALOR · Producto o servicio que satisface las necesidades racionales de la sociedad.	B4.1	Número de productos y/o servicios necesarios para vivir o que hacen un mundo mejor en comparación con los que responden a mero consumismo.
B5 COLABORADORES · Se relaciona con proveedores, distribuidores e influyentes que tienen determinados principios éticos y valores y los trata de forma justa.	B5.1	Porcentaje de los proveedores, distribuidores e influyentes que comercializan de forma honesta, transparente y justa, sobre el total.
B6 CANALES · Se relaciona con sus clientes de forma honesta, haciendo uso de un marketing que promueve el consumo responsable y no el consumismo y establece relaciones positivas y duraderas.	B6.1	Porcentaje de comunicaciones (campañas, reuniones con clientes, presentaciones de productos, ruedas de prensa, folletos, etc.) basadas en mensajes e información completa, contrastada, veraz, honesta y transparente, sobre el total.
B7 PRECIOS · Acorde con la propuesta de valor, se fijan precios justos que permitan remunerar de forma adecuada la producción o fabricación del producto, especialmente los pequeños productores locales y la remuneración justa de los trabajadores/as que imparten un servicio.	B7.1	Porcentaje de las ventas que se destina a los proveedores, sobre el total.
B8 FINANZAS DE TRIPLE BALANCE · Busca un equilibrio entre el crecimiento y la distribución de la riqueza, incluyendo la aspiración a obtener un beneficio económico suficiente y lícito y a la vez atender la dimensión social y medioambiental.	B8.1	Porcentaje del ingreso en ventas destinado a la mejora de la remuneración de los trabajadores en función de los resultados de la empresa o a proyectos sociales o de mejora del medio ambiente, sobre el total.
B9 LEGALIDAD · Las prácticas legales, mercantiles, fiscales y laborales, son las más adecuadas para llevar a cabo sus nobles finalidades y para contribuir como empresa a la comunidad, en ningún caso para obtener un mejor trato fiscal. Velando para tener comportamiento adecuado en la economía real y no especulativa.	B9.1	Número de prácticas legales, mercantiles, fiscales y laborales adecuadas para llevar a cabo sus nobles finalidades y para contribuir como empresa a la comunidad en comparación con las diseñadas exclusivamente para obtener un mejor trato fiscal.
B10 ROI (RETURN ON INVESTMENT) SOCIAL · Dispone de un sistema de indicadores de evaluación para la mejora continua, relacionados con conceptos potenciadores de la responsabilidad y la transparencia. Busca la mejora continua a través de innovar en sostenibilidad, uso inteligente de la tecnología y cohesionadores del entorno (ocupación, dinamización local, etc.)	B10.1	Retorno social sobre el capital invertido (ROIC. Return on Invested Capital) en euros.

SECCIÓN C: PERSONAS

CRITERIOS	NÚMERO DE REFERENCIA DEL INDICADOR	INDICADORES BÁSICOS
C1 MULTILIDERAZGOS · Fomentar los multiliderazgos: el liderazgo distribuido entre los miembros del equipo y el liderazgo por proyectos para aprovechar las aptitudes individuales. Los líderes deben actuar con iniciativa y actitud pro-activa siendo un motor inspirador y estimulador para que los grupos cumplan su trabajo.	C1.1	Porcentaje de trabajadores con responsabilidades de liderazgo dentro de la plantilla sobre el total de personal.
C2 TRABAJO EN EQUIPO · Desarrollar y cuidar de los equipos de trabajo a través de valores emocionales como la alegría, la solidaridad y la libertad para potenciar la creatividad, el talento y la innovación, actuando con transparencia, promoviendo la participación activa y creando mecanismos para hacerla real y posible. Incidir en el clima laboral y dando libertad al talento de las personas.	C2.1	Porcentaje habitual de horas de trabajo en equipo respecto al total de horas trabajadas.
C3 DESARROLLO PROFESIONAL · Promover el desarrollo del personal a través del desarrollo profesional, ofreciendo posibilidades de promoción.	C3.1	Porcentaje anual de trabajadores promocionados respecto al total de la plantilla.
C4 CONOCIMIENTO Y FORMACIÓN · Crear mecanismos para traccionar talento y hacer aflorar talento emergente. Potenciar el conocimiento a través de la formación adaptada a los nuevos tiempos y a los retos actuales. Fomentar la transmisión de conocimientos entre trabajadores. Utilización de medios convencionales así como plataformas digitales y de realidad virtual.	C4.1	Número de horas –de promedio– dedicadas anualmente a la formación de los trabajadores, a sesiones para hacer aflorar su talento o a reuniones específicas para que compartan su conocimiento.
C5 IGUALDAD E INCLUSIÓN · Crear un entorno que respete y fomente la diversidad social, de género, diversidad funcional, diversidad generacional y cultural de la empresa.	C5.1	Número de medidas y proyectos que fomentan la igualdad e inclusión (por ej.: contratación de personas con discapacidad, participación en programas sociales para favorecer la inserción de personas inmigradas, adecuación de las instalaciones para mejorar la accesibilidad, etc.)
C6 CONCILIACIÓN Y TELETRABAJO · Fomentar la conciliación del trabajo con la vida personal y familiar a través de medidas como la flexibilidad horaria y el teletrabajo.	C6.1	Número de medidas y proyectos que fomentan la conciliación y el teletrabajo (por ej. Flexibilidad horaria, transporte discrecional para los trabajadores, posibilidad de teletrabajo, etc.)
C7 REMUNERACIÓN JUSTA · Cumplir las liquidaciones en tiempos y forma y remunerar de acuerdo con las funciones y características del puesto de trabajo así como las tareas asignadas con concreción, valorando también, la implicación, las capacidades y las habilidades del trabajador. También la inyección moral.	C7.1	Número de beneficios, acuerdos y ventajas adicionales del personal a nivel de remuneración en comparación con lo que determina el estatuto de los trabajadores o los convenios colectivos vigentes.
C8 RED · Fomentar y comunicar las actuaciones de voluntariado corporativo, desarrollo de las habilidades personales de los participantes, donativos a instituciones locales, facilitar visitas de escolares a la propia oficina, etc.	C8.1	Número de medidas y actuaciones que se realizan para fomentar los vínculos con las redes próximas (por ej. Visitas guiadas, posibilidad de prácticas no laborales en empresa, facilidad para contratos en prácticas, colaboración y patrocinio de entidades o asociaciones del barrio, etc.)
C9 ATENCIÓN MÉDICA, SALUD Y BIENESTAR · Desplegar atención médica y medidas de higiene y seguridad en el trabajo. Servicios de asistencia de salud complementarios a la oferta pública: cardiovascular, diabetes, wellness, gestión del estrés, etc. para mejorar el ambiente de trabajo y fomentar hábitos de vida saludables como la práctica deportiva.	C9.1	Número de supósitos y situaciones que reciben una cobertura médica, de salud o de bienestar adicional a la obligatoria de media por trabajador (por ejemplo: evolución semanal del embarazo, consultas médicas on-line, cobertura dental, cobertura de gafas y lentillas, etc.)
C10 COLABORACIÓN · Fomentar la comunicación y colaboración activa entre los diferentes departamentos utilizando todos los medios disponibles, y posibilitando la rotación del personal entre los departamentos (reuniones, pantallas de comunicación, azulejos interactivos tipo Ipad, etc.).	C10.1	Número de canales, medios, herramientas y espacios disponibles para fomentar la comunicación y la colaboración (intranet, mensajería instantánea, correo electrónico, teléfono, espacio de cafetería, etc.)

SECCIÓN D: SOSTENIBILIDAD

CRITERIOS	NÚMERO DE REFERENCIA DEL INDICADOR	INDICADORES BÁSICOS
D1 IMPACTO MEDIOAMBIENTAL · Consumos de agua, gas, electricidad así como la detección y reacción ante emergencias medioambientales: escapes, incendios, etc.	D1.1	Porcentaje de superficie de la empresa controlado a través de redes de sensores ambientales inteligentes y smartmetering, que permita la detección automática de consumos así como la detección de partículas contaminantes y emisiones provocadas por emergencias ambientales, sobre el total.
D2 CONSUMO Y PRODUCCIÓN DE ENERGÍAS RENOVABLES · Autogeneración de energía a partir de fondos renovables: placas fotovoltaicas, geotermia de baja entalpía, mini eólica, etc.	D2.1	Porcentaje de uso de energías renovables (ej. solar, térmica, fotovoltaica, bioenergía, hidráulica, de las mareas, eólica, del oleaje y geotérmica) en comparación con las finitas (basadas en petróleo, carbón y gas natural)
D3 EFICIENCIA ENERGÉTICA · Permite aumentar eficiencias y mejorar la gestión de energía. Soluciones que promueven la gestión del consumo energético en climatización, ascensores e iluminación.	D3.1	Porcentaje de uso de equipos energéticamente eficientes: de almacenamiento de la energía y de alta eficiencia energética y bajo consumo como la cogeneración y las calderas de alta eficiencia, y la domótica y uso de tecnología led, sistemas de iluminación inteligentes y bajo demanda o mediante sensores de presencia en comparación con medios convencionales no eficientes.
D4 BIOCLIMÁTICA Y EDIFICACIÓN SOSTENIBLE · Edificios de consumo cero. Permiten reducir consumos sin necesidad de instalaciones energéticas más sostenibles.	D4.1	Porcentaje de uso de cierres, ventanas, envolventes de los edificios, etc. en comparación con sistemas que no favorecen la reducción del consumo.
D5 INTEGRACIÓN EN EL PAISAJE Y EL ENTORNO · Para favorecer la integración y naturalidad paisajística y ambiental y promover la reducción térmica a través de sistemas de producción que fomenten la biodiversidad y el respeto por la natura en las zonas agrícolas.	D5.1	Número de medidas para favorecer la integración en el paisaje y el entorno (Por ej. Vegetar techos, paredes y el entorno de la empresa para crear sombras, humedad y evitar islas de calor, integración cromática de las instalaciones en el entorno, y promover el consumo de productos de proximidad y respetuosos con el medio ambiente).
D6 GESTIÓN DEL CICLO INTEGRAL DEL AGUA Y RIEGO INTELIGENTE	D6.1	Número de recursos tecnológicos utilizados para favorecer que el agua sea un ciclo cerrado (Por ej. captación, transporte, distribución, alcantarillado, lectura de consumos, facturación, cobro, depuración y potabilización, etc.; jardinería de bajo consumo e integrada en el entorno y automatización de la reguera y redes de sensores para medir cuándo y cuánto es necesario regar).
D7 ECONOMÍA CIRCULAR, REDUCCIÓN, REUTILIZACIÓN, RECICLAJE Y GESTIÓN INTELIGENTE DE LOS RESIDUOS · La economía circular implica la generación de productos que mantienen su utilidad y valor y se caracteriza por ser una producción reparadora y regenerativa.	D7.1	Número de medidas adoptadas para favorecer el eco diseño de productos y la reducción, la reutilización, el reciclaje y la gestión inteligente de los residuos más allá del cumplimiento de la legalidad. Por ej. Compra de materiales teniendo en cuenta el ciclo de vida, eco diseño de nuevos productos, uso de productos reciclados y productos con certificación ambiental o eco etiquetas, información en tiempo real sobre el llenado de los contenedores, etc.)
D8 TRANSPORTE PÚBLICO Y RETRIBUCIÓN POR DESPLAZAMIENTOS · Favorece el uso del transporte público para acceder al trabajo	D8.1	Número de medidas para incentivar el uso del transporte público para acceder al trabajo (contribución a los costes de movilidad poligonal, adaptación de horarios al transporte, información en tiempo real de incidencias y frecuencias, asesoramiento digital al viajero, etc.)
D9 MOVILIDAD NO MOTORIZADA · Vehículos de propulsión ecológica y fomento del uso de la bicicleta convencional o a pie	D9.1	Número de medidas adoptadas para favorecer el uso de movilidad no motorizada (bicicleta, motocicleta y coche eléctricos, bicicleta convencional o a pie). Por ej.: aparcamiento, acceso en los edificios de las bicicletas plegables, disposición de un espacio de muda y ducha, despliegue de redes de puntos de carga, sistemas de información sobre ubicación y disponibilidad, sistemas de alquiler, etc.
D10 GESTIÓN DEL TRÁNSITO · Para disminuir la huella de carbono a través de la gestión de las propias flotas y de favorecer el uso compartido de vehículo	D10.1	Número de medidas que se proponen para favorecer la fluidez del tránsito (cálculo de la huella de carbono de la flota, planes de movilidad, favorecer la plena ocupación de los vehículos de los trabajadores, optimizar el transporte de mercancías, predicción del tránsito, semáforos inteligentes, información al conductor en tiempo real, avisos sobre incidencias, etc.).

SECCIÓN E: TECNOLOGÍA

CRITERIOS	NÚMERO DE REFERENCIA DEL INDICADOR	INDICADORES BÁSICOS
E1 TRANSFORMACIÓN DIGITAL · Establecimiento de mecanismos para facilitar la incorporación de la tecnología en todos los procesos. Facilitar el cambio de marco mental que implica la digitalización incluyendo las tendencias y avances de campos como la nanotecnología, la genética, y el movimiento maker, la economía colaborativa o la economía circular. Todo ello abordando las cuestiones éticas a favor de las personas y la calidad de vida ante la robotización.	E1.1	Número de horas anuales de media por trabajador que la empresa dedica a sensibilizar, formar y orientar hacia la transformación digital y a abordar las cuestiones éticas ante la robotización.
E2 INTERNET OF THINGS (IOT) · Internet de las cosas aplicado a distintos sectores de actividad. Permite conectar objetos entre sí y a Internet.	E2.1	Porcentaje de los productos de la empresa que disponen de sensores y computación embebida que les permite enviar y recibir información en tiempo real, sobre el total.
E3 OPEN DATA · Puesta a disposición de los trabajadores, proveedores y clientes la información en formatos estándar, abiertos e interoperables para fomentar la transparencia.	E3.1	Porcentaje de datos de la empresa que están en formatos abiertos y accesibles para trabajadores, proveedores y clientes, sobre el total.
E4 SISTEMAS CIBERFÍSICOS · Sistemas conectados entre sí y a su vez con el mundo virtual de las redes digitales. Son redes de comunicaciones avanzadas que conforman plataformas integradas para la gestión. Integran capacidades de monitorización, gestión y explotación, facilitando el seguimiento y/o control.	E4.1	Porcentaje de los datos de la empresa monitorizado y controlado a través de alguna plataforma con sistema ciberfísico (infraestructura técnica conectada con estándares abiertos; sistemas conectados a través d'IoT, plataformas definidas por software y plataformas de servicios inteligentes) sobre el total.
E5 5G, CONECTIVIDAD, CLOUD COMPUTING Y COMERCIO DIGITAL · 5G es la infraestructura de telecomunicaciones que habilita nuevos servicios de base digital (vehículo autónomo, tele asistencia médica remota, operaciones quirúrgicas remotas, etc.). Cloud computing implica información disponible en cualquier sitio y cualquier momento para trabajadores, clientes y proveedores gracias a la tecnología flexible que permite trabajar ubicando todos los recursos en la nube. Posibilidad que ofrece comprar y vender por Internet.	E5.1	Porcentaje de información de la empresa habilitado en 5G, ubicado en la nube y accesible desde cualquier sitio y en cualquier momento gracias a tecnologías de comunicación que permiten trabajar, comprar y vender, sobre el total.
E6 TECNOLOGÍA COLABORATIVA · Habilita modelos colaborativos que permiten el nacimiento de nuevos negocios C2B (por ej. Waze, etc.) compartición de capacidad i activos (por ej. Uber, Cabify, AirBnb, Blablacar, etc.) o la integración de clientes i partners en el proceso de negocio, además de nuevas formas de colaboración en los negocios (crow-sourcing de datos, crowd-funding). Aparición de la blockchain y las posibilidades que suscita. Incluye, además, la robótica colaborativa, nueva generación de robots más versátiles, fáciles de programar y manejar.	E6.1	Recursos económicos anuales de la empresa destinados a la tecnología colaborativa en euros.
E7 FABRICACIÓN ADITIVA · Impresión 3D, incluye aquellos dispositivos que producen un objeto 3D a partir de una entrada digital, sin necesidad de moldes ni utillajes de ningún tipo, a través de la deposición de capas de material y su consolidación.	E7.1	Porcentaje de objetos producidos que se fabrican a través de la impresión 3D sobre el total.
E8 INTELIGENCIA ARTIFICIAL · Área multidisciplinar que intenta dotar a las máquinas de procesos cognitivos típicos del razonamiento humano como deducir, razonar y resolver problemas complejos. Incluye la rama de machine learning o aprendizaje automático, que pretende desarrollar técnicas que permitan a las máquinas aprender automáticamente.	E8.1	Recursos económicos anuales de la empresa destinados a la inteligencia artificial en euros.
E9 TECNOLOGÍA INMERSIVA · La Realidad aumentada (RA) es la tecnología que ofrece información digital superpuesta a la visión real. La Realidad virtual o simulación (RV) se utiliza en fábrica para recrear un espejo del mundo físico en un modelo virtual. La realidad mixta (RM) es la combinación de realidad virtual y realidad aumentada.	E9.1	Recursos económicos anuales de la empresa destinados a la Tecnología Inmersiva en euros.
E10 CIBERSEGURIDAD Y CIBERINTELIGENCIA · Sistemas de protección y anticipación ante ataques a la seguridad en Internet de servicios esenciales para las empresas o que puedan generar perjuicios a los usuarios y clientes. Seguridad física de los datos ante a Ransomware y/o fallos tecnológicos. Protección de datos de carácter personal, dando cumplimiento a la normativa vigente (actualmente el RGPD Reglamento General de Protección de Datos).	E10.1	Número de medidas adoptadas para proteger los datos y los sistemas críticos ante los ciberataques. (Por ej. Sistemas de protección de software, copias de seguridad, protocolos de protección de datos de carácter personal, etc.)

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VUSINESS

BUSINESS & VALUES

CAT



VALÒMETRE

SISTEMA EUROPEU D'INDICADORS
EMPRESARIALS PER A LA GESTIÓ
BASADA EN VALORS



Universitat de Girona
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Per a més informació sobre el Projecte Vusiness
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Anàlisi de la Recepció de les Pantalles Audiovisuals
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Introducció

El Valòmetre, Sistema europeu d'indicadors empresarials per a la gestió basada en valors, és una eina de gestió d'aplicació voluntària dissenyada especialment per a les empreses per la Universitat de Girona. Té com a objectiu promoure les empreses sostenibles, intel·ligents, obertes, democràtiques i inclusives, preparades per encarar el futur.

A través del grup de recerca ARPA (Anàlisi de la Recepció de les Pantalles Audiovisuals) del Departament de Filologia i Comunicació de la Universitat de Girona, ha nascut Vusiness [de l'anglès *business*, negocis, amb v de valors], un model empresarial de creació i gestió basat en valors, alternatiu a l'actual, dissenyat per afrontar fenòmens i reptes com el canvi climàtic, les crisis econòmiques i socials, la globalització, el treball precari i la transformació digital.

El Valòmetre pretén ajudar i guiar les empreses a controlar i a mesurar els resultats de la seva gestió en àmbits com la identitat, l'administració i la gestió, les persones, i la sostenibilitat i la tecnologia, utilitzant una metodologia comuna comparable.

Els resultats de seguiment es basen en l'autoavaluació, les observacions, la recopilació de dades de diferents fonts i l'anàlisi d'aquestes per part de les empreses. No es fixen valors mínims que han d'aconseguir-se ni es proporcionen certificacions. No obstant això, la identificació d'indicadors proporciona a les empreses la informació bàsica per fer un seguiment de les cinc àrees, la qual cosa els facilita una gestió més eficaç d'acord amb els valors orientats a les persones i al medi ambient.

El Valòmetre es basa en cinquanta indicadors que estan dividits en cinc categories:

- a) Identitat
- b) Administració i gestió
- c) Persones
- d) Sostenibilitat
- e) Tecnologia

Metodològicament, la redacció inicial dels indicadors del Valòmetre ha partit de l'ús de tres tècniques complementàries. En primer lloc, s'ha realitzat una diagnosi exhaustiva conformada per quatre revisions bibliogràfiques focalitzades en la inclusivitat, la sostenibilitat, la tecnologia i la comunicació.

En segon lloc, s'han seleccionat cinquanta persones professionals-experts (científics i científiques, professors i professores de diferents disciplines acadèmiques, empresaris i empresàries, emprenedors i emprenedores, tècnics i tècniques, i assessors i assessores de diferents sectors empresarials), les quals han participat en tres grups de discussió combinats amb, en tercer lloc, entrevistes en profunditat per conceptualitzar conjuntament el Valòmetre.

La utilitat i la viabilitat del Valòmetre com a eina de gestió empresarial basada en valors s'ha aplicat a una experiència pilot. En aquest punt convidem les empreses a posar a prova l'eina i a facilitar a la Universitat de Girona informació sobre la seva experiència.

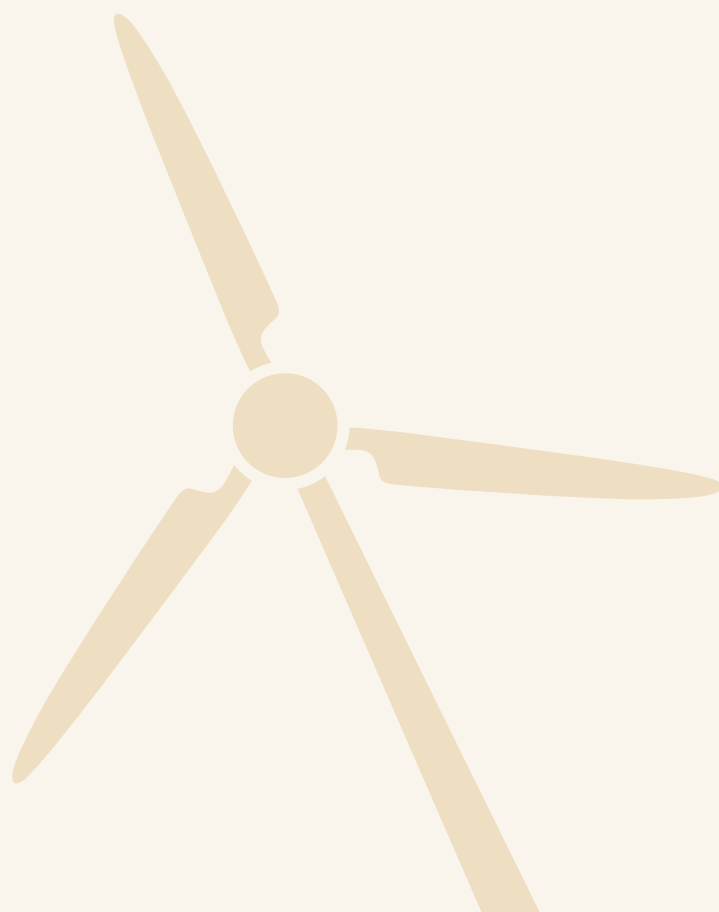
A partir dels comentaris rebuts, un grup d'experts de la Universitat de Girona revisarà periòdicament el sistema. La primera edició és el resultat de la prova pilot. Esperem, en posteriors edicions, oferir un sistema verificat i adequat.



El Valòmetre pretén ajudar i guiar les empreses a controlar i a mesurar els resultats de la seva gestió en àmbits com la identitat, l'administració i la gestió, les persones, i la sostenibilitat i la tecnologia, utilitzant una metodologia comuna comparable.

Índex

- 05 Pròleg
- 06 Empreses amb valors
- 08 El Valòmetre. Sistema europeu d'indicadors empresarials per a la gestió basada en valors
- 08 Què és el Sistema europeu d'indicadors empresarials per a la gestió basada en valors?
- 08 Per què mesurar i fer un seguiment dels indicadors basats en valors?
- 08 Quines empreses ho poden aplicar?
- 09 Per què aplicar el Sistema europeu d'indicadors empresarials per a la gestió basada en valors?
- 09 Quins són els principals avantatges d'aplicar el Valòmetre?
- 09 Com funciona el Sistema europeu d'indicadors empresarials per a la gestió basada en valors?
- 10 Guia d'aplicació del Sistema europeu d'indicadors empresarials per a la gestió basada en valors en set etapes
- 10 Etapa 1: sensibilització
- 10 Etapa 2: delimitació de l'àmbit d'intervenció
- 10 Etapa 3: constitució del grup motor
- 10 Etapa 4: funcions, responsabilitats i planificació
- 11 Etapa 5: recollida de dades
- 11 Etapa 6: resultats i anàlisi
- 11 Etapa 7: innovació i millora contínua
- 12 Indicadors bàsics
- 14 Identitat
- 15 Administració i gestió
- 16 Persones
- 17 Sostenibilitat
- 18 Tecnologia
- 19 Agraïments



Pròleg

Si un problema ben plantejat és un problema mig resolt, aquest Valòmetre neix bé. Hi ha dos elements que em semblen cabdals.

El primer motiu és que no pretén avaluar o jutjar, sinó dotar d'uns indicadors d'autoajuda per a les empreses. L'important no és la nota, sinó poder millorar de mica en mica. Al cap i a la fi aquesta és la manera com les societats s'han fet millors per a les persones.

El segon és que no existeixen trucs molt vàlids i senzills. Per exemple, l'ètica kantiana resa: “actua de manera que la teva conducta pugui ser elevada a norma universal”. Això, en la tradició catòlica, seria: “estima i no facis als teus germans el que no voldries per a tu”. Si en cada decisió apliquéssim aquestes màximes segurament redreçaríem una bona part de carències del sistema actual. Però un sistema d'indicadors simplifica enormement el procés i serveix, alhora, de recordatori sistemàtic, cosa molt útil a les empreses i organitzacions on pot haver-hi moviment de persones, de responsables, etc.

El Valòmetre, per tant, s'ajusta a la ciència més moderna de la direcció d'empreses, que s'allunya del control en què es basava en el segle passat per abraçar una nova manera de fer que consisteix a crear les condicions laborals i de mercat perquè les persones i els clients i clientes es relacionin amb l'empresa traient el màxim potencial de cadascú. Ja a ningú se li acudeix fiscalitzar la creativitat, com tampoc aquest Valòmetre pretén fiscalitzar els valors vigents. Sembla evident, però no és la tònica general. No hem d'ensenyar res a les empreses i organitzacions. No tenim la veritat. Únicament la podem inspirar.

No imposa llores pesades sobre les empreses i organitzacions que les limitin a l'hora de créixer o les situïn en una posició menys competitiva que d'altres.

Gran notícia. Si millorar o fer evolucionar els valors de les empreses i organitzacions en limita la competitivitat, la rendibilitat o la capacitat de creixement, estem destruint l'objectiu amb les premisses. Petites, mitjanes i grans empreses i organitzacions són les que s'han de sentir atretes per la modernitat i el motor de canvi que pot significar el Valòmetre. Si els valors suposen un fre, només atrauran determinats sectors, empreses i organitzacions on la mida no sigui clau, i això derivarà, inevitablement, cap a

un impacte social molt més reduït i amb una capacitat de retroalimentar-se molt lenta.

Molt s'ha repetit que el sistema econòmic actual “s'ha de canviar” per diferents motius. Potser, en realitat, no cal trencar amb un sistema que ha portat moltes coses bones, sinó contribuir-ne a l'evolució. Si, com deia l'educador Capità Enciam, “els petits canvis són poderosos”, aquest Valòmetre pot promoure molts petits canvis que derivin en una societat molt més Valuosa.

Dr. Carles Torrecilla

Professor titular del Departament de Direcció de Màrqueting d'ESADE



El Valòmetre, per tant, s'ajusta a la ciència més moderna de la direcció d'empreses, que s'allunya del control en què es basava en el segle passat per abraçar una nova manera de fer que consisteix a crear les condicions laborals i de mercat perquè les persones i els clients i clientes es relacionin amb l'empresa traient el màxim potencial de cadascú.



Empreses amb valors

L'economia mundial ha sofert una desacceleració greu i ràpida que afecta, especialment, les persones més vulnerables, fet que genera índexs de desocupació elevats i treball temporal en condicions precàries.

Com a conseqüència d'això, l'atur ha augmentat i s'ha destruït ocupació de qualitat, i, per tant, s'ha produït una deterioració significativa de les condicions de vida i de treball. En tan sols quatre anys, a Europa, s'han perdut gairebé cinc milions de llocs de treball. A Espanya, la crisi econòmica ha incidit especialment a causa de la bombolla immobiliària. A més, la política de retallades ha agreujat els efectes de la crisi sobre els col·lectius més desfavorits.

Cada vegada més famílies en còmput anual no arriben al salari mínim interprofessional, la qual cosa accentua la situació i el risc de pobresa. Les dificultats per accedir a un habitatge de lloguer o de propietat és a causa de l'endeutament creixent de les famílies treballadores, de la pèrdua del seu poder adquisitiu, de la dificultat per accedir a un crèdit i, molt especialment, d'un repartiment més desigual de la riquesa.

En plena transició cap a la quarta revolució industrial, la transformació digital i el desenvolupament de la intel·ligència artificial generen un canvi profund a les empreses. Diversos estudis indiquen que l'ocupació relacionada amb els sectors

de la indústria i els serveis es digitalitzarà en un 90%. Aquest canvi pot suposar una oportunitat si s'aprofita per desenvolupar un nou model econòmic per facilitar la sortida de la crisi o bé una enorme preocupació si implica la destrucció de milers de llocs de treball.

Els canvis disruptius en la tecnologia faciliten un nou entorn econòmic globalitzat que facilita que les empreses generalitzin els processos de subcontractació i externalització a empreses localitzades en països en vies de desenvolupament amb salaris molt baixos. Aquí cal sumar-hi les feines que s'estima que prop de dos-cents milions de nens entre cinc i disset anys duen a terme al món, ja que es troben sotmesos a les pitjors formes de treball infantil relacionades amb armament, tasques domèstiques o explotació infantil.

Una altra problemàtica per afrontar és el canvi climàtic, provocat, molt probablement, per l'activitat humana, que causa l'origen de l'augment de la temperatura. Els efectes del canvi climàtic estan generant repercussions devastadores als ecosistemes, a la salut i al benestar de la població, i no s'espera que millorin a mitjà termini.

Per superar les mancances que presenta l'actual sistema econòmic, font de desigualtat i exclusió, les empreses que aposten per una gestió basada en valors tenen com a principal

objectiu reinventar-se i evolucionar cap a un concepte de negoci en els quals la col·laboració, la participació i la implicació dels empleats i empleades siguin indispensables i determinants.

Segons Marcos Eguiguren, director executiu de Global Alliance for Banking on Values (GABV), la gestió de les crisis econòmiques i socials, la deslocalització, la globalització o el canvi climàtic, entre altres, promouen i acceleren la recerca de models econòmics alternatius, capaços d'assentar unes bases més sòlides i que donin una millor resposta a les mancances de l'actual model capitalista. Apunta Eguiguren que es necessiten empreses que actuïn en el mercat global amb sentit d'ètica, responsabilitat, transparència, democràcia i participació; empreses liderades amb valors corporatius propis d'una cultura empresarial inclusiva en l'àmbit social, sostenible ambientalment i sàvia pel que fa a l'ús de la tecnologia al servei de la qualitat de vida.

En aquest entorn, des del grup d'investigació ARPA (Anàlisi de la Recepció de les Pantalles Audiovisuals), del Departament de Filologia i Comunicació de la Universitat de Girona, s'impulsa el Projecte Vusiness [de l'anglès *business*, negoci, amb v de valors], que promou les empreses obertes, democràtiques, sostenibles, inclusives i que fan un ús intel·ligent de la tecnologia amb l'objectiu de servir de model inspirador en els àmbits d'investigació, educació, emprenedoria i empresa.

Amb la finalitat d'establir les bases científiques per a la creació d'un model alternatiu basat en les empreses amb valors en el marc del Projecte Vusiness, s'ha dut a terme, de forma estructurada i metòdica, una exhaustiva revisió bibliogràfica des del 2015 per seleccionar les conclusions dels estudis més rellevants.

Per tal de contrastar i ampliar la informació recopilada en la fase de revisió bibliogràfica es duen a terme tres fòrums per reflexionar i debatre sobre les empreses inclusives, obertes i democràtiques. El primer porta per títol "Les persones, el centre de les empreses"; el segon, "Empreses intel·ligents, anticipant les necessitats de l'entorn, generant futur", i el tercer, "Empreses sostenibles, afrontant el canvi climàtic". A més, es realitzen diverses entrevistes en profunditat a professionals de diferents disciplines.

El model es presenta en diferents universitats americanes com Harvard University, MIT-Massachusetts Institute of

Technology, Emerson College, Boston College i Suffolk University de Boston.

A continuació li presentem el Valòmetre, Sistema europeu d'indicadors empresarials per a la gestió basada en valors, conceptualitzat per cinquanta persones professionals-experts (científics i científiques, professors i professores de diferents disciplines acadèmiques, empresaris i empresàries, emprenedors i emprenedores, tècnics i tècniques, i assessors i assessores de diferents sectors empresarials).



Des del grup d'investigació ARPA (Anàlisi de la Recepció de les Pantalles Audiovisuals), del Departament de Filologia i Comunicació de la Universitat de Girona, s'impulsa el Projecte Vusiness [de l'anglès *business*, negoci, amb v de valors], que promou les empreses obertes, democràtiques, sostenibles, inclusives i que fan un ús intel·ligent de la tecnologia amb l'objectiu de servir de model inspirador en els àmbits d'investigació, educació, emprenedoria i empresa.

El Valòmetre. Sistema europeu d'indicadors empresarials per a la gestió basada en valors



Què és el Sistema europeu d'indicadors empresarials per a la gestió basada en valors?

El Valòmetre és una eina de gestió i supervisió destinada a les persones autònomes i a les empreses micro, petites, mitjanes i grans. Està dissenyat com un procés impulsat per la direcció de les empreses per recopilar i analitzar dades per millorar la gestió.

L'objectiu del Valòmetre és contribuir a millorar la gestió basada en valors i, específicament, la gestió inclusiva, sostenible i amb un ús intel·ligent de la tecnologia a les empreses. L'eina està dissenyada amb la finalitat de facilitar el mesurament dels processos de gestió centrats en cinc àmbits, per supervisar-ne el rendiment i per mesurar-ne els progressos.

El model s'ha inspirat en el Sistema europeu d'indicadors turístics d'Europa (ETIS) i en el document “*Smart cities: la transformació digital de les ciutats*”, per part del Centre d'Innovació del Sector Públic de PwC i l'IE Business School.



Per què mesurar i fer un seguiment dels indicadors basats en valors?

Les persones autònomes i els empresaris i empresàries de micro, petites, mitjanes i grans empreses sovint prenen les decisions basant-se en un conjunt limitat de dades del balanç, o fins i tot per inèrcia o costum. Les dades financeres no representen l'empresa íntegrament. La recopilació i l'anàlisi d'informació sobre cinc eixos clau per al desenvolupament de les empreses ajudarà, sens dubte, a fer possible el creixement i la consolidació empresarial respectuosa amb les persones col·laboradores i amb el seu entorn.

Quines empreses ho poden aplicar?

Qualsevol empresa, independentment del nombre de treballadors i treballadores i del volum de facturació, ho pot aplicar. Es recomana que aquelles que tenen processos externalitzats (producció, transport, administració, etc.) sotmetin a l'avaluació les empreses que realitzen aquell producte o servei.

Així, per exemple, si una persona autònoma utilitza una companyia de transport per realitzar el servei de logística i de repartiment, pot analitzar l'eix de sostenibilitat sobre l'empresa d'enviaments. Cal tenir en compte que la clientela cada vegada pren més consciència dels efectes devastadors de la petjada de carboni, és a dir, de la quantitat d'emissions de gasos d'efecte d'hivernacle, i escull empreses que, amb els seus productes i serveis, contaminen menys.

Per què aplicar el Sistema europeu d'indicadors empresarials per a la gestió basada en valors?

El Valòmetre és una eina per a la gestió basada en valors i no un sistema de certificació. Està conceptualitzat per facilitar l'avaluació i la millora de la gestió empresarial sobre cinc eixos perquè les empreses siguin més obertes, inclusives, sostenibles i tecnològicament intel·ligents.

Amb l'ús del Sistema europeu d'indicadors empresarials per a la gestió basada en valors les empreses poden avaluar i analitzar el seu rendiment i desenvolupar plans estratègics i d'accions per millorar els seus valors a curt, a mitjà i a llarg termini.

L'eina orienta les empreses per a la seva aplicació. A través de la conscienciació i la participació del conjunt de l'empresa es pretén generar efectes positius a escala quantitativa i qualitativa, que es poden mesurar, recopilar i analitzar per promoure una millora contínua.

Es recomana a les empreses que constitueixin grups de treball multidisciplinaris per prioritzar eixos i accions concretes, estimular i promoure la participació de tot el personal de l'empresa, prendre les decisions estratègiques adequades per afavorir la consolidació de l'empresa, aplicar i mesurar l'impacte de les activitats, i promoure la millora contínua.

Quins són els principals avantatges d'aplicar el Valòmetre?

Amb l'aplicació del Sistema europeu d'indicadors empresarials per a la gestió basada en valors es pretén recopilar informació i dades d'àmbits cada vegada més estratègics i imprescindibles per a la presa de decisions, com són les persones, la sostenibilitat i la tecnologia.

Gràcies a l'eina es poden prioritzar projectes i accions d'intervenció així com establir comparatives de resultats.

Un altre aspecte que cal destacar és la millora del clima laboral com a conseqüència, d'una banda, de les millores en la gestió de personal, i d'una altra, per la seva participació més activa en la gestió del conjunt de l'empresa. En paral·lel, el sistema també promou la millora de la relació amb els *stakeholders*.

Un tercer aspecte clau és el referent als efectes positius que es generen sobre el medi ambient i el planeta.

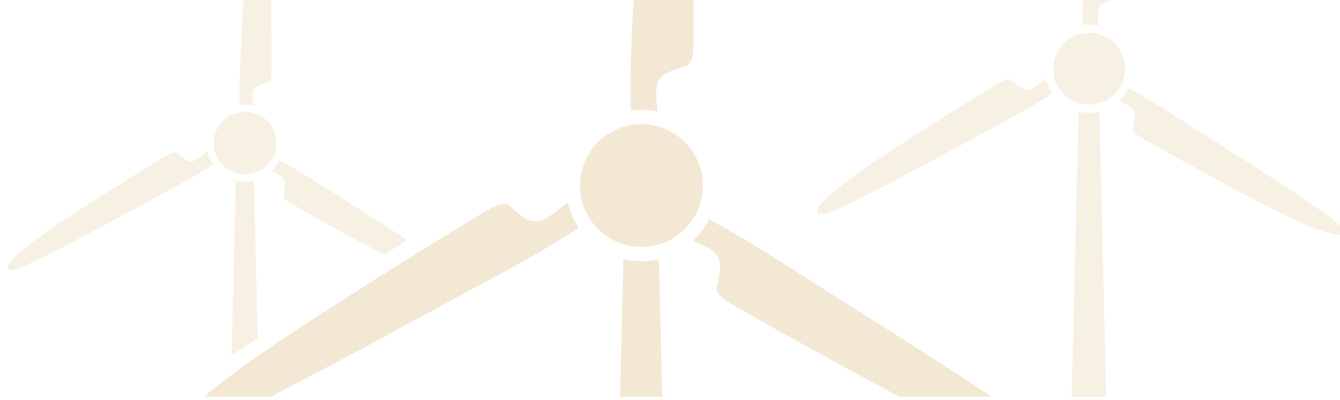
Finalment, i no per això menys important, millora l'experiència, la percepció i la fidelització de la clientela cap a l'empresa.

Com funciona el Sistema europeu d'indicadors empresarials per a la gestió basada en valors?

El Valòmetre és un procés de gestió integral basat en cinc eixos: identitat, administració i gestió, persones, sostenibilitat i tecnologia.

Conté cinquanta indicadors bàsics que es poden utilitzar individualment, per eixos o íntegrament, en funció de les necessitats de millora. Alhora, els indicadors es poden integrar en altres sistemes de gestió empresarial ja existents a les empreses. El fet de poder triar els criteris i els indicadors segons la necessitat particular de l'empresa dota l'eina i el sistema de la flexibilitat necessària per augmentar la viabilitat d'aplicació i el seu consegüent rendiment.

El Sistema europeu d'indicadors empresarials per a la gestió basada en valors està pensat per ser aplicat de forma col·lectiva, implicant-hi tot el personal. Per garantir l'èxit, la presa de decisions i el repartiment de responsabilitats ha de ser compartit entre els diferents integrants del grup motor.



Guia d'aplicació del Sistema europeu d'indicadors empresarials per a la gestió basada en valors en set etapes

Etapa 1: sensibilització

Una vegada la direcció de l'empresa ha decidit utilitzar el sistema Valòmetre, és important comunicar la decisió al conjunt de treballadors i treballadores per augmentar el compromís, per propiciar la participació activa i per fomentar el desenvolupament d'accions i d'activitats d'acord amb els objectius marcats en els diferents criteris.

Habitualment s'estructura un grup motor per aplicar i desenvolupar el Sistema europeu d'indicadors empresarials per a la gestió basada en valors.

La comunicació interna, a través d'eines com el correu electrònic o la missatgeria instantània, i l'ús de les xarxes socials, poden ser útils per garantir que la comunicació sigui ràpida i fluida entre totes les persones participants en el procés.

Si la iniciativa de la implantació del sistema per a la gestió basada en valors procedeix dels mateixos treballadors i treballadores, és recomanable que disposin del suport i del compromís explícit per part de la direcció.

Etapa 2: delimitació de l'àmbit d'intervenció

És necessari delimitar els eixos estratègics en què s'incidirà. Es recomana començar pel d'identitat i prosseguir amb el d'administració i gestió. Si aquests dos es consideren consolidats es pot continuar amb el de persones, sostenibilitat i tecnologia. Tot i que s'aconsella utilitzar els deu criteris amb els seus respectius indicadors, també és possible fer servir i adaptar els que més s'ajustin a les necessitats o als reptes de l'empresa. L'eina pot descarregar-se dins del web www.vusiness.com.

Etapa 3: constitució del grup motor

Per implantar el Sistema europeu d'indicadors empresarials per a la gestió basada en valors es recomana constituir un grup de treball d'entre vuit i dotze membres. Evidentment, si es tracta d'una micro empresa o d'una empresa petita el nombre serà menor. El grup motor ha d'estar integrat per representants dels diferents departaments de l'empresa (producció, logística, administració, qualitat, comercial, etc.) interessats en la implantació del sistema com a eina per fomentar el canvi en l'organització.

El grup ha d'estar liderat i coordinat directament pel mateix empresari o empresària, el director o directora general, o un membre a qui deleguin aquestes responsabilitats i funcions.

El seu rol actiu permetrà dissenyar una estratègia d'acció i engegar-la. A través d'una primera reunió s'identificaran conjuntament els reptes empresarials per assolir i s'escolliran els criteris i els indicadors més afins. A partir d'aquí, és aconsellable abordar com es podrien obtenir les dades basant-se en els coneixements i l'experiència de les persones integrants.

Etapa 4: funcions, responsabilitats i planificació

És important que en la reunió s'acordin les responsabilitats de cada membre del grup motor, quines dades, com s'obtindrà i en quin termini. La flexibilitat és clau en tot el procés.

El fet de destriar responsabilitats desencadena un sentiment d'adhesió i compromís. Per exemple, la persona que és responsable de la logística ha de recopilar dades en relació amb el consum de recursos finits basats en petroli, carbó i gas natural, i comparar-ho amb energies renovables com la solar, la tèrmica, la bioenergia o la hidràulica.



Etapa 5: recollida de dades

La recopilació de dades s'ha de produir inicialment de forma contínua i fluida, per poder avaluar amb rigor cada criteri així com per detectar possibles millores durant la fase posterior de seguiment.

És important, com ja s'ha esmentat anteriorment, que cada empresa esculli els criteris i els indicadors més rellevants segons les seves necessitats i els seus reptes.

Es recomana que encara que les dades siguin recollides i recopilades per diferents unitats, se centralitzin per obtenir una imatge global i, alhora, detallada del procés. En alguns criteris, la informació ha d'obtenir-se a través de la realització d'enquestes, entrevistes, grups de discussió o altres tipus d'eines.

En funció de l'empresa, dels tipus de dades per recaptar i del temps o dels costos per obtenir-los, es recomana que cada grup motor decideixi els cicles de temporalització adequats de recollida de dades per a cada criteri i indicador.

Etapa 6: resultats i anàlisi

A partir de les dades recollides i processades, es pot avançar procedint a la seva anàlisi i discussió amb l'objectiu d'establir un pla estratègic d'accions per millorar els criteris. El grup motor, convocat pel coordinador o coordinadora, es reunirà per analitzar els resultats i per prendre decisions. Conjuntament definiran objectius realistes i acordaran les millors activitats per aconseguir-los.

Amb els resultats analitzats, es recomana establir prioritats així com les mesures més adequades per aconseguir els objectius. Els àmbits que es considerin urgents hauran de ser afrontats amb immediatesa, decidint qui, com i quan engegar el pla d'acció.

Etapa 7: innovació i millora contínua

Per garantir l'èxit de la implantació del Sistema europeu d'indicadors empresarials per a la gestió basada en valors es requereix una estratègia ben definida, un grup motor amb capacitats per mantenir l'ús del sistema i la comunicació constant dels resultats.

Quan el sistema d'implantació de millores està en marxa, s'ha de pensar a dissenyar una estratègia de millora a llarg termini, d'entre tres i cinc anys. Cada unitat que compon el grup motor ha de responsabilitzar-se d'una àrea i ha de ser generador i sentir-se corresponsable dels canvis a l'empresa.

Els criteris i els indicadors han de ser revisats periòdicament. A més, l'ampliació gradual dels criteris per valorar per part de les empreses els permetrà tenir una visió més àmplia.

També és important aclarir si l'empresa disposa del finançament òptim per continuar implantant plans de millora.

Es recomana que les empreses puguin difondre els resultats així com els casos d'èxit a través de diferents mecanismes de comunicació. Aquesta informació pot ser útil per dissipar l'estratègia a llarg termini.

Finalment, s'espera que l'aplicació del Valòmetre incideixi a maximitzar el benefici social i econòmic de l'empresa.

Indicadors bàsics

Els indicadors bàsics recopilen la informació clau i fonamental de l'empresa per descriure, mesurar i comparar el seu rendiment i la seva millora en cinc eixos estratègics.

Els cinquanta indicadors bàsics incorporen els aspectes més destacats de la identitat, l'administració i la gestió, les persones, la sostenibilitat i la tecnologia.

El seu mesurament facilita les comparacions a curt, a mitjà i a llarg termini per poder valorar si el pla d'accions assoleix els resultats esperats. Es recomana recopilar dades i realitzar un seguiment periòdic dels indicadors escollits.

Quan la seva empresa hagi establert un sistema clar per al mesurament i el seguiment dels indicadors clau escollits, pot afegir indicadors addicionals per recollir informació complementària adaptada a les seves problemàtiques, necessitats o reptes específics.

És important especificar amb claredat la metodologia de recopilació de dades i els indicadors per garantir que qualsevol integrant de l'empresa pugui recollir dades amb fiabilitat i validesa per a la seva posterior avaluació i comparació.

La següent figura mostra el Valòmetre representat com un aerogenerador (generador d'energia elèctrica accionat per la força del vent).

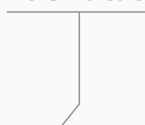
Persones



Administració i gestió



Identitat



Tecnologia



Sostenibilitat



VALÒMETRE

Sistema europeu d'indicadors empresarials per a la gestió basada en valors

**A continuació es descriu la relació de criteris,
referències i indicadors bàsics organitzats
en els cinc eixos estratègics esmentats.**

IDENTITAT

ADMINISTRACIÓ I GESTIÓ

PERSONES

SOSTENIBILITAT

TECNOLOGIA



SECCIÓ A: IDENTITAT

CRITERIS	NÚMERO DE REFERÈNCIA DE L'INDICADOR	INDICADORS BÀSICS
A1 EMPRENEDOR O EMPRENEDORA · Caracteritzat per ser creatiu, innovador, comunicatiu, sensible, honest, compromès, ètic, empàtic, proper, eficaç, eficient, amb capacitat de lideratge, transparent i responsable.	A1.1	Percentatge dels trets de personalitat i característiques de l'emprenedor o emprenedora que determinen si sap identificar una oportunitat i té les habilitats per engegar-la sobre el total.
A2 MISSIÓ · La nostra raó de ser fundacional; persegueix una finalitat noble i lloable (educació de qualitat, igualtat de gènere, treball decent i creixement econòmic, producció i consum responsables, etc.).	A2.1	Percentatge de coincidència entre la raó de ser fundacional de l'empresa en comparació amb algun dels disset reptes que defineixen els Objectius de Desenvolupament Sostenible (ODS) de les Nacions Unides.
A3 VISIÓ · L'empresa es planteja assolir reptes de futur compromesos amb el desenvolupament de les persones i amb la sostenibilitat del medi.	A3.1	Percentatge de coincidència entre els reptes de futur de l'empresa en comparació amb els reptes que defineixen els Objectius de Desenvolupament Sostenible (ODS) de les Nacions Unides.
A4 VALORS · Profundament compromesos amb valors ètics, socials, laborals i ambientals per afavorir al desenvolupament harmònic del planeta i de la humanitat.	A4.1	Percentatge de valors de l'empresa relacionats amb l'ètica, socials o ambientals en comparació amb els valors pragmàtics i econòmics (eficiència, qualitat, etc.).
A5 SOSTENIBLE · Contribueix a la riquesa i al bé comú i no consumeix, en cap àmbit, més recursos dels que genera.	A5.1	Percentatge de recursos energètics que genera l'empresa en comparació amb els que consumeix.
A6 PROGRÉS · Actua sobre el progrés tecnològic i el redirigeix perquè sigui d'ajuda per a un món millor.	A6.1	Percentatge d'ús de les noves tecnologies per promoure la qualitat de vida en comparació amb l'ús per eliminar llocs de treball.
A7 RESPONSABILITAT · Actua des de la plena llibertat responsable, especialment cap a la societat i el medi ambient.	A7.1	Percentatge de productes i/o serveis, produïts o prestats respectivament per l'empresa, que afavoreixen la societat i el medi ambient sobre el total.
A8 TRANSPARÈNCIA · Actua en el lliure mercat de forma absolutament transparent.	A8.1	Percentatge d'accés al procés de presa de decisions, a l'accés lliure de documents, instruccions, fórmules, contractes, etc., que afecta la ciutadania o el medi ambient sobre el total.
A9 ÈTICA · No es dedica, en cap cas, a activitats especulatives, ni tan sols de forma marginal, i estén el compromís ètic a la seva cadena de proveïdors i proveïdores, distribuïdors i distribuïdores, i clients i clientes.	A9.1	Nombre d'accions ètiques sobre proveïdors i proveïdores, distribuïdors i distribuïdores, i clients i clientes en comparació amb el total d'activitats.
A10 BENEFICI JUST · Aspira a obtenir un benefici suficient per continuar contribuint al desenvolupament social i per procurar la compensació lícita de qui arrisca el seu capital i qui dedica el seu treball.	A10.1	Beneficis que dedica a una compensació lícita pel seu treball i a la millora de l'empresa, als seus empleats o empleades, o al desenvolupament social en comparació amb la dedicació a despeses i malbarataments personals sobredimensionats o innecessaris en euros.

SECCIÓ B: ADMINISTRACIÓ I GESTIÓ

CRITERIS	NÚMERO DE REFERÈNCIA DE L'INDICADOR	INDICADORS BÀSICS
B1 LÍDER TRANSFORMADOR · Caracteritzat per ser emprenedor, innovador, inspirador, creatiu, sensible, honest, compromès, social, ètic, empàtic, proper, eficaç, eficient, transparent, discret, complidor i responsable.	B1.1	Percentatge dels trets de personalitat i característiques del perfil que determinen si és un líder autèntic, inspirador i està capacitat per motivar, cohesionar i afavorir el rendiment d'equip sobre el total.
B2 GOVERNANÇA · El consell d'administració, la junta general d'accionistes, l'equip directiu, el comitè d'auditoria, etc., s'organitzen i prenen decisions per aconseguir els seus objectius legítims, actuant sempre de forma absolutament transparent, ètica i responsable.	B2.1	Nombre de decisions estratègiques preses de forma ètica, responsable i comunicades en comparació amb les que s'oculten i no responen a finalitats nobles.
B3 ENTORN I OPORTUNITATS · L'empresa està atenta davant els reptes, les oportunitats i les necessitats que té la societat per esdevenir més sostenible, desenvolupada, justa i equitativa.	B3.1	Percentatge de productes i/o serveis desenvolupats davant reptes o necessitats de l'entorn per afavorir l'economia circular, un desenvolupament sostenible o una societat més justa i equitativa sobre el total.
B4 PROPOSTA DE VALOR · Producte o servei que satisfà les necessitats racionals de la societat.	B4.1	Nombre de productes i/o serveis necessaris per viure o que fan un món millor en comparació amb els que responen a un mer consumisme.
B5 COL-LABORADORS I COL-LABORADORES · Es relacionen amb proveïdors i proveïdores, distribuïdors i distribuïdores, i persones influents que tenen determinats principis ètics i valors, i els tracta de forma justa.	B5.1	Percentatge dels proveïdors i proveïdores, distribuïdors i distribuïdores, i persones influents que comercialitzen de forma honesta, transparent i justa sobre el total.
B6 CANALS · Es relaciona amb la seva clientela de forma honesta, fent ús d'un màrqueting que promou el consum responsable i no el consumisme, i estableix relacions positives i duradores.	B6.1	Percentatge de comunicacions (campanyes, reunions amb la clientela, presentacions de productes, rodes de premsa, fullets, etc.) basades en missatges i informació completa, contrastada, veraç, honesta i transparent sobre el total.
B7 PREUS · D'acord amb la proposta de valor, es fixen preus justos que permetin remunerar de forma adequada la producció o fabricació del producte, especialment els petits productors i productores locals i la remuneració justa dels treballadors i treballadores que presten un servei.	B7.1	Percentatge de les vendes que es destina als proveïdors i proveïdores sobre el total.
B8 FINANCES DE TRIPLE BALANÇ · Busca un equilibri entre el creixement i la distribució de la riquesa, incloent l'aspiració a obtenir un benefici econòmic suficient i lícit, i, alhora, atendre la dimensió social i mediambiental.	B8.1	Percentatge de l'ingrés en vendes destinat a la millora de la remuneració dels treballadors i treballadores en funció dels resultats de l'empresa o a projectes socials o de millora del medi ambient sobre el total.
B9 LEGALITAT · Les pràctiques legals, mercantils, fiscals i laborals són les més adequades per dur a terme les seves finalitats nobles i per contribuir com a empresa a la comunitat, però, en cap cas, per obtenir un millor tracte fiscal. Es vetlla per tenir un comportament adequat en l'economia real i no especulativa.	B9.1	Nombre de pràctiques legals, mercantils, fiscals i laborals adequades per dur a terme les seves finalitats nobles i per contribuir com a empresa a la comunitat en comparació amb les dissenyades exclusivament per obtenir un millor tracte fiscal.
B10 ROI (RETURN ON INVESTMENT) SOCIAL · Disposa d'un sistema d'indicadors d'avaluació per a la millora contínua, relacionats amb conceptes potenciadors de la responsabilitat i la transparència. Busca la millora constant a través d'innovar en l'ús de la sostenibilitat, l'ús intel·ligent de la tecnologia i els cohesionadors de l'entorn (ocupació, dinamització local, etc.).	B10.1	Retorn social sobre el capital invertit (ROIC - <i>Return on invested capital</i>) en euros.

SECCIÓ C: PERSONES

CRITERIS	NÚMERO DE REFERÈNCIA DE L'INDICADOR	INDICADORS BÀSICS
C1 MULTILIDERATGES · Fomentar els multilideratges: el lideratge distribuït entre els membres de l'equip i el lideratge per projectes per aprofitar les aptituds individuals. Els líders han d'actuar amb iniciativa i amb actitud proactiva, i han de ser un motor inspirador i estimulador perquè els grups compleixin el seu treball.	C1.1	Percentatge de treballadors i treballadores amb responsabilitats de lideratge dins de la plantilla sobre el total de personal.
C2 TREBALL EN EQUIP · Desenvolupar i cuidar els equips de treball a través de valors emocionals com l'alegria, la solidaritat i la llibertat per potenciar la creativitat, el talent i la innovació, actuant amb transparència, promovent la participació activa i creant mecanismes per fer-la real i possible. Incidir en el clima laboral i donar llibertat al talent de les persones.	C2.1	Percentatge habitual d'hores de treball en equip respecte del total d'hores treballades.
C3 DESENVOLUPAMENT PROFESSIONAL · Promoure el desenvolupament del personal a través del desenvolupament professional, oferint possibilitats de promoció.	C3.1	Percentatge anual de treballadors i treballadores promocionats respecte del total de la plantilla.
C4 CONeixEMENT I FORMACIó · Crear mecanismes per promoure el talent i fer aflorar el talent emergent. Potenciar el coneixement a través de la formació adaptada als nous temps i als reptes actuals. Fomentar la transmissió de coneixements entre treballadors i treballadores. Utilitzar mitjans convencionals així com plataformes digitals i de realitat virtual.	C4.1	Nombre d'hores —de mitjana— dedicades anualment a la formació dels treballadors i treballadores, a sessions per fer aflorar el seu talent i/o a reunions específiques perquè comparteixin el seu coneixement.
C5 IGUALTAT I INCLUSIó · Crear un entorn que respecti i fomenti la diversitat social i de gènere, la diversitat funcional, i la diversitat generacional i cultural de l'empresa.	C5.1	Nombre de mesures i projectes que fomenten la igualtat i la inclusió (contractació de persones amb discapacitat, participació en programes socials per afavorir la inserció de persones immigrades, adequació de les instal·lacions per millorar l'accessibilitat, etc.).
C6 CONCILIACIó I TELETREBALL · Fomentar la conciliació del treball amb la vida personal i la familiar a través de mesures com la flexibilitat horària i el teletreball.	C6.1	Nombre de mesures i projectes que fomenten la conciliació i el teletreball (flexibilitat horària, transport discrecional per als treballadors i treballadores, possibilitat de teletreball, etc.).
C7 REMUNERACIó JUSTA · Complir les liquidacions en temps i forma, i remunerar d'acord amb les funcions i les característiques del lloc de treball així com les tasques assignades amb concreció, valorant també la implicació, les capacitats i les habilitats del treballador o treballadora. També es té en compte la injecció moral.	C7.1	Nombre de beneficis, acords i avantatges addicionals del personal pel que fa a la remuneració en comparació amb el que determina l'Estatut dels treballadors o bé els convenis col·lectius vigents.
C8 XARXA · Fomentar i comunicar les actuacions de voluntariat corporatiu, desenvolupar les habilitats personals de les persones participants, impulsar donatius a institucions locals, facilitar visites d'escolars a la mateixa oficina, etc.	C8.1	Nombre de mesures i actuacions que es realitzen per fomentar els vincles amb les xarxes properes (visites guiades, possibilitat de pràctiques no laborals en empreses, facilitat per a contractes en pràctiques, col·laboració i patrocini d'entitats o associacions del barri, etc.).
C9 ATENCIó MÈDICA, SALUT I BENESTAR · Desplegar atenció mèdica i mesures d'higiene i seguretat en el treball. Oferir serveis d'assistència de salut complementaris a l'oferta pública: cardiovascular, diabetis, <i>wellness</i> , gestió de l'estrès, etc. Tot plegat amb la finalitat de millorar l'ambient de treball i fomentar hàbits de vida saludables, com per exemple la pràctica esportiva.	C9.1	Nombre de supòsits i situacions que reben una cobertura mèdica, de salut o de benestar addicional a l'obligatòria de mitjana per treballador o treballadora (evolució setmanal de l'embaràs, consultes mèdiques en línia, cobertura dental, cobertura d'ulleres i lentilles, etc.).
C10 COL-LABORACIó · Fomentar la comunicació i la col·laboració activa entre els diferents departaments utilitzant tots els mitjans disponibles i possibilitant la rotació del personal entre els departaments (reunions, pantalles de comunicació, taulells interactius tipus lpad, etc.).	C10.1	Nombre de canals, mitjans, eines i espais disponibles per fomentar la comunicació i la col·laboració (intranet, missatgeria instantània, correu electrònic, telèfon, espai de cafeteria, etc.).

SECCIÓ D: SOSTENIBILITAT

CRITERIS	NÚMERO DE REFERÈNCIA DE L'INDICADOR	INDICADORS BÀSICS
D1 IMPACTE MEDIAMBIENTAL · Consums d'aigua, gas i electricitat així com la detecció i la reacció davant emergències mediambientals: fuites, incendis, etc.	D1.1	Percentatge de superfície de l'empresa controlat a través de xarxes de sensors ambientals intel·ligents i <i>smart metering</i> , que permeti la detecció automàtica de consums així com de partícules contaminants i emissions provocades per emergències ambientals sobre el total.
D2 CONSUM I PRODUCCIÓ D'ENERGIES RENOVABLES · Autogeneració d'energia a partir de fonts renovables: plaques fotovoltaïques, geotèrmia de baixa entalpia, mini eòlica, etc.	D2.1	Percentatge d'ús d'energies renovables (solar, tèrmica, fotovoltaïca, bioenergia, hidràulica, de les marees, eòlica, de l'onatge i geotèrmica) en comparació amb les finites (basades en petroli, carbó i gas natural).
D3 EFICIÈNCIA ENERGÈTICA · Permet augmentar eficiències i millorar la gestió d'energia. Són solucions que promouen la gestió del consum energètic en climatització, ascensors i il·luminació.	D3.1	Percentatge d'ús d'equips energèticament eficients: d'emmagatzematge de l'energia i d'alta eficiència energètica i baix consum, com la cogeneració i les calderes d'alta eficiència, la domòtica i l'ús de tecnologia LED, i els sistemes d'il·luminació intel·ligents, sota demanda o mitjançant sensors de presència en comparació amb els mitjans convencionals no eficients.
D4 BIOCLIMÀTICA I EDIFICACIÓ SOSTENIBLE · Edificis de consum zero. Permeten reduir consums sense necessitat d'instal·lacions energètiques més sostenibles.	D4.1	Percentatge d'ús de tancaments, finestres, envoltants dels edificis, etc., en comparació amb els sistemes que no afavoreixen la reducció del consum.
D5 INTEGRACIÓ AL PAISATGE I A L'ENTORN · Per afavorir la integració i la naturalitat paisatgística i ambiental, i per promoure la reducció tèrmica a través de sistemes de producció que fomentin la biodiversitat i el respecte per la natura a les zones agrícoles.	D5.1	Nombre de mesures per afavorir la integració al paisatge i a l'entorn (vegetar sostres, parets i l'entorn de l'empresa per crear ombres, humitat i evitar illes de calor; integrar cromàticament les instal·lacions a l'entorn, i promoure el consum de productes de proximitat i que siguin respectuosos amb el medi ambient).
D6 GESTIÓ DEL CICLE INTEGRAL DE L'AIGUA I REG INTEL·LIGENT	D6.1	Nombre de recursos tecnològics utilitzats per afavorir que l'aigua sigui un cicle tancat (captació, transport, distribució, clavegueram, lectura de consums, facturació, cobrament, depuració i potabilització, etc.; jardineria de baix consum i integrada a l'entorn i automatització del reg i xarxes de sensors per mesurar quan i quant és necessari regar).
D7 ECONOMIA CIRCULAR, REDUCCIÓ, REUTILITZACIÓ, RECICLATGE I GESTIÓ INTEL·LIGENT DELS RESIDUS · L'economia circular implica la generació de productes que mantenen la seva utilitat i valor. Es caracteritza per ser una producció reparadora i regenerativa.	D7.1	Nombre de mesures adoptades per afavorir el disseny eco de productes i la reducció, la reutilització, el reciclatge i la gestió intel·ligent dels residus més enllà del compliment de la legalitat (compra de materials tenint en compte el cicle de vida, disseny eco de nous productes, ús de productes reciclats i productes amb certificació ambiental o etiquetes eco, informació en temps real sobre l'ompliment dels contenidors, etc.).
D8 TRANSPORT PÚBLIC I RETRIBUCIÓ PER A DESPLAÇAMENTS · Afavoreix l'ús del transport públic per accedir al treball.	D8.1	Nombre de mesures per incentivar l'ús del transport públic per accedir al treball (contribució als costos de mobilitat poligonal, adaptació d'horaris al transport, informació en temps real d'incidències i freqüències, assessorament digital a les persones que viatgen, etc.).
D9 MOBILITAT NO MOTORITZADA · Vehicles de propulsió ecològica i foment de l'ús de la bicicleta convencional o a peu.	D9.1	Nombre de mesures adoptades per afavorir l'ús de la mobilitat no motoritzada (bicicleta, motocicleta i cotxe elèctrics, bicicleta convencional o a peu). Per exemple: aparcament, accés als edificis de les bicicletes plegables, disposició d'un espai de muda i dutxa, desplegament de xarxes de punts de càrrega, sistemes d'informació sobre ubicació i disponibilitat, sistemes de lloguer, etc.
D10 GESTIÓ DEL TRÀNSIT · Per disminuir la petjada de carboni a través de la gestió de les mateixes flotes i d'afavorir l'ús compartit de vehicle.	D10.1	Nombre de mesures que es proposen per afavorir la fluïdesa del trànsit (càlcul de la petjada de carboni de la flota, plans de mobilitat, afavoriment de la plena ocupació dels vehicles dels treballadors i treballadores, optimització del transport de mercaderies, predicció del trànsit, semàfors intel·ligents, informació als conductors i conductores en temps real, avisos sobre incidències, etc.).

SECCIÓ E: TECNOLOGIA

CRITERIS	NÚMERO DE REFERÈNCIA DE L'INDICADOR	INDICADORS BÀSICS
E1 TRANSFORMACIÓ DIGITAL · Establir mecanismes per facilitar la incorporació de la tecnologia a tots els processos. Facilitar el canvi de marc mental que implica la digitalització incloent les tendències i els avanços de camps com la nanotecnologia, la genètica, el moviment maker, l'economia col·laborativa o l'economia circular. Tot això abordant les qüestions ètiques a favor de les persones i la qualitat de vida davant la robotització.	E1.1	Nombre d'hores anuals de mitjana per treballador o treballadora que l'empresa dedica a sensibilitzar, formar i orientar cap a la transformació digital, i a abordar les qüestions ètiques davant la robotització.
E2 INTERNET DE LES COSES (IoT) · Internet de les coses aplicat a diferents sectors d'activitat. Permet connectar objectes entre si i a Internet.	E2.1	Percentatge dels productes de l'empresa que disposen de sensors i computació integrada que els permet enviar i rebre informació en temps real sobre el total.
E3 OPEN DATA · Posada a disposició dels treballadors i treballadores, proveïdors i proveïdores, i clients i clientes la informació en formats estàndard, oberts i interoperables per fomentar la transparència.	E3.1	Percentatge de dades de l'empresa que estan en formats oberts i accessibles per a treballadors i treballadores, proveïdors i proveïdores, i clients i clientes sobre el total.
E4 SISTEMES CIBERFÍSICS · Sistemes connectats entre si i, al seu torn, amb el món virtual de les xarxes digitals. Són xarxes de comunicacions avançades que conformen plataformes integrades per a la gestió. Integren capacitats de monitoratge, gestió i explotació, facilitant el seguiment i/o control.	E4.1	Percentatge de les dades de l'empresa monitoritzades i controlades a través d'alguna plataforma amb sistema ciberfísic (infraestructura tècnica connectada amb estàndards oberts, sistemes connectats a través d'IoT, plataformes definides per programari i plataformes de serveis intel·ligents) sobre el total.
E5 5G, CONNECTIVITAT, INFORMÀTICA EN NÚVOL (CLOUD COMPUTING) I COMERÇ DIGITAL · 5G és la infraestructura de telecomunicacions que habilita nous serveis de base digital (vehicle autònom, teleassistència mèdica remota, operacions quirúrgiques remotes, etc.). Informàtica en núvol (<i>cloud computing</i>) implica informació disponible en qualsevol lloc i en qualsevol moment per a treballadors i treballadores, clients i clientes, i proveïdors i proveïdores gràcies a la tecnologia flexible que permet treballar situant tots els recursos al núvol. Possibilitat que ofereix comprar i vendre per Internet.	E5.1	Percentatge d'informació de l'empresa habilitat en 5G, situat al núvol i accessible des de qualsevol lloc i en qualsevol moment gràcies a tecnologies de comunicació que permeten treballar, comprar i vendre sobre el total.
E6 TECNOLOGIA COL-LABORATIVA · Habilita models col·laboratius que permeten el naixement de nous negocis C2B (com per exemple Waze), la compartició de capacitat i actius (Uber, Cabify, Airbnb, Blablacar, etc.) o la integració de clients i clientes i socis i sòcies en el procés de negoci, a més de noves formes de col·laboració en els negocis com el proveïment participatiu (<i>crowdsourcing</i>) de dades o el finançament col·lectiu (<i>crowdfunding</i>). Aparició de la cadena de blocs (<i>blockchain</i>) i les possibilitats que suscita. Inclou, a més, la robòtica col·laborativa, que és una nova generació de robots més versàtils i fàcils de programar i manejar.	E6.1	Recursos econòmics anuals de l'empresa destinats a la tecnologia col·laborativa en euros.
E7 FABRICACIÓ ADDITIVA · Impressió 3D. Inclou aquells dispositius que produeixen un objecte 3D a partir d'una entrada digital, sense necessitat de motlles ni utilitatges de cap tipus, a través de la deposició de capes de material i la seva consolidació.	E7.1	Percentatge d'objectes produïts que es fabriquen a través de la impressió 3D sobre el total.
E8 INTEL·LIGÈNCIA ARTIFICIAL · Àrea multidisciplinària que intenta dotar les màquines de processos cognitius típics del raonament humà com deduir, raonar i resoldre problemes complexos. Inclou la branca d'aprenentatge automàtic (<i>machine learning</i>), que pretén desenvolupar tècniques que permetin a les màquines aprendre automàticament.	E8.1	Recursos econòmics anuals de l'empresa destinats a la intel·ligència artificial en euros.
E9 TECNOLOGIA IMMERSIVA · La realitat augmentada (RA) és la tecnologia que ofereix informació digital superposada a la visió real. La realitat virtual o simulació (RV) s'utilitza en fàbrica per recrear un mirall del món físic en un model virtual. La realitat mixta (RM) és la combinació de la realitat virtual i la realitat augmentada.	E9.1	Recursos econòmics anuals de l'empresa destinats a la tecnologia immersiva en euros.
E10 CIBERSEGURETAT I CIBERINTEL·LIGÈNCIA · Sistemes de protecció i anticipació davant d'atacs de seguretat a Internet de serveis essencials per a les empreses o que puguin generar perjudicis als usuaris i usuàries i als clients i clientes. Seguretat física de les dades davant del programari de segrest (<i>ransomware</i>) i/o fallades tecnològiques. Protecció de dades de caràcter personal, donant compliment a la normativa vigent, actualment el Reglament general de protecció de dades (RGPD).	E10.1	Nombre de mesures adoptades per protegir les dades i els sistemes crítics davant els ciberatacs (sistemes de protecció de programari, còpies de seguretat, protocols de protecció de dades de caràcter personal, etc.).

Agraiments

La Universitat de Girona i especialment els responsables del Projecte Vusiness del grup de recerca ARPA (Anàlisi de la Recepció de les Pantalles Audiovisuales) del Departament de Filologia i Comunicació agraeixen la col·laboració i el suport en la realització d'aquest estudi a les cinquanta persones professionals-experts que han col·laborat aportant els seus coneixements i les seves opinions per construir el Valòmetre:

IDENTITAT

- 01 Marcos Eguiguren, economista i director executiu de la Global Alliance for Banking on Values.
- 02 Victor Küppers, conferenciant motivacional i professor de Màrqueting i Direcció Comercial a la Universitat Internacional de Catalunya.
- 03 Francesc Ventura Ribal, director del Departament d'Interculturalitat i Cohesió Social de la Fundació Bancària "la Caixa".
- 04 Ernest Benach, consultor, periodista i professor de la Universitat Oberta de Catalunya.
- 05 Sergi Mayà, emprenedor i CEO de la Nevateria Alimentària, SL.
- 06 Xavier Carpintero, director de DO Sinergia, Strategic Problem Solver & Senior Coach (STC Change Strategies) i Trainer en PNL (ITA NLP).
- 07 Gildo Seisedos, cofundador Blockchain 4 Cities i professor de l'IE Business School.
- 08 Javier Blázquez, coordinador tècnic de projectes internacionals de la Fundació ONCE.
- 09 Gemma Descamps, tècnica de l'Observatori del Turisme del Baix Empordà i col·laboradora de la Facultat de Turisme de la Universitat de Girona.
- 10 Maribel Domínguez, responsable d'Emprenedoria de l'INS Montilivi de Girona i professora especialitzada en AICLE.

ADMINISTRACIÓ I GESTIÓ

- 01 Oriol Amat, catedràtic d'Economia Financera i Comptabilitat de la Universitat Pompeu Fabra.
- 02 Ramon Tremosa, professor titular del Departament de Teoria Econòmica de la Universitat de Barcelona i investigador del Centre d'Anàlisi Econòmica i de les Polítiques Socials (CAEPS).
- 03 Andreu Mas-Colell, professor d'Economia i Empresa a la Universitat Pompeu Fabra. Va ser catedràtic d'Economia a la Universitat de Harvard, professor d'Economia i Matemàtiques a la Universitat de Califòrnia (Berkeley) i president de la Barcelona Graduate School of Economics (2006-10).
- 04 Jordi Úbeda, gestor de màrqueting d'Abacus Cooperativa.
- 05 Aniol Barnadas Sánchez, analista estratègic de Cobega.
- 06 Xavier Costa, director financer jubilat de Francisco Pagès Valentí, SA.
- 07 Marc Teixidor, enginyer, consultor i emprenedor en sèrie.
- 08 Ferran Roderó, delegat d'ACCIÓ, Agència per a la Competitivitat de l'Empresa de la Generalitat de Catalunya a Girona.
- 09 Marc Genés, economista i tècnic de Turisme del Consell Comarcal del Baix Empordà.
- 10 Katarzyna Watras, llicenciada en Dret i assessora d'empreses en els àmbits d'internacionalització i exportació.

PERSONES

- 01 Sandra Jiménez, responsable de Recursos Humans d'International Recruitment de Mango.
- 02 Cristina Toll, responsable de Medi ambient, Salut i Seguretat de Danone.
- 03 Jaume Vilella, director tècnic del FC Barcelona de bàsquet de cadira de rodes i director de l'Escola AFA.
- 04 Agustín Matfà, gerent de Down Espanya.
- 05 Esther Carreras, relacions externes de la cooperativa La Fageda.
- 06 Gema Guzmán, responsable de Projectes de Desenvolupament Professional de la Fundació Princesa de Girona.
- 07 Mohamed El Amrani, coordinador de projectes a SUARA Cooperativa i Premi Fundació Princesa Social 2014.
- 08 Núria Valls, tècnica d'Ocupació del Consell Comarcal del Baix Empordà.
- 09 Imma Pérez, directora de Nottopic-RSC, comunicació i xarxes.
- 10 Isabel Godoy, responsable de Turisme Inclusiu del Patronat de Turisme Costa Brava - Pirineu de Girona.

SOSTENIBILITAT

- 01 Pere Macias, president de la Fundació Cercle d'Infraestructures i professor de la Universitat Politècnica de Catalunya.
- 02 Josep Serra, viticultor i emprenedor del Cellar de la Vinyeta.
- 03 Eduard Adrobau, tècnic de Medi Ambient.
- 04 Narcís Vicens, biòleg i responsable tècnic de Medi Ambient de la Diputació de Girona.
- 05 Joan Naspleda, doctor en Ciències Biològiques.
- 06 Ainhoa Azorín i Solé, sòcia fundadora de Toc de Gestió SCP i Engega't. Sòcia freelance d'organitzacions en sostenibilitat i millora contínua.
- 07 Albert Masclans, llicenciat en Ciències Ambientals, especialitzat en el seguiment de l'impacte ambiental en obres i en control dels vectors ambientals de la indústria química.
- 08 Marc Casadellà, emprenedor i director Par3 Pitch & Putt Gualta.
- 09 Sara Pizzinato, responsable de les campanyes d'energia i canvi climàtic de Greenpeace Espanya.
- 10 Joan Barfull, responsable tècnic de la delegació de PIMEC Girona i de Sostenibilitat.

TECNOLOGIA

- 01 Carlos Grau, director del Mobile World Congress.
- 02 Carlos Cuffi, director del Programa 5G del Mobile World Capital.
- 03 Dídac Lee, emprenedor en sèrie, fundador de més de quinze empreses i conseller delegat d'Inspirit, grup d'empreses tecnològiques i innovadores.
- 04 Xavier López, director tècnic de Sistemes a Hartmann.
- 05 Mariona Serra, cofundadora i CEO a GoodGut.
- 06 Joan Duran, tècnic de l'Àrea d'Estratègia de la Secretaria de Telecomunicacions, Ciberseguretat i Societat Digital de la Generalitat de Catalunya.
- 07 Antoni Sudrià, professor emèrit de la Universitat Politècnica de Catalunya i exdirector de CITCEA.
- 08 Joan Battle y Grabulosa, exrector de la Universitat de Girona entre 2002 i 2005, i catedràtic del Departament d'Arquitectura i Tecnologia de Computadors.
- 09 Meius Ferrés, responsable de l'Àrea de Comunicació i Relacions Institucionals de la Universitat de Girona.
- 10 Xavier Bach-Esteve, coordinador del Departament d'Informàtica del Consell Comarcal del Baix Empordà i consultor de la Universitat Oberta de Catalunya.



VUSINESS

BUSINESS & VALUES



PLA D'EMPRESA BASADA AMB VALORS

VUSINESS PLAN

De l'anglès Busines «Negocis» amb «V» de Valors



Universitat de Girona
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PLA D'EMPRESA BASADA EN VALORS

VUSINESS PLAN

De l'anglès Busines «Negocis» amb «V» de Valors

Nom de l'empresa

Nom de la persona emprenedora



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Per a més informació sobre el Projecte Vusiness consulta'n el web
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 Anàlisi de la Recepció de les Pantalles Audiovisuals
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Presentació

PLA D'EMPRESA BASADA EN VALORS

VUSINESS PLAN. De l'anglès *Busines «Negocis»* amb «V» de *Valors*

Les empreses són organismes vius que requereixen estructures dinàmiques, amb capacitat d'adaptació al canvi i amb vocació de treball en equip, com fan les abelles de forma natural des del Cretaci, fa cent milions d'anys.

El rusc té les funcions de refugi, fabricació i emmagatzematge de mel i pol·len, i també de bressol per a les cries de les abelles. Disposa d'unes propietats físiques i químiques particulars que li permeten funcionar com una xarxa de comunicació i memòria autònoma, tot enviant i rebent informació d'altres abelles que formen part d'aquest superorganisme.

La forma hexagonal del rusc facilita que les vibracions produïdes per part de les abelles que "dansen" al damunt de les cel·les buides es transmetin de manera òptima per tot el rusc, augmentant les visites per aportar una major font d'aliment.

En l'entorn actual, afectat per les crisis econòmiques, la globalització, la deslocalització, el treball infantil i precari, i el canvi climàtic, **ES REQUEREIXEN EMPRESES AMB VALORS: obertes, democràtiques, inclusives, sostenibles i que facin un ús intel·ligent de la tecnologia.**

El **PLA D'EMPRESA BASADA EN VALORS** és un document que t'ajudarà a definir el teu projecte empresarial, tenint en compte les teves competències i els teus valors, així com els recursos necessaris i les accions per posar-lo en marxa.

Et serà útil per ordenar les idees, per tenir una visió més general i estratègica, i per poder preveure les dificultats i les oportunitats que aniran apareixent a cada fase del procés de creació, tot reduint significativament el risc de fracàs.

Ahora, serà una eina que et permetrà explicar i defensar el teu projecte per cercar finançament i establir relacions i aliances.





VUSINESS

BUSINESS & VALUES

