

HOW MIGHT THE COLLABORATIVE ECONOMY INFLUENCE SUSTAINABILITY OF TOURISM IN BARCELONA?

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Master in Technology for Sustainable Development

Master of Science Thesis

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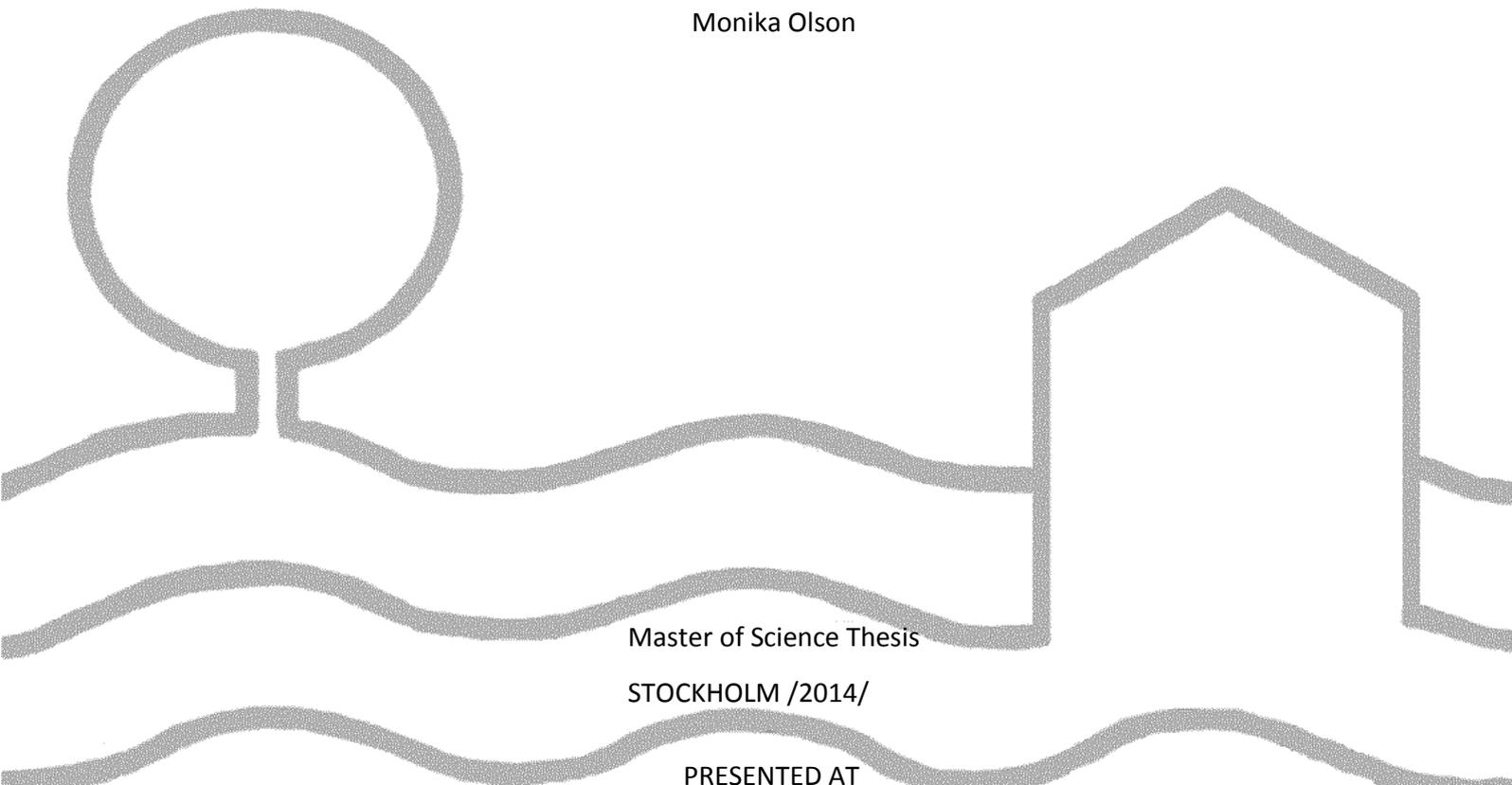
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EXECUTIVE SUMMARY

The aim of this project is to analyze how the Collaborative Economy (CE) might influence sustainability of tourism in Barcelona.

Since The Olympic Games in 1992, Barcelona has become a leader in many aspects, but especially in the tourism sector. Nowadays the city is a highly popular tourist destination and the tourism industry has made a significant contribution to the economics of Barcelona with the creation of income, taxes, hard currency and jobs (Sirakaya, Jamal, & Choi, 2001). Despite the high success achieved by “model Barcelona” it is important to take into account some challenges faced by the city in terms of tourism, creating a need for alternative and more environmentally and host-friendly practices in development, planning, and policies (Saarinen, J. 2006).

One example of this is CE, which, since 2011, has started to have an impact on the Catalan capital, and all indicators show that the peer to peer (P2P) sites are one of the technology trends that are already radically transforming tourism (Sunyer, 2014). Collaborative consumption was named one of TIME Magazine's 10 ideas that will change the world.

All we do, create and produce has an impact on the environment (tourism generates an impact as well as the CE) and measuring the impact of our actions helps us to know where to improve and develop better strategies. The questions now are: what is the real impact that these new systems have on the city? Do they contribute to the path of sustainable tourism?

To answer these questions and form a point of departure for this study, I interviewed different stakeholders: twelve experts from CE and tourism in Barcelona and 49 students from UAB University under the Tourism Grade. Interviews made to experts were based on face to face meetings carried out in two parts; firstly semi-structured questions and secondly a survey based on an evaluation of a previously selected tourism system indicator. The survey consisted of the evaluation of the European Tourism Indicators System – ETIS for Sustainable Destinations, where the interviewees had to evaluate the influence of CE through the validation of the 27 core indicators (deciding whether the indicator would increase, decrease or remain equal with the influence of the CE). The interviews conducted with the forty-nine students were made online and based on the survey evaluation of ETIS (like with the experts).

The results show that CE could generate a better distribution of income around the city and could support the process of decentralization of tourism activity in the city center. Furthermore, it could strengthen social relations between locals and visitors, and thereby improve the negative perception that mass tourism generates in some specific points like Ciutat Vella. According to the stakeholders interviewed, the influence of CE in Barcelona could ensure a higher rate of satisfaction among tourists and increase the number of

strategic plans of the city in terms of sustainability. On the other hand, it is noteworthy to consider the negative effects that CE could generate; the more distribution the city has, the more social friction is generated and so more specific managing plans are needed. Furthermore, interviewees considered that the occupancy rate in commercial accommodation and direct tourism employment would decrease, which means less income from the “traditional” tourist enterprises.

The results also illustrate a lack of understanding of the CE and sustainable tourism concepts. Although experts were familiar to both concepts, researchers and tourism managers had a better understanding of sustainability in tourism while promoters of the CE were the stakeholders with more knowledge about the Collaborative movement. There is still a need of more comprehension of both terms.

There are three elements to consider for discussions which concern respondents with such a variety of opinions depending on their background; 1) the understanding of the two concepts (CE and sustainable tourism) of the case from the all stakeholders involved. If there is a lack of comprehension of both it is just impossible to apply them; 2) the regulation process of the CE which nowadays has split the opinion of the population and 3) the carrying capacity that the city can support. They are the key elements to discuss in the collaborative economy wave.

Nonetheless, one must consider what CE means, what its main principles are and why it exists and connect all these with the necessities related with tourism, which presents a considerable challenge in certain parts of the world. Only when an appropriate comprehension of the “core” and “essence” of both concepts is achieved will we be able to connect them, understand their strengths and weaknesses and aim for genuine sustainable development.

ACKNOWLEDGEMENTS

Thank you:

To all the interviewees; you have gifted me with time of your life, I loved listen to you and each interview was a great learning experience. Thank you all!

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To all and each of you, turn up the volume, because “Don’t worry- Playing for change” is on the radio now here for us to dance and sing together!

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ACRONYMS

CE- Collaborative Economy

ETIS - European Tourism Indicators System

EC- European Commission

ETIS- European Tourism Indicators System

ICT- Information and Communication Technologies

P2P- Peer to Peer

SDS - Sustainable Development Strategy

ST- Sustainable Tourism

STD- Sustainable Tourism in Destinations

TSG- Tourism Sustainability Group

UAB- Universitat Autònoma de Barcelona

UNWTO - United Nations World Tourism Organization

UNEP- United Nations Environment Program

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1 INTRODUCTION

1.1 MOTIVATION

My main motivation to develop this project is related with a personal venture idea focused in the P2P tourism industry in Barcelona. From my point of view, new “start ups” need to focus more on academic research under its specific sector to complement and gain a broader perspective of the area (understand the current situation, gain awareness of the present trends and last innovations). It will help to construct ideas that create positive value for the system, with the consciousness of internalities and externalities that new business can generate.

Also I wanted to contribute in the analysis of the recent increase of “start ups” under the umbrella of the new trend of the collaborative economy (CE). One of the main challenges of the CE is to analyze and measure its real impact in the economic, social and environmental sectors.

1.2 INTRODUCTION

This project is about the correlation between two topics; Sustainable Tourism and Collaborative Economy (CE) inside a box called Barcelona. Why I have chosen these two topics?

On one hand, the impacts of tourism have received increasing attention in discourses and studies over the past decades. Because of its ability to create income, taxes, hard currency and jobs, tourism has made a significant contribution to the economics of many communities around the world (Sirakaya, Jamal, & Choi, 2001), in this case in Barcelona. On the other hand, its impacts have led to a range of evident and potential problems, creating a need for alternative and more environment- and host friendly practices in development, planning, and policies (Saarinen, J. 2006).

Since The Olympic Games celebrated in 1992, Barcelona became a leader in many aspects, but especially in the tourism sector. Nowadays it is a highly popular tourist destination with about 8 million visitors in 2013. Despite the high success achieved by “model Barcelona”, it is important to take into account some challenges faced by the city in terms of tourism.

Spanish tourism had grown oriented to the search of short-term profits, while considerations of the environmental and social costs of tourism development were subordinated to economic efficiency. What does Barcelona tourism look like nowadays? And more in depth how does Barcelona’s sustainable tourism look like in 2014? These are two of the main questions when defining my project.

On the other hand, since approximately 2011, the CE started to create impact into the Catalan capital, and all indicators show that the P2P sites are one of the technology trends

that are already radically transforming the tourism (Sunyer, 2014). Collaborative consumption was named one of TIME Magazine's 10 ideas that will change the world.

With the social media connectivity which has enhanced access to information and has allowed consumers to create content and amplify their voices, across the globe, it seems that the limits and barriers of the tourism market have just been extended. This is the stand point where the new concept of CE or Sharing Economy stands from. The sharing concept has created markets out of things that wouldn't have been considered monetizable assets before.

With the crisis of 2007–2010 that affected our economy, the financial world, our values and a bunch of factors across it have prompted consumers to reconnect through peer-to-peer (P2P) marketplaces that turn underutilized assets and resources into new jobs, income streams and community networks.

During the year 2013 and 2014, many platforms and projects grew up under the umbrella of CE in the touristic sector. Their main slogans are: creating more value, connecting people, building trust between humans or enhancing more environmental actions. But there are also critiques related to these; for example it has alerted the tourism sector, which analyzes the phenomenon while cautioning its disadvantages and lack of regulation, since they consider CE as unfair competency and the main force that makes them generate less income.

The question now is which is the real impact that these new systems generate to the city? Do they contribute into the path of sustainable tourism? Everything new needs a process of adaptation and sometimes direct and indirect consequences are difficult to measure in such a small scale of time.

All we do or create produce an impact on the environment (tourism generate an impact as well as the CE) and measuring the impact of our actions help us to know where to improve and to develop better strategies. That's why, rather than "*let it be*", we must be willing to evaluate and opt for transparency. Consciousness and awareness of the impacts generated by the touristic sector and CE are the main ingredients to cook every day to fulfill such expectations.

Nonetheless, we must regard what does CE mean and its main principles and reasons why it exists and connect it with the main trends related with tourism which have such a big challenge to accomplish in certain destinations. Just when we achieve an appropriate comprehension the "core" or "essence" of both concepts we can connect them and understand their strengths and weaknesses to walk into a sustainable development path.

The project is organized as follows:

- Introduction: explanation of the main goal and objectives
- Methodology
- Background
- Description of the case
- Results
- Conclusions and Discussions

1.3 RESEARCH QUESTION, OBJECTIVES AND HYPOTHESIS

RESEARCH QUESTION: How the collaborative economy might influence sustainability of tourism in Barcelona?

AIM: The aim of this project is to analyze how the collaborative economy can influence sustainability of tourism in Barcelona.

WHAT	WHY	HOW
Analysis of the impact of the collaborative economy into the sustainability of tourism	In order to understand how collaborative economy can influence the sustainability of the touristic model in Barcelona	By using qualitative research: Interviews Surveys

Table 1- Objectives

MAIN OBJECTIVES OF THE THESIS ARE:

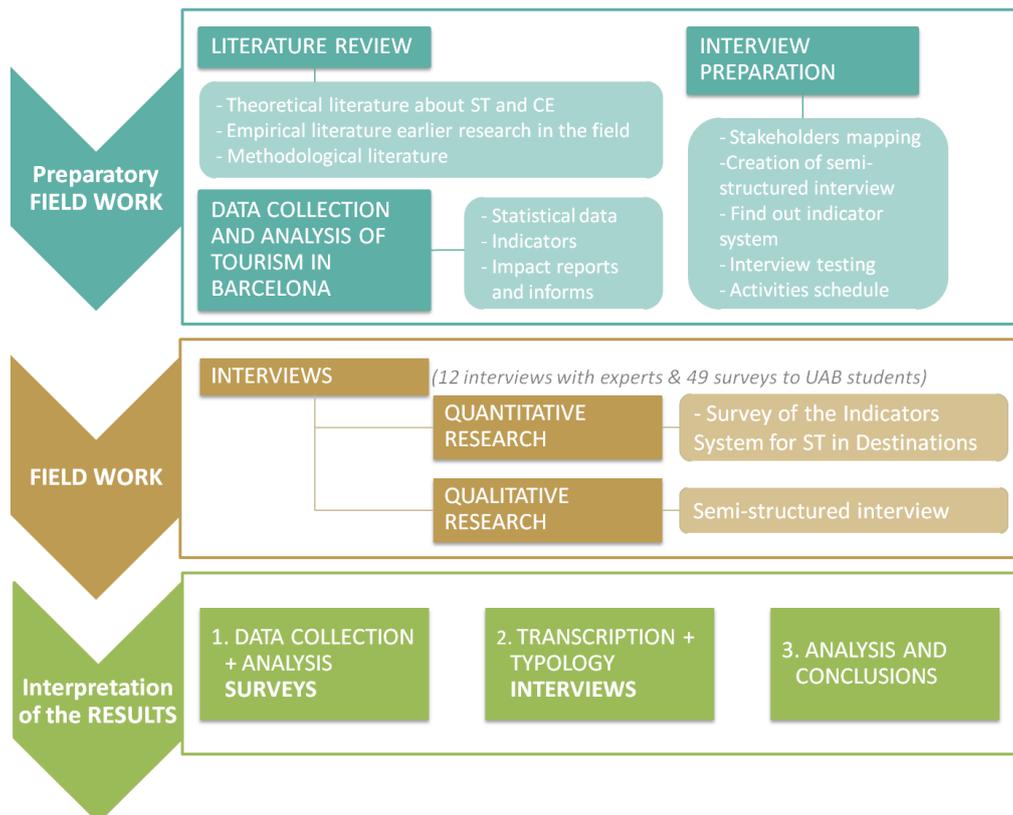
1. Explore the familiarity of CE concept of the stakeholders selected
2. Investigate the stakeholders understanding of Tourism in Barcelona
3. Search how the stakeholders recognize the concept of sustainability in tourism and describe the connection between CE and its influence on sustainability
4. Understand from the stakeholder's point of view how the CE influence the indicator system of sustainable tourism previously selected

DIRECTIONAL HYPOTHESIS: Make a prediction about the expected outcome of the research, basing this prediction on prior literature and studies on the topic that suggest a potential outcome as following:

1. CE can improve the sustainability of tourism in Barcelona
2. The main economic impact of CE is a better distribution of the income generated
3. The social impact related to C.E is highly associated with its capacity to dilute mass tourism
4. One of the big challenges of CE is to measure its contribution to mitigate the environmental impact

2 METHODOLOGY

The research design is divided in three different areas Graph 1; a preliminary phase of the field work, the study field and the interpretation of results and discussion, at every stage of the research it was intended to adopt an accurate methodology to give greater weight and credibility to the results. The following graph shows the general diagram which represents the research design in a schematic way which allows a better understanding of this chapter.



Graph 1- Diagram of the research design. Source: Own elaboration

2.1 LITERATURE REVIEW

The first step to start with the project was an extended literature review to recognize the subject through theory and data to reflect the situation of CE and ST in Barcelona. Research included a review of:

- Theoretical literature about ST and CE
- Empirical literature about earlier research in the field of study
- Methodological literature about how to use the qualitative and quantitative methods chosen
- Theoretical and empirical literature to contextualize, compare and generalize findings

Therefore literature review is the basis for identifying relevant information, schedule data collection methodology and define the analysis and processing.

2.2 DATA COLLECTION AND ANALYSIS OF DOCUMENTS

To prepare the research was necessary to analyze data related from CE, Tourism in Barcelona and it's sustainability to gain an accurate knowledge of the current situation. For this purpose a recompilation of data and the analysis of it were carried out at the beginning stage. Information was gathered from: Statistical Data available from the City Hall (Barcelona City Hall, 2013), recompilation of the main indicators related with tourism (Barcelona Turisme, 2013), Impact Reports of Tourism in Barcelona (Barcelona Turisme, 2012) and other public available informs (Barcelona City Hall, 2013b).

2.3 INTERVIEW

To achieve the objectives of the research, I used interviewing; a method of data collection that involves researchers seeking open-ended answers related to a number of questions, topic areas, or themes.

2.3.1 STAKEHOLDERS MAPPING

A preliminary phase of the field work was necessary to analyze and choose the appropriate agents to interview in this project. It was necessary to identify criteria to achieve the maximum range of opinions and the least bias possible through purposive sampling; the sample is drawn from the population in a targeted way, according to the logic of the research (Punch, 2006). The demands of purposive sampling are to think critically about the parameters of the population we are studying and to choose our sample case on this basis. "Many qualitative researches employ... purposive, and not random, sampling methods. They seek out groups, settings and individuals where... the processes being studied are most likely to occur" (Denzin and Lincoln, 1994:202).

Experts are selected under the definition of Bogner and Menz (2002, p.46):

"Experts have technical process oriented and interpretive knowledge referring to their specific professional sphere of activity. Thus expert knowledge does not only consist of systematized and reflexively accessible specialist knowledge, but it has the character of practical knowledge in big parts... The expert's knowledge and orientations for practices, relevancies, etc. have also a chance to become hegemonic in a specific organizational or functional context. This means, experts have the opportunity to assert their orientation at least partly."

2.3.2 QUALITATIVE AND QUANTITATIVE METHODS

The project is carried out combining qualitative and quantitative methods, so different methodological perspectives complement each other in the research. Qualitative and quantitative methods would be viewed as complementary (Jick 1983, p.135) but the different methods will remind autonomous, operating side by side and their meeting point is the case study.

2.3.3 ETHICS

The difficulties inherent in qualitative research can be alleviated by awareness and use of well-established ethical principles, as Capron (1989) said; any kind of research should be guided by the principles of respect for people, beneficence, and justice.

Capron considered that respect for people is the recognition of participants' rights, including the right to be informed about the study, the right to freely decide whether to participate in a study, and the right to withdraw at any time without penalty (Orb et.al. 2000). In a qualitative research study this principle is honored by informed consent, which means making a reasonable balance between over-informing and under-informing (Kvale, 1996). It also means that participants exercise their rights as autonomous persons to voluntarily accept or refuse to participate in the study (Orb et.al. 2000).

A second ethical principle closely linked with research is beneficence—doing good for others and preventing harm. Protection of participants' identities also applies to publications. Participants should be told how results will be published (Orb et.al. 2000).

The principle of justice refers to equal share and fairness. One of the crucial and distinctive features of this principle is avoiding exploitation and abuse of participants (Orb et.al. 2000).

2.3.4 SURVEY

To achieve objective number four the realization of surveys was selected as a form of quantitative method. The survey wants to identify by an indicator system the influence that CE can have to the sustainability of tourism in Barcelona. For this reason, a previous literature research was done to find out the appropriate system of indicators to measure sustainability of tourism.

Quantitative Research is used to quantify the problem by way of generating numerical data or data that can be transformed into useable statistics. Quantitative Research uses measurable data to formulate facts and uncover patterns in research. The aim to use quantitative research is to measure data to formulate facts and uncover patterns and generalize results from a larger sample population (Flick U 2009).

2.3.5 SEMI-STRUCTURED INTERVIEW

Commonalities and differences between interviewee's statements are to be identified and interpreted as marked in objectives one, two and three. Thus the goal of the semi-structured interview is to gain insights and different perspectives on the issue of ST and CE in Barcelona and compare existing approaches to the case.

Qualitative researchers aim to gather an in-depth understanding of human behavior and the reasons that govern such behavior. The qualitative method investigates the *why* and *how* of decision making. Interview studies which are based on a relatively small number of cases and use open-ended questions are usually treated as examples of qualitative research (Silverman, 2010). The interest on using semi-structured interviews is linked to the expectation that the interviewed subject's viewpoints are more likely to be

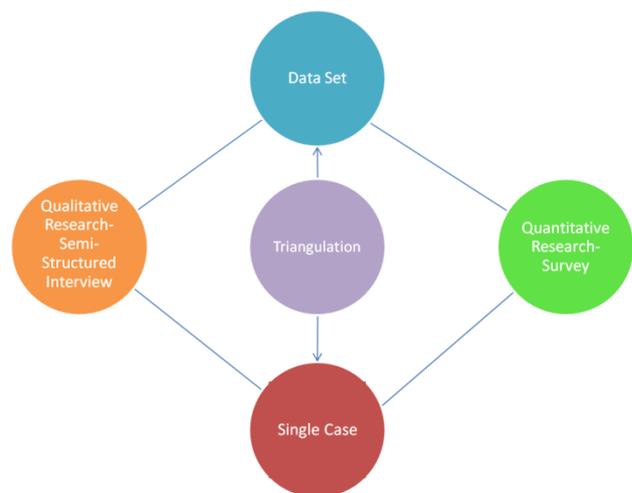
expressed in an openly designed interview situation than in a standardized interview or a questionnaire (Flick U 2009).

Semi-structured interviews were made to different experts from CE and/or ST. The questions asked were similar within every group to ensure the comparability between the results (Diekmann 2009, p.537). Meuser and Nagel (2002) discuss the expert interview as a specific form of applying semi-structured interviews. Here the interviewees are or less interested as a (whole) person than their capacities as experts for a certain field of activity. They are integrated into the study not as a single case but as a representing group of specific experts (Flick U 2009).

2.4 INTERPRETATION OF THE RESULTS

1. Survey data collection. Compilation of responses, analysis and completion of graphics to show the information separately from experts and students.
2. Transcriptions of the interviews; since all interviews were recorded by an audio-recorder to allow returning to the data in their original form as often as wish, so they can be replayed, transcriptions can be improved and analyses can take off on a different tack unlimited by the original transcript (Silverman, 2010).
3. Triangulation Collecting Data.

Triangulation means combining quantitative and qualitative methods (Flick 1992, 2004). For the experts' interviews, triangulation analysis of qualitative and quantitative research is carried out. Since the same experts were interviewed and filled the survey. Their answers in both are compared to each other, put together and refer to each other in the analysis.



Graph 2- Triangulation Collecting Data. Source: Own elaboration

The answers to the survey are analyzed for their mean and distribution across the whole agents. Then the answers in the interviews are analyzed and compared with the typology above, the distribution of the survey's answer and the typology developed are linked and compared (Flick 2007).

3 BACKGROUND– SUSTAINABLE TOURISM

Sustainable development became one of the main objectives in many economic sectors after the publication of the Brundtland Report by the World Commission on Environment and Development (WCED) *Our Common Future* in 1987 (WCED, 1987). The commission's report defines sustainable development as a process that meets the needs of present generations without endangering the ability of future ones to meet their own needs (WCED, 1987).

There had been some academic and policy discussions on sustainability and the limits of growth in tourism prior to the Brundtland report (Gossling and Hall, 2005a), but ever since the report sustainability has been the central theme in discussions on tourism and policies for its management (Saarinen, 2006).

After the United Nations' Conference on Environment and Development (the Earth Summit) in 1992 celebrated in Rio de Janeiro, it has attempt to consolidate a worldwide strategy based on sustainable development models and the need to enforce its principles of futurity, equity, and holism (Redcliffe and Woodgate, 1997). According to Saarinen (2006) the message was the same as nowadays: "a negative outcome (collapse) was not inevitable if development actors could change their policies".

3.1 DEFINITION

The definition provided by the World Tourism Organization (WTO) was inspired by the Brundtland Report and defines sustainable tourism as that which "meets the needs of tourists and host regions, while at the same time it protects and improves opportunities for the future. It focuses on the management of all the resources in such a way that all economic, social, and aesthetic needs are met while cultural integrity, key ecological processes, biodiversity, and life support systems are respected" (World Tourism Organization, 1993). But perhaps as a result of conceptual problems, disagreements, and the multidimensionality of both concepts (Sharpley, 2000), many commentators have stated that no exact definitions of sustainable tourism exist. Consequently, the notion has sometimes been understood as an ideology and point of view rather than an exact operational definition (Clarke, 1997).

One of the key problems is tied to the holistic nature of sustainability, especially its spatial and temporal scales. According to Gossling (2000) the tourism activity is a significant part of the global economy and culture, but the focus of sustainability has nevertheless been mainly on destinations and tourism practices in those areas, grasping the most visible processes and impacts related to the industry, but only the fragment of the total, like a drop in the ocean.

The concept of carrying capacity occupies a key position with regard to sustainable tourism, in that many of the latter's principles are actually based on this theory and research tradition (Tribe et al., 2000, p. 44–45). It is occasionally interpreted as an application of sustainable tourism (Butler, 1999c), implying that the two can co-exist and may both be useful concepts and frameworks for analyzing the impacts and limits of development (Butler, 1996a). Carrying capacity has been generally defined as the maximum number of people who can use a site without any unacceptable alteration in the physical environment and without any unacceptable decline in the quality of the experience gained by tourists (Mathieson and Wall, 1982). The concept of carrying capacity has many definitions, but they all have a common denominator: a change in the sign of the impact (Saveriades, 2000).

It is also a question of human values and (changing) perceptions concerning the resource, indicators, criteria, and impacts (Hughes and Furley, 1996; Lindberg et al., 1997; Odell, 1975). There are probably as many definitions of carrying capacity in the literature as there are definitions of sustainable tourism, based on different perspectives and opinions concerning nature and culture and their use as resources.

It is necessary to develop tourism policies that guarantee the protection of natural, social and cultural resources and ensure that these resources can meet the needs of current and future residents and tourists (Sharpley, 2000; Liu, 2003). In line with this new paradigm, government policies for tourism planning aim for a model of tourism based on diversity, quality and sustainability that can improve the competitiveness of destinations. During the process of designing and implementing such policies, indicators of sustainable tourism can help to evaluate destinations and to define more suitable policies.

3.2 EXISTING APPROACHES TO EVALUATE SUSTAINABILITY IN TOURISM (INDICATORS)

Sustainable tourism indicators are widely recognized as a useful tool for: 1) evaluating policies and monitoring performances (Butler, 1998b; Crabtree & Bayfield, 1998; EU Commission – TourismSustainability Group, 2007b; Gahin et al., 2003; Kelly & Baker, 2002); 2) defining strategies for development and setting numerical targets (Bakkes, 1997; Stoeckl et al., 2004); 3) communicating the current situation and future scenarios to all the stakeholders easily (Hammond et al., 1991; OECD, 2009; Smeets & Weterings, 1999).

From a methodological standpoint, there are many methods of evaluating and obtaining synthetic indicators (Nardo et al., 2005). Thus, there is no established theoretical framework to determine the most suitable aggregation procedure for each type of analysis (Blancas et al., 2010). As there is no unique indicator system to study sustainable tourism (Manning, 1999), each study has to design its own set, bearing in mind the intended use of the information provided.

Since the 1990s, research has mainly focused on defining indicators in developing destinations (Farsari and Prastacos, 2002); there are fewer studies measuring and applying such systems to established destinations (Vera and Ivars, 2003). Destinations are defined as established when they have the necessary infrastructure but have problems related to saturation, excessive exploitation of their resources or inadequate planning. In the long

term, the future is more uncertain for these destinations and they are therefore in need of a suitable system of indicators to guide planning (Blancas et al., 2010).

Different academic institutions, international organizations, governments and private enterprises have developed research projects to define indicator systems in order to evaluate sustainable tourism in different destinations. Thus, sustainable tourism indicators are defined as “the set of measures that provide the necessary information to better understand the links and the impact of tourism on the cultural and natural setting in which this takes place and on which it is strongly dependent” (World Tourism Organization, 1996). Indicators created by the WTO from 1992 onwards are especially relevant. In 1996, these results were summarized as a practical guide for the development and use of indicators (World Tourism Organization, 1996).

3.2.1 EUROPEAN TOURISM INDICATORS SYSTEM- ETIS

The European Commission has developed a European Tourism Indicators System (ETIS) for Sustainable Management at Destination Level. The system is designed to be used by tourism destinations to monitor, manage, measure and enhance their sustainability performances, without needing any specific training (European Commission, 2014).

At the European level the ETIS system aims to be the standard for all types of tourism destinations in Europe that want to evaluate and monitor the sustainability of tourism. According to the European Commission (2014), a destination can be defined as: a geographic area that is currently or potentially attractive to visitors, a place which is recognized and can easily be defined as a visitor destination and has a range of facilities and products in place for tourism purposes, a place or area promoted as a destination, a place or area where it is possible to measure the supply of and demand for tourism services or a place or area where the visitor management process usually includes a range of public and private sector stakeholders together with the host community.

There are two pilot phases that will assess the system:

- A first pilot phase, running from 15 July 2013 to 15 April 2014
- A second pilot phase, running from 16 April 2014 to 31 December 2014

According to Malcolm Bell, Head of Tourism at Visit Cornwall, “This system allows destinations to develop the tourism they want, rather than the tourism they end up with”.

The implementation and formulation of ETIS is influenced by; 1) the concept of sustainable development based on Rio Declaration on Environment and Development’s Agenda 21 in 1992- a comprehensive plan of action adopted by 178 governments; 2) the 2003 European Commission (EC) Report on sustainability of European Tourism; 3) United Nations World Tourism Organization (UNWTO) and United Nations Environment Program (UNEP) agenda of 12 aims for sustainable tourism in 2005, which include the EU Sustainable Development Strategy (SDS) for economic prosperity, social equity and cohesion and environmental protection.

The Tourism Sustainability Group (TSG), the organization in charge of ETIS, has developed 21 actions plans to make “Europe the world’s No 1 tourist destination” with a

new political framework for tourism in Europe composed of 4 strategic guidelines; stimulate competitiveness in European tourism sector, promote the development of sustainable, responsible and high quality tourism, consolidate the image and profile of Europe and maximize potential of EU financial policies and instruments. As a result TSG wants to build a comprehensive system including process and methodology rather than just a list of indicators. Action Plan number 11 is the creation of ETIS.

ETIS is based on 67 indicators (27 core indicators and 40 optional) which are organized in four categories: destination management, social and cultural impact, economic value and environmental impact.

What are core indicators?

- Core indicators are those that are common to most global systems, and achievable for most destinations
- Core indicators are the place to start

What are optional indicators?

- Remaining indicators are identified as “optional”
- For destinations that are monitoring the core set already and want to do more
- For destinations with more advanced sustainability systems

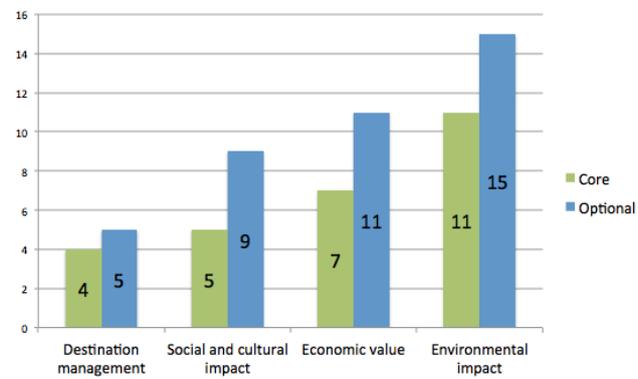


Figure 1- ETIS - Core and Optional Indicators (European Commission, 2014)

3.3 CURRENT SITUATION OF TOURISM IN BARCELONA

3.3.1 HISTORY

Changes in the methods of showing the city of Barcelona come up with major changes in Spain policies, urban renewal, development and growth; however Barcelona’s growth as a tourist centre is closely linked to the hosting of a number of major events (Duran, 2002).

The study of the tourist image of Barcelona begins with the Universal Exhibition in 1888, an event that put Barcelona under the eyes of world and was repeated with the International Exhibition of 1929. The development of the tourist image was completely stopped during the years of the Spanish Civil War and restarted again a couple of decades later, during the second part of the Franco regime. In the last years of the 1980s a new tourist image was created, from the preparation for the Olympics in 1992 and wanted to give another breath to it with the Forum of Cultures in 2004 (Suhett de Morais and Prat Forga, 2011).

Barcelona has always received people from all corners of the world. But until the late nineteenth century, travelers who came to the city were not for leisure; merchants and sailors were the people who most commonly entered into his waters. The year 1888 brought new horizons to Barcelona, as this was the year of the Universal Exhibition in

Ciudadella Park. During the years of the Spanish Civil War (1936-1939), any tourist image can be analyzed, for obvious reasons. A couple of decades later the situation changed radically; in 1950 Spain received a total of 750,000 tourists, a decade later, more than 6 million people visited the country and at the end of 1960 this number grew to 24 million (La Vaina, 2006).

Under the slogan "Spain is Different" enabled the country to attract many tourists during the government of Franco regime (from 1-10-1936 until his death in 20-11-1975). It is very interesting to note how tourists from other European countries (mostly Nordic) were able to release some of the oppressive Spain from the regime, mainly in coastal cities habits.

Tourism levels increased without regulation, managed by a centralized policy dominated by macroeconomic and sectoral objectives, and to the detriment of concepts such as equity in the development and the maintenance of a territorial balance (Urtasun et al., 2006).

In the 80's the city of Barcelona was the gateway to the beaches of the Costa Brava and did not lend attention to aspects or architectural monuments. The Olympic Games celebrated in 1992 marked the town for the major transformations implemented - is important to remember that the concept of sport only makes sense after the city was chose as the host for Olympics Games in 1992. Just after the announcement, as Benach (1993) said, "Barcelona was rebuilt to be the scene of a great show".

There is no doubt that the Olympic Games mark a "before and after" as far as tourism in Barcelona is concerned. It is then that the three key concepts designed by Smith (2005) were completed: monumentality, modernism and sports come together to lay the bases for the modern attractions of Barcelona. This was the time when Barcelona was transformed from just another town in Spain to be the reference world on how Olympic Games can completely change a city.

This process began the year after Barcelona's nomination as Olympic host city, and it was to give rise to a range of outcomes, including the establishment in 1993 of "Turisme de Barcelona" (Barcelona Tourism), the organism which is to be responsible for promoting the city's tourism. The process also included examination of the city's previous tourism policy and consideration of what form it should take in the future. The Miró Year in 1993 marked a break from the Olympics and a decisive bid by the city to capture the cultural tourism market; the model adopted has proven apt and highly successful (Duran, 2002).

Barcelona took advantage of two major events, the successful Olympic Games of 1992 and the Forum of Cultures in 2004, to change its landscape and turn itself into a city recognized internationally as a model of town layout and quality of life. Barcelona has continued to enjoy an uninterrupted growth of international prestige as well as a practically unanimous consensus as regards the quality and beauty of its urban development and habitability (Balibrea, 2001).

3.3.2 MODEL DESCRIPTION

The great 1992 event led the city to showcase the multiple dimensions which make up its personality; it provided the impulse for Barcelona to become a leader in many respects, but especially in tourism. Now, Barcelona is a highly popular tourist destination, and it enjoys a very positive image among visitors, whether they come for business or leisure.

Over the last few years, Barcelona has become one of the main urban tourist destinations in Europe, with more than 7.4 million tourists in 2012 and nearly 16 million annual overnight stays in the city's hotels. Barcelona ranks sixth in the list of most visited European cities, behind London, Paris, Berlin, Rome, and Madrid.

Half of this tourism demand is due to holidaymakers (culture and leisure), 42% to business reasons (business tourism), and the remaining 8% is down to personal reasons, such as visits to relatives and friends, and for health reasons. The tourists' provenance is mainly international (51.5 % are European, and 36.7 % come from the rest of the world), whereas national tourists (Catalan and Spanish) represent a total of 21.8 %.

Transport and communication infrastructure has played, and continues to play, a very important role in the tourist development of the city. It is important to emphasize the key role that the recent expansion of Barcelona airport has played, with 35.1 % millions of passengers in 2012; the harbor, with 2.5 millions of cruise ships in 2012; and new connections through the high speed rail network. On the other hand, there is an abundant supply of accommodation, with more than 65,000 hotel beds and 20,000 complementary beds in boarding houses, hostels and holiday apartments.

In addition, there exist some important cultural and leisure resources, which are the main attraction for tourists in the city. Among the cultural resources, the historical heritage in the Gothic Quarter (with Roman and Medieval architecture) is worth seeing, and especially, the modern architecture in Eixample, where there are several emblematic works of Gaudi, such as the most visited monument in Spain, the Sagrada Familia. A wide range of museums, commerce and gastronomy, as well as internationally known cultural and sports events, complement these cultural and leisure facilities and draw visitors from both home and abroad (UAB, 2013).

One of the attractions of the Catalan capital is that it is a worldwide city of change and reinvention, a potential technology and online business centre, as well as a consolidated business, scientific and cultural base, all of which have strengthened it as an outstanding destination for business tourism. Within this sector, there are trade fairs and conventions conceived as events which attract this type of tourist to the city. In the case of trade fairs, Barcelona is a very well-known destination, with Fira de Barcelona as the main organizer of fairs in Spain (there were 57 fairs of international reference held in 2011, and more than 2 million visitors). In the case of events tourism, which includes congresses, conventions, meetings and courses, Barcelona is near the top of the international ranking of cities that organize international conventions (UAB, 2013). The city is the world leader in terms of the number of congresses scheduled after 2001, according to the International Congress & Convention Association (ICCA) (Duran, 2002).

3.3.3 SUSTAINABLE TOURISM BARCELONA

How does Barcelona's sustainability tourism look like in 2014? Tourism brings benefits in form of income and distribution of our culture, which usually outweigh the disadvantages generated in the areas most directly affected by the presence of tourists (Garcia, 2013).

In 2011 the Spanish Tourism Synthetic Index (tourism GDP) increased by 2.6%, ie, tourism grew nearly four times more than the whole of the Spanish economy (0.7%). It also generated 2.678 million Euros more than in 2010, with a net creation of 17,000 jobs during the year. Thus, tourism ranks as one of the sectors with the highest contribution to GDP growth. In Barcelona tourism generates an economic impact of 20 million Euros a day and has a prominent impact on sectors such as trade and catering, as well as the projection of the Barcelona brand (Barcelona City Hall, 2013c).

But, despite the high success achieved by "model Barcelona", it is important to take into account some challenges faced by the city in terms of tourism (UAB, 2013).

The relationship between tourism, cultural heritage and citizens is a question that arises often in current debates on the first two areas, because citizens are increasingly being more directly involved (Garcia, 2013). Special attention has to be paid to the growing tensions sparked by the success of tourism in certain areas of the city, which run the risk of becoming veritable urban theme parks, expelling residents and traditional shops and losing their identity and authenticity, which are ultimately the essence of their appeal to visitors and residents (Beloso, n.d).

For instance, Ciutat Vella has a strong attraction for its abundance of museums, restaurants and hotels, making this district one of the main destinations for travelers and generates a significant development pressure in Ciutat Vella. For example, it generates new real estate projects and speculation, which threatens the architectural heritage of the historic center of Barcelona. The strong urban development pressure does not allow residents to keep their homes in the district and neighborhood life is lost; more than 45 percent of the population in Ciutat Vella is floating population (Legoupil, 2013).

From the cruise tourism perspective Barcelona remains a top destination among the Mediterranean cruise ports and fourth worldwide in 2011, with more than 2.3 million passengers for the tenth consecutive year (Barcelona City Hall, 2013c). However, cruise tourism generates conflicts over the city and its citizens and contributes less money than other types of tourism. The real state pressure is very important in Ciutat Vella, and new urban development projects threaten the maintenance of architectural heritage and neighborhood life (Legoupil, 2013).

Another important aspect to take into account is the decentralization of tourist activity through the search for and creation of new tourist icons and by favoring other districts. One example of this centralization of the tourism activity is the agglomeration of the touristic accommodation. According to the data available from the Statistic Department of Barcelona City Hall 70% of the touristic accommodation is concentrated in two districts; Ciutat Vella (37,5%) and Eixample (32,3%) (Barcelona City Hall, 2013a). On the other hand,

the procedure of making reference points (icons) out of the resources that the city has naturally is not only efficient but can also confuse its real façade. A façade that most tourists can only glance at turning it as superficial and ephemeral as it is portrayed and assuming this sponsored image of Barcelona. The gap between such tourist pictures and the reality damages the identity of the city as this type of imposed pictures aid the creation of clichés (Palou, 2006).

However, apart from these specific challenges, a more general one is to make the tourism model of the city sustainable by fostering quality in the sector and reducing the problems related to overcrowding of specific areas with a new tourism governance within the city and its territorial environment; a complicity with society and institutions, and a competitive improvement of destination and tourist activities. .Thereby it is needed a diversification of different products and strategies for the maintenance of tourism in the right measure between the economy, society and environment (UAB, 2013).

3.3.4 BARCELONA'S BRAND

“Barcelona is a global brand” or “Barcelona attracts many tourists because it has a very strong brand”. These are some of the phrases often uttered by municipal and business leaders in Barcelona, the media and more. However, what does having a great brand or saying that the Barcelona Brand is very strong mean? And ultimately, what use is it to us?

One of the problems involved when we talk about the city as a brand is the actual term “brand”, which emerged from marketing and is usually linked to the production and business setting, and therefore to a more or less mercantilist view. Nevertheless, the debate’s intensity tapers off when it comes to the brand of a city in terms of its image or reputation because everyone understands the importance of a good reputation for a person, a product or a company.

In Barcelona programs were implemented to afford the city and its values projection through culture and events. These were spearheaded by the companies and brands of products and services and other institutions, by the citizens themselves and by organizations created deliberately for this purpose, such as the Turisme de Barcelona Consortium and various initiatives of the City Council. These efforts have made an enormous contribution to the transformation and projection of Barcelona as a modern, advanced, cosmopolitan, open, creative and inspiring city boasting a high quality of life.

Still, we must not forget that Barcelona is also the result of its history, culture, traditions and values, and other aspects related to its geographical location – namely, the sea, the climate, gastronomy and the Mediterranean lifestyle – all of them part of its identity and which, combined with other factors, have made it an attractive place to live, study and work.

Ferran Adrià, one of the most eminent ambassadors of Barcelona and Catalonia brands, gave us a recipe for the future in the city; passion, memory and respect for the past, ethics, honesty, freedom, risk, ambition and generosity are values that should always govern our leaders’ actions; not so much in the pursuit of success but rather in the pursuit of happiness (Beloso, n.d).

4 BACKGROUND– COLLABORATIVE ECONOMY

4.1 CONTEXTUALIZATION AND MAIN DRIVERS

At the beginning of the Internet, scholars began predicting a shift in power from the marketer to the consumer, suggesting a new form of consumer–firm relationship (Bakos, 1991, Deighton and Kornfeld, 2009, Kozinets, 1999, Levine et al., 2000 and Shipman, 2001). With the introduction of the World Wide Web, ordinary consumers gained access to huge amounts of information and developed opportunities to influence their own lives, in the marketplace and beyond; it has turn on the CIBER’s voices, to anyone willing to listen.

Back in 2000, Jeremy Rifkin marked the beginning of the Age of Access where people gradually abandon the idea of possession and owning, to go into the purchase of access to experiences, which involves that the new industries that would dominate the global economy would be the "new experiences industries" as related to tourism and culture (Sunyer, 2014).

Hence more and more people are rejecting the materialistic attitudes that defined recent decades, and are gradually shifting towards a different way of living that is based on connectedness and sharing rather than ownership and consumption with digital interactive technology as the facilitator to the change in the consumer landscape. ‘Sharing more and owning less’ is the ethic that underlies a discernible change in attitudes among affluent society that is being led by today’s young, tech-savvy generation known as Generation Y or the Millennials (Parsons, 2014).

Bauman, one of the world’s most eminent polish sociologist, argues that modern relationships have become detached, loose and fleeting, due in part to the fact that contemporary sociality is deeply inflected by a consumerist logic that capitalizes on all aspects of social life, including our relationships with one another (Germann, 2013). The corrective to the co modifying effects of the market economy, according to Bauman, is the moral economy, which he defines as: “*A community, a neighborhood, a circle of friends, partners in life and partners for life: a world where solidarity, compassion, sharing, mutual help and mutual sympathy. . . .A world whose residents are neither competitors nor objects of use and consumption, but fellows (helpers and helped) in the ongoing, never-ending joint effort of shared life-building and making shared life livable*” (Bauman, 2003, p. 70).

Bauman’s commentary resonates with the new Collaborative Economy (CE), since the CE captures a variety of online enterprises that mobilize new technologies in the spirit of lending, borrowing, gifting, swapping, bartering or renting consumer goods. According to its proponents, the CE revolves around ‘collaborative consumption’ in which people use online peer-to-peer networks to share assets (Botsman & Rogers, 2010).

According to Botsman & Rogers (2010) the main drivers of the collaborative economy are:



Figure 2- Main drivers of CE according to Botsman & Rogers. Source: Botsman & Rogers (2010)

NEW TECHNOLOGIES- The evolution and maturity of internet had created an adequate context to build trust in the CE. A combination of social networks, technological innovations, smart grids, and real-time technologies enable sharing among strangers ‘in ways and at a scale never before possible’ (Botsman & Rogers, 2010, p. xv). Newer social technologies also allow consumers to move beyond these individually based power sources to dynamic, complex, other-oriented power sources (Labrecque, et al, 2002).

SENSE OF COMMUNITY- evolution from generation me to generation we with “millennia’s” as the main drivers of change.

ENVIRONMENTAL CONCERNS- Greening, cleaning, and sustainability have been hot topics for years. This bolsters the need for long term thinking where sustainability is longer a trend and sustainable development is a necessary step towards the future.

Based on the perspective of Botsman and Rogers (2010), the conceptual and empirical study on the sharing economy based in Germany from Heinrichs (2013) identified the Key dimensions of connecting the sharing economy to the sustainability discourse: 1) the relevance of materialist and post-materialist values related to consumer practices together with a reflection of new results of happiness research in this context, 2) the influence of environmental and sustainability awareness on changing consumer habits and practices, 3) the broader debate on limits to (material) growth and new indicators of wealth and quality of life as the macro-political sibling of sharing economy practices, 4) the role of critical perspectives on capitalism and consumerism and 5) the anthropological and socio-psychological discourse on “*homo economicus*” versus “*homo collaborans*” and the role of trust in human interaction.

COST CONSCIOUSNESS- people are more conscious about their purchasing decisions, giving more importance to practicality rather than consumerism. This owner-less trend has been catalyzed and has been extended into the physical goods with the recent economic crisis as people were more aware of where they are spending their money with and what kind of returns (in terms of happiness) they are getting. More stuff is not more happiness (Cañigueral, 2012). We are shaking from the wisdom, “You are what you own” and converting it to a new wisdom, “You are what you can access”.

On the other hand, As Jeremiah Owyang explains in his June 2013 report, there are societal, economical and technological drivers explaining this new economy as exposed in the following figure.

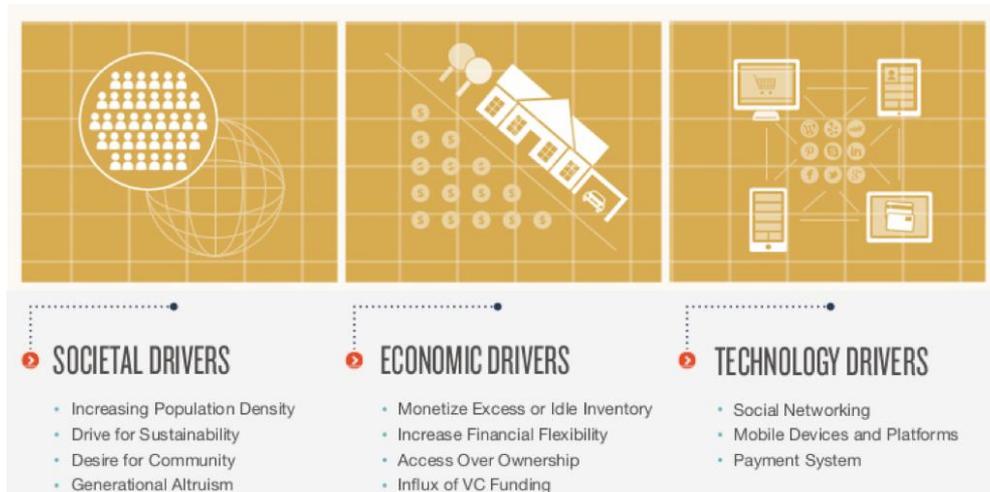


Figure 3- Drivers of the CE according to Jeremiah Owyang. Source: Owyang (2013)

For example, under their research they added some driver forces like: a) the increasing of population density which enables sharing to occur with less friction, b) influx of Venture Capital funding; investors are key to the rise of CE and also c) new payment systems which are required to broke transactions between buyers and sellers (Owyang, 2013).

4.2 DEFINITION OF CE

Business and consumer research bears witness to a flurry of recent attention to a group of related business and consumption practices describable as “sharing” (Belk, 2010), “collaborative consumption” (Botsman & Rogers, 2010), “the mesh” (Gansky, 2010), and “access-based consumption,” (Bardhi & Eckhardt, 2012). This attention corresponds to the rise of numerous for-profit and non-profit businesses that are flourishing thanks to the rise of the “sharing and collaborative activities” (Lessig, 2008). Collaborative economy is the most accepted term in English, and I will use it through the all document; however I will consider synonyms terms like sharing economic or access-based consumption which may be referred in some graphs.

Sharing is a phenomenon as old as humankind, while collaborative consumption and the “collaborative economy” are phenomena born of the Internet age (Belk, 2013). According to most general definitions that are widely available online, the **collaborative economy** leverages information technology to empower individuals or organizations to distribute, share and re-use access capacity in goods and services. “It is a tectonic shift in how the economy works. A society changes from a top-down factory model of organization to a peer-to-peer network model. At its simplest, the collaborative economy is the decentralization of economic power brought on by new technology, new and revived business models, and massive social change. It’s made up of thousands of innovations, some for profit, some nonprofit, and some that thrive in the commons” (Botsman & Rogers, 2010).

Instead terms like “collaborative economy”, “collaborative consumption”, “sharing economy” and “peer economy” are being used synonymously, these terms have different meanings. The entire picture of the CE is showed in Figure 4 (Botsman & Rogers, 2010).

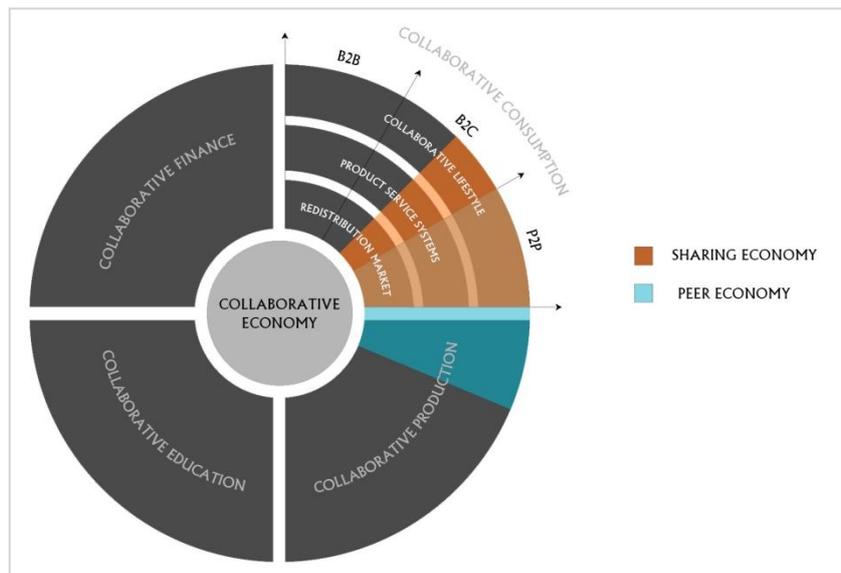


Figure 4- Complete picture of CE. Source: Botsman & Rogers (2010)

- **Sharing Economy:** An economic model based on sharing underutilized assets from spaces to skills to stuff for monetary or non-monetary benefits. It is largely focused on P2P marketplaces.
- **Peer Economy:** Person-to- person marketplace that facilitate the sharing and direct trade of products and services built on peer trust.
- **Collaborative Consumption:** Three systems are include inside the collaborative consumption:
 1. First, product-service systems that facilitate the access of a product versus needing to own it outright (i.e., car sharing);
 2. Second, redistribution markets, which enable the redistribution of unwanted or underused goods (i.e., eBay);
 3. Third, collaborative lifestyles in which assets and skills can be shared (i.e., coworking spaces).

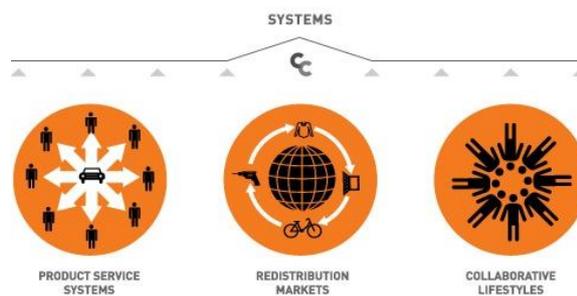


Figure 5- Systems of the Collaborative Consumption. Source: Botsman & Rogers (2010)

Belk (2013) considers the collaborative consumption as people coordinating the acquisition and distribution of a resource for a fee or other compensation. By including other compensation, the definition also encompasses bartering, trading, and swapping, which involve giving and receiving non-monetary compensation. The ground that

collaborative consumption occupies a middle ground between sharing and marketplace exchange, with elements of both.

Although Bardhi and Eckhardt (2012) conflate collaborative consumption and sharing in their concept of “access-based consumption,” they describe the domain and motivation of collaborative consumption in observing that: “Instead of buying and owning things, consumers want access to goods and prefer to pay for the experience of temporarily accessing them”. Collaborative consumption is the subset of Bardhi and Eckhardt's (2012) notion of access-base consumption that they call market-mediated access.

4.2.1 WHICH ARE THE COMMONALITIES BETWEEN ALL OF THESE TERMS?

There are two commonalities in these sharing and collaborative consumption practices: 1) their use of temporary access non-ownership models of utilizing consumer goods and services and 2) their reliance on the Internet, and especially Web 2.0, to bring this about. Web 2.0 “...refers collectively to websites that allow users to contribute content and connect with each other” (Carroll & Romano, 2011, p. 190). This is in contrast to Web 1.0 which primarily involved one-directional provision of information to consumers who did not interact or respond to the web site or to one another.

According to Rachel Botsman (2010) the author of “What’s mine is yours” the new models of CE must be based on 4 main principles:

Trust: Different degrees of trust are required for collaboration and sharing among individuals.

Critical Mass: Also known as “tipping point”, at which there is enough momentum in a system to make it self-sustaining.

Idle Capacity: Refers to the unused potential of resources.

Belief in “the Commons”: “The commons” refers to resources that belong to everyone. Believe that by providing value to the community individual value is achieved.

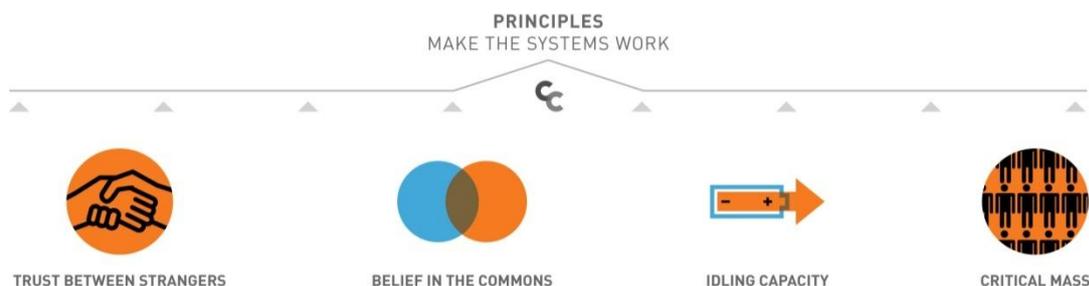


Figure 6- Principles of CE. Source: Botsman & Rogers (2010)

4.3 KEY ORGANIZATIONS PROMOTING THE SHARING ECONOMY

A number of organizations have emerged in recent years who seek to connect collaborators and mainstream sharing. Key among these are:

1. **OuiShare:** A French-based non-for-profit aiming to connect efforts within the Sharing or Collaborative Economy to create a global network of collaborators. Having started in France in 2012, they have spread to Europe, Latin America and the Middle East.
2. **Shareable:** "Shareable is a nonprofit news, action and connection hub for the sharing transformation", and the primary global online magazine on the Sharing Economy.
3. **Collaborative Consumption.com:** Founded by Rachel Botsman, after her book 'What's Mine is Yours' (2010), Collaborative Consumption.com has been growing as an online resource for collaborative consumption across the globe and as a network for the community within this space. They "curate news, content, events, jobs, studies and resources from key media outlets and industry blogs, as well as produce original content".
4. **The Mesh:** Who hold a global directory of Sharing Economy Businesses and organized Mesh2013, a global gathering for the 'instigators' of the Sharing Economy.
5. **Consumo Colaborativo:** Founded in the summer of 2011 as a blog, ConsumoColaborativo.com is today the reference medium in Castilian for all the news about start-ups and collaborative consumption services. They have a special focus on those located in Spain and Latin America.

4.4 PEER TO PEER TOURISM

Since collaborative consumption is part of a general shift from centralized, hierarchical forms of social organization with high entrance barriers (Bauwens, 2005, p. 7) to P2P collaboration, it is necessary to define P2P before continuing with the discussion. P2P systems are decentralized networks based on distributive intelligence "[...] organized through the free cooperation of equals in view of the performance of a common task, for the creation of a common good" (P2P Foundation, 2006). Thanks to the proliferation of smart phones, wireless Internet and social networks, P2P platforms have been thriving, enabling anyone who chooses to participate and publish content on the Web regardless of time and space (Döbler, 2010, p. 391). Pioneering applications of P2P on the Web include file and music sharing, video streaming and the sharing of code necessary to develop open source software programs such as Linux.

In this dynamic of growth, it is added the recent emergence of P2P tourism, collaborative tourism applied in economics. All indicators show that the P2P sites are one of the technology trends that are already radically transforming the tourism (Sunyer, 2014). Mr. Rifai, Secretary-General of the World Tourism Organization (UNWTO) recently

stressed that the revolution in tourism joins the revolution in information and communication technologies (ICT) and the urban revolution. "In 40 years it will be said that this was the era of travel," said Rifai.

According to an interview made to Juanjo Rodriguez, founder of the global online exchange platform Knok houses, a study made by Knok shows that there is a potential for multiplying by 100 the current value of the P2P industry travel in the coming years (Val del, 2013). For instance, Airbnb made a study of the economic impact in Barcelona which shows that Airbnb generated \$175 million in economic activity in Barcelona in one year and has driven the promotion of 4.310 direct and indirect jobs. In addition, Airbnb guests spend 2.3 times more money and stay 2.4 times longer than the typical visitor to Barcelona (Hantman, 2014).

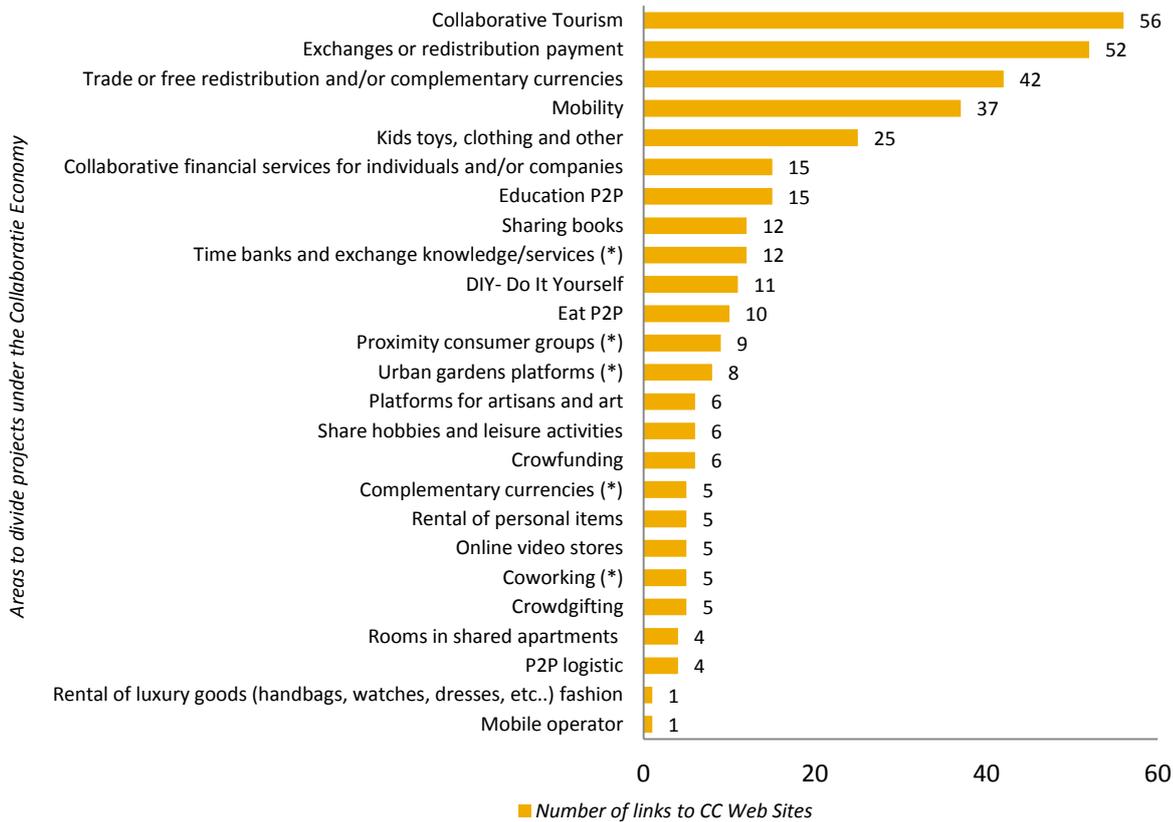
4.4.1 CURRENT SITUATION OF COLLABORATIVE ECONOMY IN BARCELONA

According to the study made from Avancar, the car sharing leader company in Spain, Madrid and Catalonia are the two the regions that "consume" the most collaborative consumption, 81% and 77% of respondents respectively claims to have rented or shared some good or service sometime (Avancar, 2014).

Time and money are precious when consuming values. The main reasons why the Spaniards join the collaborative economy are generally saving and convenience of services. In Spain, things that are rented or shared are housing (29%), movies or music (29%) and DIY tools (28%). "The study we have conducted highlights the importance that the collaborative economy is achieving as part of the global economic model. Considering the lifestyle of most Spaniards, it is much easier to have immediate access to flexible services with the characteristic of "Pay as you live" "says Josep Sala, CEO of Avancar (Avancar, 2014).

The latest and most reliable information about collaborative consumption projects in Spain are available in the webpage: www.consumocolaborativo.com, which is the reference tool for all the news about start-ups and services under the collaborative consumption.

Nowadays in Spain we can find the following links expressed in Graph 3 to websites of different projects available from "Consumo Colaborativo" on-line directory. They are clustered by different criteria; kind of industry as for example tourism or education and business model (P2P, B2C...). It is noteworthy that those criteria marked with (*) in Graph 3 show the number of internet sites (platforms) and not the related projects. For example there are 5 links of different platforms related to complementary currencies but in Spain we can find more than 25 different complementary currencies, the same happens with co-working spaces; there are 5 different platforms but more than 400 co-working spaces around Spain.



Graph 3- Number of links from CC Web Site www.consumocolaborativo.com. Source: Own elaboration based on ConsumoColaborativo, 2014

According to the directory of Collaborative Consumption in Spain, there are 56 links to different projects about collaborative tourism which are divided in temporary hosting, home exchanges, tourism experiences and other collaborative tourism projects. As shown, the collaborative economy is rooted in each of the five key elements of the travel ecosystem:

GETTING THERE AND MOBILITY: From car-pooling to carsharing or others. Some examples: **BlaBlaCar, SocialCar, Avancar or Uber** are companies working in Barcelona.

SLEEPING: You can swap homes with one another; have someone sleep on your couch or living room floor, rent out a room or your entire apartment, rent out occasionally or professionally, downtown or by a lake. Leading examples: **AirBnB, Couchsurfing, Alterkeys, Knok, HomeExchange, HouseTrip.**

EATING: Prepare home-cooked meals and invite unknown guests to join and mingle away or sharing with your neighbors what you have cooked for lunch or dinner. Some examples: **EatWith, SocialEatersn, EatingAbroad or CompartoPlato.**

VISITING: Once at a destination, asking a local for the best spots, things to do or places to see. Or get your own private guide to show you the off-the-beaten paths stuff and hidden gems that only locals would know about... Some examples: **Trip4Real, Vayable or Nomaders.**

4.5 FUTURE BASED ON SHARING?

As the sharing economy receives increasing attention from the media, a debate is beginning to emerge around its overall importance and future direction. There is no doubt that the emergent paradigm of sharing resources is set to expand and further flourish in coming years, especially in the face of continuing economic recession, government austerity and environmental concerns (Parsons 2014).

Firstly, its definition has some different understandings with specific projects. According to Heinrichs (2013) a more theory-grounded conceptualization of the sharing economy is needed.

On one hand, as described before, Botsman and Rogers (2010, p. xv) describe how Joe Gebbia, Brian Chesky, and Nathan Blecharczyk conceptualized Airbnb.com (the website for people to rent out lodging): *“On a whiteboard in their apartment they drew a spectrum. On one side they wrote “hotels” and on the other they scribbled rental listings such as craigslist, youth hostels, and nonmonetary travel exchanges such as CouchSurfing that help people travel by creating a network of couches available to sleep on for free”*. The middle ground, for Botsman and Rogers, should include Airbnb, which exemplifies collaborative consumption in that it includes people coordinating acquisition and distribution of a resource for a fee.

Meanwhile Ramón Estalella, general secretary of the Spanish Confederation of Hotels and Tourist Accommodation, CEHAT separates companies like Airbnb to the collaborative consumption "is technically true that they are based on the principles of collaborative consumption models, but at the moment that enters a broker who charges a commission, we can speak of a full-fledged online agency, which sells in private housing rentals. It is not a peer to peer model from the moment that there is a company that charges a commission of 15% and has a portal sort by price. Companies like Airbnb are agencies specializing in private sale and nothing else. In fact, there is more to see its turnover, which is public and even Airbnb is thinking to enter to the stock market. It is a portal as it can be Booking, just that it is specialized in private property" (Nuñez, 2014).

Secondly, the problems related with its regulation.

The music and film industries vigorously opposed online sharing of their products. The publishing industry and online book sellers have been somewhat less aggressive, but still take various DRM precautions to forestall duplication of their e-books. Hotels are pressuring municipalities to enforce hotel or bed and breakfast regulations on those who would offer short-term rental services through the likes of Airbnb, Knok or Alterkeys to rent all or a portion of their home.

The same happens with restaurants that feel threatened by “private kitchen” offerings, where people buy a meal in someone else's home, and want them to be inspected for the same health and safety standards that the restaurants must obey. Some banks rail against P2P lending and crowd funding. Whether or not these reactions are wise and effective in resisting the sharing economy is an open question. Clearly they were not in the case of music and film.

"I would not call it a threat, says Ramón Estalella- but rather a trend. However it is a dangerous trend, as this type of vacation is the focus of the underground economy most important in our country, with millions of stay not taxed". I do not think we have to regulate it to curb it but we have to regulate it to ensure tourists especially tranquility of staying in these establishments" says Juan Carlos Sanjuan, director of Casual Hotels (Nuñez,2014).

To meet all legal requirements as intermediaries, Collaborative consumption platforms in the tourism sector, they should have law like online travel agencies, because even in its legal conditions are exempted from liability if the accommodations registered on their website do not meet legal requirements, they must assume their share of responsibility, at least liability insurance, in case of problems with the traveler and within the owner. And, of course, not forgetting the need for fiscal adjustment, which prevents the promotion of submerged economy, forcing the tax return in all income earned through these platforms. The problem is that the network moves faster than lawmakers, who must work now in this issue ", says Javier de la Cruz, CEO from IdeasforChange (Nuñez, 2014).

Many proponents of the sharing economy therefore have great hopes for a future based on sharing as the new modus operandi. Almost everyone recognizes that drastic change is needed in the wake of a collapsed economy and an overstretched planet, and the old idea in which a culture that promotes excessive consumerism and commercialization leads us to see the 'good life' as the 'goods life' is no longer tenable in a world of rising affluence among possibly 9.6 billion people by 2050. Botsman and Rogers (2010) suggest that collaborative consumption could be as important as the Industrial Revolution in terms of how we think about ownership.

5 CASE DEFINITION

Interviews were made to the different stakeholders according to the following scheme:

1. Experts and professionals (12 interviews in total):
 - Survey of the Indicator System for ST in Destinations
 - Semi- structured questions
2. UAB Students (50 interviews). In collaboration with UAB professor, Francesc Romagosa, who has previously explained in detail the concept of ST and CE, they were asked to do an assignment (attached in the Appendix 1) which had two tasks:
 - Survey of the Indicator System for ST in Destinations

The field study was conducted in approximately 1 month, from 7th April till 2nd May 2014, with the following schedule.

Seven Interviews were made face-to-face, which are marked in Table 2 in red color and interviews made on-line (via Skype) are marked in purple. When qualitative research is based on interviews, it is often the face- to- face contact and the personal relationship, based on verbal and non-verbal communications, which are its strengths. In this situation the dialogue is stimulated in details, which is a condition for the quality of data. On-line interviewing was conducted in a synchronous form, which means we were on-line at the same time thanks to Skype program. This resource allowed me to make 5 interviews closest to the verbal exchange like in a face-to- face interview.

	NUMBER OF EXPERTS INTERVIEWED (OPEN QUESTIONS AND SURVEY INDICATOR SYSTEM)	DATE
Number of interviews	1	8/04/14
	2	10/04/14
	1	11/04/14
	2	23/04/14
	1	25/04/14
	1	28/04/14
	1	2/05/14
	2	5/05/14
	1	6/05/14
TOTAL	12	

Table 2- Schedule of the field study – interviews with experts

The interviews made to students were made on-line through the platform SuveyMonkey and the date to submit the survey was 16th of May.

5.1 STAKEHOLDERS MAPPING

The stakeholders are divided and selected according to the following criteria:

CRITERIA	Level of knowledge	<ul style="list-style-type: none"> - Experts who know about CE and/or the tourism industry - Students from Universitat Autònoma de Barcelona-UAB studying Tourism bachelor
	Area of work	<ul style="list-style-type: none"> - Managers and Promoters - Promoters - Researchers and Development-R&D- University and professors - Business woman and men
	Forms of owners	<ul style="list-style-type: none"> - Public Sector - Private Sector
	Research area	<ul style="list-style-type: none"> - Tourism - CE - Tourism and CE

Table 3- Criteria for the stakeholder's identification

In total 12 different experts were established from CE and/or the tourism industry, and 49 students from UAB, Table 4 matches the different criteria with the number of agents and the reason why they were selected.

CRITERIA 1- level of knowledge	CRITERIA 2- area of work	CRITERIA 3- forms of owners	CRITERIA 4- area of the research	Nº OF AGENTS	WHY?
Experts	Managers and promoters	Public	Tourism	2	The main manager and official administrator of tourism in Barcelona to coordinate the efforts of different stakeholders to accomplish goals and common objectives. Management comprises planning, organizing and controlling to accomplish a goal according to policies and laws.
	Promoters	Public	CE	1	One of the main organizations promoting Collaborative Economy around Europe.
	R&D- Professors	Public	Tourism	4	University Research Institutes studying tourism (managing, planning, measuring impacts and methodologies...) Different experts in: Tourist Destinations, Ecotourism, Public Tourism Management, ICT in tourism, Tourism management and Responsible tourism marketing
	Business people	Private	Tourism and CE	3	Projects emerging in BCN under CE with present/potential impact and a strategy consultant for companies and institutions
		Private	Tourism	2	Main agents with experience and professional background on the touristic sector of Barcelona
Total experts	-	-	-	12	-

Students	Students	Public	Tourism	50	Students as the people learning and attending an educational institution since they are the future expert's generation.
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Table 4- Division and criteria's for stakeholders

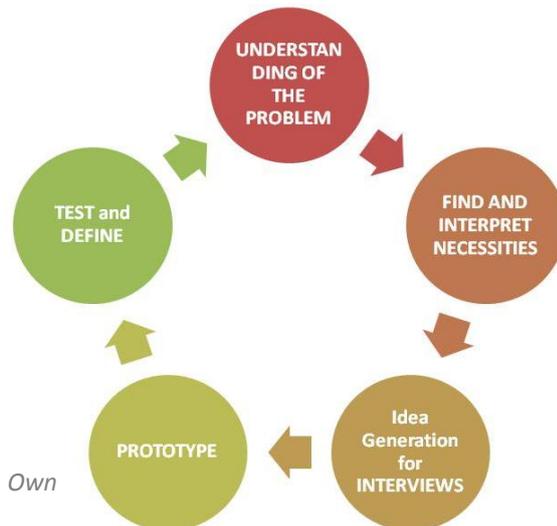
5.2 SURVEY OF THE INDICATOR SYSTEM FOR SUSTAINABLE TOURISM IN DESTINATIONS

The method is based on a survey made to the 12 experts and 49 students previously selected. It is used to evaluate the European Tourism Indicators System (ETIS) for Sustainable Management at Destination Level. The complete survey can be found in the Appendix 2. Sustainability indicators for tourism destinations, as explained in page 11; they are an important tool for sustainable management tourism, especially from the point of view of the destinations.

The survey aims to evaluate the extent to which the development of CE in Barcelona's tourism (as an example of iconic tourism destination in Europe) may affect the value (amount) of each of the 27 "core indicators" of the ETIS system. For example, in the first case listed in the survey, in which the indicator name is "Number of tourist nights per month", interviewees must assess whether the foreseen development of sharing economy in Barcelona's tourism (i.e. more offer of exchange homes for tourists, houses where tourists can eat, etc.), will affect the number of tourist monthly overnight stays in the city in a decrease, an increase, or remain the same.

5.3 SEMI-STRUCTURED QUESTIONS

The semi-structured interview was made to the 12 experts in order to understand their opinion more in depth about the exposed topic. To develop the semi-structured interview the followed steps are shown on Graph 4 which identifies: first of all a correct understanding of the research (CE and ST in Barcelona), find the main necessities to develop the interview, design and test it.



Graph 4- Steps to design the interview. Source: Own elaboration

The interviews were based on 16 questions (see Appendix 3) and had a length of 30 to 90 minutes. Table 5 shows the correlation between the questions asked with what was expected to find (the reason why the questions were asked).

OPEN QUESTIONS OF THE INTERVIEW	WHY I ASK THEM?
1. Are you familiar with the term of “Sharing economy” or “collaborative economy” ?	Understand if the interviewee is familiar or not with the CE.
2. What does it mean for you?	In case he/she is not familiar, these 3 questions are not considered for the interview and a brief description of the CE is described with the information available in Appendix4.
3. Could you tell me some examples of CE in Barcelona related with tourism ?	
4. Which are the main driver forces (main forces influencing touristic sector IN and OUT the system) of Tourism in Barcelona ?	
5. How would you describe the tourism in Barcelona ? What model has/follow?	Know his/her knowledge related with the tourism in Barcelona nowadays and the present trends in terms of describing it, identifying the main driver forces and see the consequences and challenges with ICT’s incorporation under their point of view.
6. Can you describe it with one word ?	
7. Forward looking, what are the present trends of Tourism in Barcelona ? Are there model changes in these trends?	
8. Do you think that the introduction of ICT (information and communications technology) innovations with the improvement of connections by social networks and may affect to the city? How do you think it affects to the city in terms of tourism ? Why?	
9. Which are the main challenges of the city related with this “smart tourism” ?	
10. What is Sustainable Tourism for you? Can you describe it?	The key core of the interview, show how the interviewee understands the concept of sustainability in tourism, related with his/her perception with Barcelona and sustainability and finally establish the connection between CE and its influence on sustainability.
11. Do you think tourism in Barcelona is sustainable nowadays?	
12. Do you think that the CE can play an important role in the sustainability of tourism in the city?	
13. Have you ever used any products or services under the CE?	To know if they are actual consumers, potential consumers of CE or neither of them
14. How often do you “consume” products or services derived from the CE ?	
15. How often do you “consume” products or services derived from the CE in tourism (as a travel or as a host for example)?	
16. Would you be interested in participating in the CE the future ?	

Table 5- Correlation between questions and what is expected to find

After doing the semi-structured interviews to the 12 experts, answers were analyzed and compared according to the following table:

QUESTION NUMBER	QUESTION (ABBREVIATED)	CRITERIA'S FOR EACH SEMI-STRUCTURED QUESTION
1	Are you familiar with the term of CE?	% Yes and % No
2	Definition CE	Clustered parameters for CE's definitions according to interviewees responses
3	Examples CE	% of Examples
4	Driver Forces	% of Driver Forces
5	Description of Tourism in BCN	Clustered parameters for tourism in Barcelona according to interviewees responses
6	One word for describing Tourism in Barcelona	% of "one word description"
7	Future trends Change model?	% change model (Yes/No/No Answer) Explanation of each with examples of the interviewees responses
8	ICT incorporation	Select one key phrase for each interviewee
9	Challenges for "smart tourism"	Select one key phrase for each interviewee
10	Definition of ST	% of clustered parameters, "catch phrase" and others Explanation of each with examples of the interviewees responses
11	Barcelona's Tourism is sustainable?	% Yes/No Explanation of each by clustering parameters according to interviewees responses
12	Role of the EC in the sustainability of tourism	% Positive/Negative/Neutral Explanation of each by clustering parameters according to interviewees responses
13	Used CE?	% Yes/No
14	How often use of CE?	% (Never, Rarely, Sometimes ,Very often)
15	How often use of CE in tourism?	% (Never, Rarely, Sometimes ,Very often)
16	Interested in CE for future?	% Yes/No

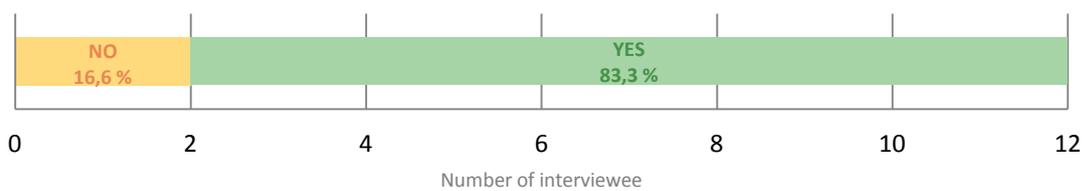
Table 6- Criteria to analyze each semi- structured question

6 RESULTS OF THE ANALYSIS

6.1 SEMI-STRUCTURED INTERVIEW

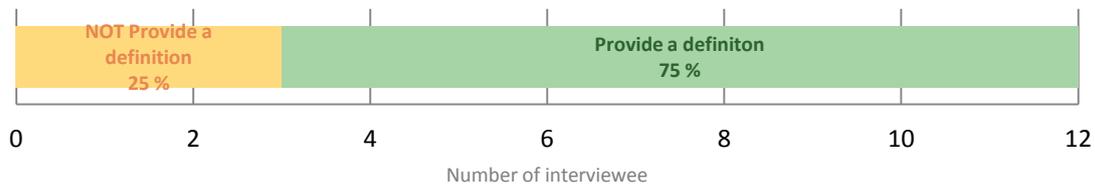
In this section, results from the semi-structured questions made to experts are shown; per each question of the interview results are described. There are 16 questions with their associated answers.

Q1- ARE YOU FAMILIAR WITH THE TERM OF “SHARING ECONOMY” OR “COLLABORATIVE ECONOMY”?



Graph 5- Familiarity with CE

Q2- WHAT DOES IT MEAN FOR YOU?



Graph 6- Definition of CE

Graph 5 and Graph 6 show that 75% of the interviewees are familiar with the term CE and could provide a definition. One interviewee considers familiar with CE, has listened about it, but could not provide a definition. Finally 2 interviewee, representing 16,6 % of the total amount are not familiar at all with the concept of CE.

For 75% of respondents, the definition of CE is related to the criteria showed in Table 7. A total amount of seven interviewees consider CE as a “connection, point of contact, agreement between two people, community building and p2p distribution”. It is also noteworthy that social networking technologies are the main facilitators of CE while the purpose of CE is the satisfaction of social and economic needs according to the interviewees.

CLUSTERED PARAMETERS FOR CE'S DEFINITIONS ACCORDING TO INTERVIEWEES	Nº OF INTERVIEWEE
Connection/Point of contact/agreement between two people/ community building / p2p distribution	7
Social networking technologies	3
Satisfy needs	3
Cooperation/common looking / solidarity	2
Co-creation/new model production	2
Exchanges (monetary/non monetary)	2
Collaborative consumption/ sharing	2
Open source	1
Exchanges (just monetary)	1
Without external regulation	1
Horizontal organization	1
Trust between strangers	1
Collaborative finances	1
Empowerment of people	1
Contradicting what the economy has normally wanted which is to internalize benefits and to externalize costs	1
Clever people have found a way of creating momentum on a number of things that have already existed before	1
Pretty way of dressing the reality	1

Table 7- Criteria for CE's definitions

The following criteria (cooperation/common looking/solidarity, co-creation/new model production and exchanges of products/services for a monetary or non monetary compensation) are considered important for two interviewees each when defining CE. Other criteria are taken into account as shown in the above table: CE normally has more horizontal organizations structures, it encourages empowerment of people and one of the main differences with the “traditional” economy is that “it is the agreement between two people, without wanting to undergo external regulation” as interviewed number 7 answered. Four different examples of definitions provided by respondent’s are:

*“It is a **“pretty” way of dressing the reality** of society. People seeking a better lifes through different **alternatives to have revenues**” (Interview nº5- Tourism Business)*

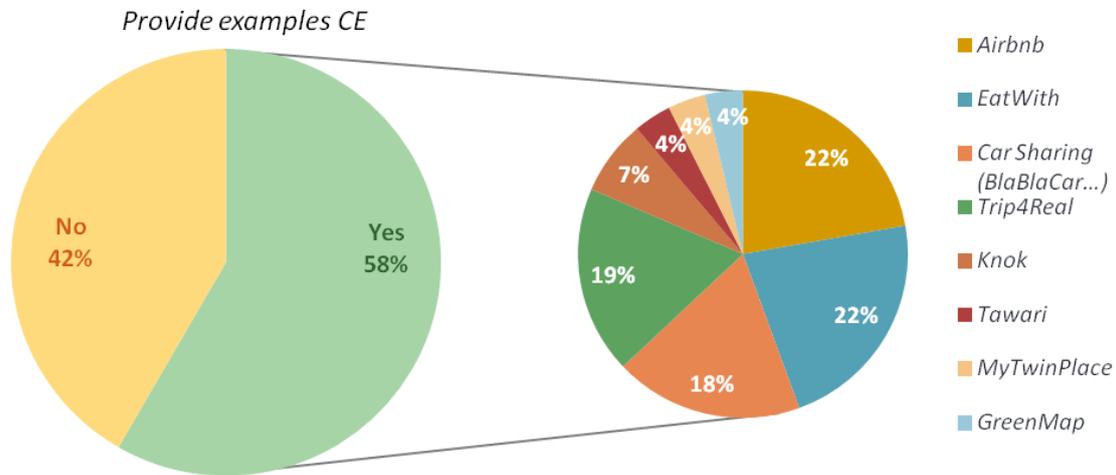
*“Based on 4 main columns: **colaborative consumption**, **p2p distribution**, **collaborative finances** and **open-knowledge**. Difference with tradictional economy: **horitzontal organization**, **open-source**, **empowerment of people**, **community building** and trust between strangers through social networking technology” (Interview nº8- CE Promoter)*

*“Old wine in new bottles. I think some **clever people have found a way of creating momentum on a number of things that have already existed before**. So it seems to me that the idea of sharing economy is basically **contradicting what the economy has normally wanted which is to internalize benefits and to externalize costs**” (Interview nº9- Researcher)*

*“New model production that tries to produce economic wealth making resources available **for all common** or relative abundance putting value to underutilized resources” (Interview nº10- CE Business)*

Q3- COULD YOU TELL ME SOME EXAMPLES OF CE IN BARCELONA RELATED WITH TOURISM?

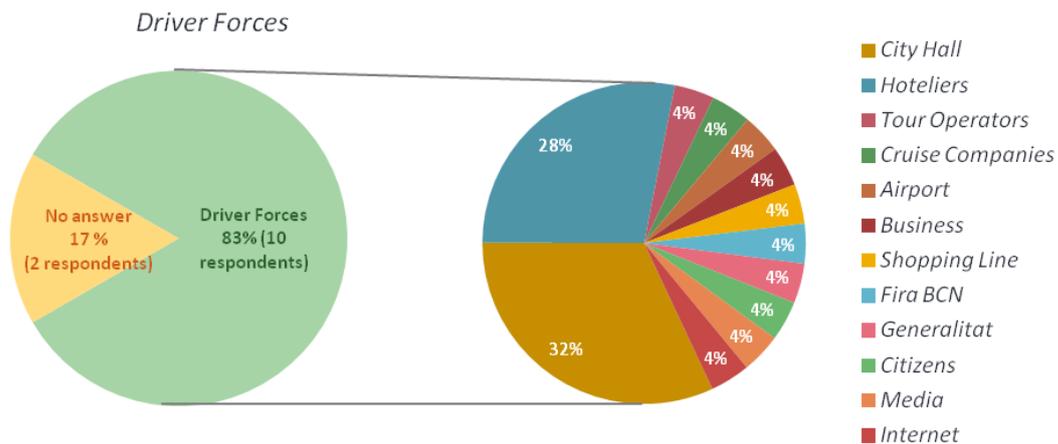
Graph 7 shows the % of interviewees that provide examples of the CE (58%) and the % of interviewees who do not know examples of the CE or interviewees who can explain some projects of CE but they do not remember the names (42%).



Graph 7- Examples of CE

The projects and/or examples most known for those interviewed are: AirBnb and EatWith with 22,2% each (which means 6 people of 12 know that platforms) followed by CarSharing initiatives (like BlablaCar) and Trip4Real with 18,5% each.

Q4- WHICH ARE THE MAIN DRIVER FORCES (MAIN FORCES INFLUENCING TOURISTIC SECTOR IN AND OUT THE SYSTEM) OF TOURISM IN BARCELONA?



Graph 8- Drivers forces Tourism in Barcelona

According to Graph 8, two interviewee’s do not answer *Question 4* and 10 respondents consider that there are two main drivers forces of Tourism in Barcelona; first the City Hall with 32% of the results and second the hoteliers of Barcelona (Gremi d’Hotelers) with 28%.

Q5- HOW WOULD YOU DESCRIBE THE TOURISM IN BARCELONA?

PARAMETERS FOR DESCRIBING TOURISM IN BARCELONA ACCORDING TO THE INTERVIEWEES			Nº OF INTERVIEWEES
General Characteristics	Tourist profile	There are two types of tourists: <ul style="list-style-type: none"> • The traditional tourism, which represents the large part of tourism; is individualistic and use TripAdvisor, go to hotels and make bookings to different agencies, still a tourist who comes to see the icons of the city using sandals and socks, look for a distortion of reality without falling into banality but with spaces adapted to their tastes and their ways of understanding things • WANDERLAST people with the desire to travel, adventurous minds, curious and independent tourists, the ones that follow the philosophy of "be local", live like a local 	4
		3/4 of international tourism	1
	Morphologically	Diverse, heterogenic (responds to many different reasons)	8
		Volume very important/ leader in Europe of numbers of visitors	3
		Seasonally adjusted	3
		Rapid growth	1
		Short and repetitive stays	1

Table 8- Criteria for describing tourism in Barcelona according to the interviewees

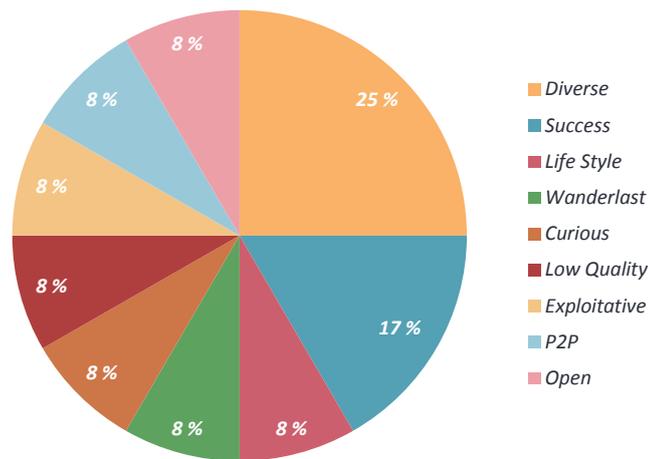
All interviewees answered *Question 5*, 4/12 of respondents think that Barcelona has two type of tourist as Table 8 shows with one person who describes the provenance of tourists (3/4 of received tourism in Barcelona is international).

Morphologically, Barcelona is considered a diverse and heterogenic destination for 8/12 interviewees and 3/12 also consider the volume of visitors (as a leader in Europe of number of tourists) and the seasonality adjusted parameter as important characteristics to describe tourism in Barcelona.

"Barcelona is a cow, and we know that the cow makes milk and can getting out milk form the cow but we don't think we have to give the cow any food. You know what will happen to that cow right? It will die" (Interview nº9- Researcher)

"The brand (Barcelona) itself will reach a point of maturity and stabilize the curve. In fact we are in a delicate issue because you can die of success, when it begins to perceive a decline in world growth is when to start working on more qualitative aspects, loyalty to incorporate new elements of the imagine Barcelona's brand" (Interview nº11- Tourism Manager)

Q6- CAN YOU DESCRIBE IT WITH ONE WORD?

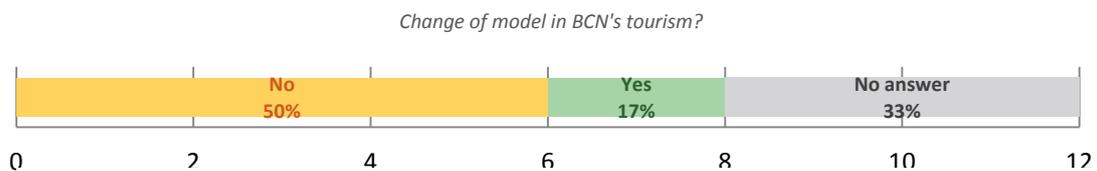


Graph 9- One word to describe tourism in BCN

When describing tourism in Barcelona, 25% of respondents (3 people) choose the word “diverse” while 17% thinks “success” matches better with 3 respondents. Life style, wanderlast, curios, low quality, exploitative, P2P and open are the others words chosen by the interviewees to describe the tourism in Barcelona with one word.

Q7- FORWARD LOOKING, WHAT ARE THE PRESENT TRENDS OF TOURISM IN BARCELONA? ARE THERE MODEL CHANGES IN THESE TRENDS?

According to 6 of the respondents there will be no changes in the model that Barcelona follows nowadays; but there will be small changes in sustainability issues to strengthen the positive aspects of the model and reduce the negative impacts because “Turisme de Barcelona” is willing to commit to responsible tourism (interview nº3), also interviewed number 8 and 9 consider that “because we are still so obsessed with growth” in “5 years time it will be for sure more tourists”.



Graph 10- Changes of model?

On the other hand, 17% of interviewee’s think Barcelona will have a change of touristic model, mainly focusing on people (citizens and tourists) as the new protagonists of the touristic model.

“Tourists seek to know the city as if they are part of it, and this is a change from the local people and from tourists” (Interview nº6- CE Tourism Business)

“The change to the collaborative economy is not a 180 degree change, but what will occur is that the entire system will veer 15 degrees” (Interview nº10- CE Business)

Q8- DO YOU THINK THAT THE INTRODUCTION OF ICT (INFORMATION AND COMMUNICATIONS TECHNOLOGY) INNOVATIONS WITH THE IMPROVEMENT OF CONNECTIONS BY SOCIAL NETWORKS AND MAY AFFECT TO THE CITY? HOW DO YOU THINK IT AFFECTS TO THE CITY IN TERMS OF TOURISM? WHY?

Respondents consider that the incorporation of ICT's is on its way of incorporation. ICT's are key elements to improve tourism in a more suitable way. Despite nowadays Barcelona has big challenges in terms of how to be a "smart destination" (for example managing flow and touristic pressure in the city), it is considered a pioneer city in establishing the theme of "smart city" although they are measures just "on the paper".

*It is still **difficult to connect all tourism services that the city offers** in different platforms, because they do not exist yet or because they are not enough widespread (Interview n°1- CE business)*

*ICTs are key elements to align the concept of **responsible/ sustainable tourism** to get better experiences and connections with citizens (Interview n°2- Tourism Manager and Promoter)*

*The willingness of the city is to embrace new technologies. What happens now is that there are just measures "on the paper"; **the level of implementation of "smart destination" is very limited**, especially in pressure and flow management (Interview n°3- Researcher)*

*The city is receiving help and progress of new technologies. But **change is slow and everything is a process**. Gradually we will enter into the digital world (Interview n°6- CE Tourism Business)*

***Barcelona is a pioneer city in establishing the theme "smart city"** (Interview n°11- Tourism Manager)*

Q9- WHICH ARE THE MAIN CHALLENGES OF THE CITY RELATED WITH Q.8 ("SMART TOURISM")?

According to interviewees there are four main challenges to incorporate the term "smart tourism:

- Barcelona is not ready for this kind of new initiatives; a lot of effort from such different agents to embrace smart tourism.
- Technologies are not an end in itself, but should be formulas that help to give substance to certain projects.
- Accept the loose of control from the public administrations.
- Ensuring that technology will serve us not to fall into cultural generalizations. Keep adding fresh innovation and continue to maintain our identity of Barcelona as "mestizo" is very important and the role of technology is crucial. A present Barcelona but in continuous transformation.

Q10- WHAT IS SUSTAINABLE TOURISM FOR YOU? CAN YOU DESCRIBE IT?

Five interviewees attribute sustainable tourism to:

- The tourism that encourages and have a balance of economic, social, cultural and environmental aspects: 2 people- tourism researchers
- Long term continuity: 1 person from CE business

- Maximize its benefits and minimize its negative impacts: 1 person- tourism manager and promoter
- As a path, goal or direction where to go: 1 person- tourism researcher

*"Connection between people, while **long term continuity**" (Interview n°1- CE business)*

*"**Maximize its benefits and minimize its negative effects**" (Interview n°2- Tourism Manager and Promoter)*

*"Is that tourism **economically** viable, so think in the long run, **socially** fair so tries to avoid or reduce social discrimination and ensure maximum benefits to the local population and **cultural and environmentally** friendly" (Interview n°4- Researcher)*

*"Tourism that considerer the **environment** and also is responsible for **social and economic level**" (Interview n°7- Researcher)*

*"Sustainable Tourism is a little bit a kind of dream. I see it as a **goal**, the direction which we want to travel. I much prefer to talk about whether a company/individual is taking responsibility to be more sustainable. You can't be 100% sustainable; you can be closer to where you want to be" (Interview n°9- Researcher)*

There is one interviewee who prefers to use a "catch phrase" to express the meaning of Sustainable Tourism like:

"Good places to visit that are good places to live" (Interview n°3- Researcher)

Also, there are four interviewees representing who doubted when asking that question and finally they attribute sustainable tourism to; a) continue doing things rights, b) the kind of tourism that goes beyond the typical things, c) environmental issues, d) make better places to live, e) fulfill the expectations of tourists or f) behavioural actions related to transport or consciousness patterns when using energy.

"Continue doing things right, taking care of what we have and improve, but considering that you cannot grow to infinity" (Interview n°5- Tourism Business)

"It is a tourism that does not need a super structure to carry it out. Tourism that goes beyond the typical things. Not wanting to cheat tourists" (Interview n°6- CE Tourism Business)

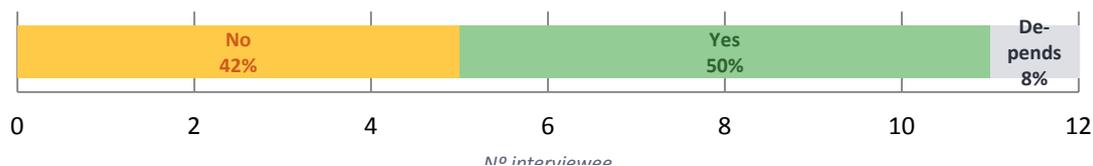
*"Low-impact tourism in **environmental** aspect. Tourists as observer" (Interview n°8- CE Promoter)*

"Tourism that make better the place and the people who welcome" (Interview n°10- CE Business)

*"Tourism that allows to **fulfills the expectations of tourists** while guaranteed of the non-destruction and maintenance of the **space and all actors** involved in tourism" (Interview n°11- Tourism Manager)*

"It can be one that encourages public transport, Incentive for hotels to be converted using renewable energies, it cannot exist in a city" (Interview n°12- Tourism Business)

Q11- DO YOU THINK TOURISM IN BARCELONA IS SUSTAINABLE NOWADAYS?



Graph 11- Do you think tourism in Barcelona is Sustainable nowadays?

A total amount of 42% of the interviewees which includes the opinion of the four researchers interviewed considers that tourism in Barcelona is not sustainable nowadays because:

Is based basically with and for profit (Interview nº1- CE business)

Barcelona tries, but the distinction relies on what depends on the governance of the city and depends on business (Interview nº3- Researcher)

Barcelona has significant challenges. Economic point of view, try to ensure that tourism contributes the highest percentage of destination and the benefits to local people, social level to try to reduce the negative perception of tourism, with more integration of local culture, and environmentally basically deconcentration resulting in reduction of waste, improved noise and the improvement of environmental management (Interview nº4- Researcher)

If nothing is done at the administration level the "brand Barcelona" might disappear, Barcelona must necessarily lower the number of visitors, carrying capacity is in its limit (In Interview nº7- Researcher)

Sustainability issues are still a drop in the ocean and my worry is that the scale of the problem is growing faster than the scale of the solution, so the volume of unsustainable tourism arriving to Barcelona is growing much faster than these wonderful initiatives that we have of sustainability (Interview nº9- Researcher)

While 50% consider tourism in Barcelona is sustainable, with the following comments:

It must has higher profits, because if not, we would not accept it and it would be unsustainable (Interview nº2- Tourism Manager and Promoter)

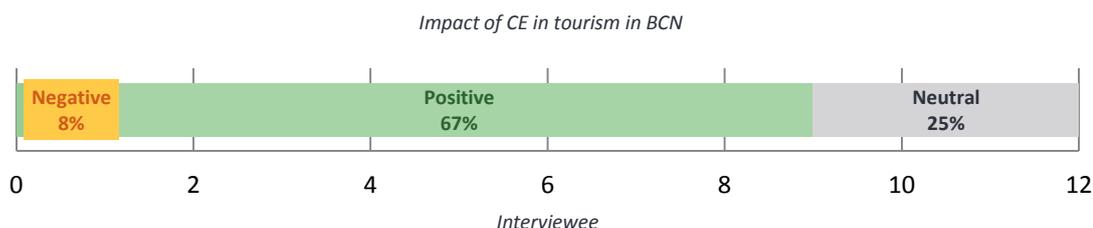
For me, it is sustainable, but it seems to be it is in his limit, though people want more flow. I think if the flow of the city can be distributed to different areas, probably there is still a growth potential (Interview nº8- CE Promoter)

I think it is sustainable, but we could talk in terms of scale if sustainability is touching the limits of tolerance. The question is to manage the space of the city and know what kind of tourism we want (Interview nº11- Tourism Manager)

Nowadays it is sustainable, but it was more sustainable before (Interview nº12- Tourism Business)

Finally, one respondent (Interview nº6- CE Tourism Business) thinks that sustainability depends on the district, so it is not possible to say Yes or No in a general context.

Q12- DO YOU THINK THAT THE CE CAN PLAY AN IMPORTANT ROLE IN THE SUSTAINABILITY OF THE CITY?



Graph 12- Impact of CE in Barcelona's tourism

One interviewee (from the tourism business) considers that CE would cause a negative impact on the sustainability of tourism, while 58% (2 CE- Tourism Business, 2 Tourism Manager, 2 Researchers and one CE promoter) considers that CE would influence positively to the sustainability of tourism in Barcelona. Table 9 shows the correlation between the impacts of CE into the city with the criteria expressed from the interviewees.

IMPACT	CRITERIA	Nº INTERVIEWEES
POSITIVE	More integrated in population/ more integration in the tourist destination, and meet the need of bringing cultures and contact people/ Connect with locals/ densifies social relationships	5
	CE are elements that encourage better economic flow and distribution of influxes from the tourism sector	4
	More positive impact in areas where tourism does not have presence	1
	Activities relieving the pressure on the overcrowded areas of the city.	1
	Brings autonomy to people	1
NEGATIVE	The more distribution you have more friction you win	1
	Could adversely affect the traditional tourism sector (jobs ...)	1
	Influences in the city taking part of the income of legal establishments	1
	Such initiatives may endanger the local community and the tourist experience	1
NEUTRAL	Environmental assessment should be done	1
	When something becomes popular can stain what is called as sustainable tourism.	1
	The concept of sharing economy really maximizing the benefits for people that needed the most. But it is very utopic, because the people that need things the most have the least power.	1
	The city doesn't have to loose in the processes of CE's incorporation	1
	EC must add! If the very idea of CE is to strengthen the sustainability , its inclusion will only improve	1

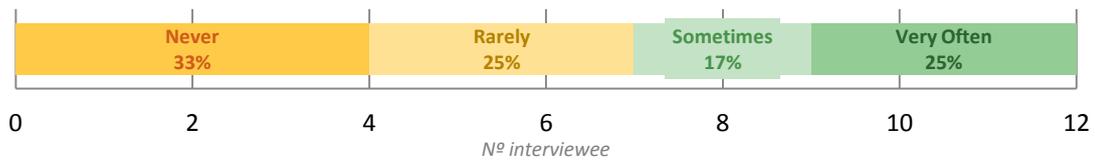
Table 9- Impacts of CE into sustainability of tourism in Barcelona

Q13- HAVE YOU EVER USED ANY PRODUCTS OR SERVICES UNDER THE CE?



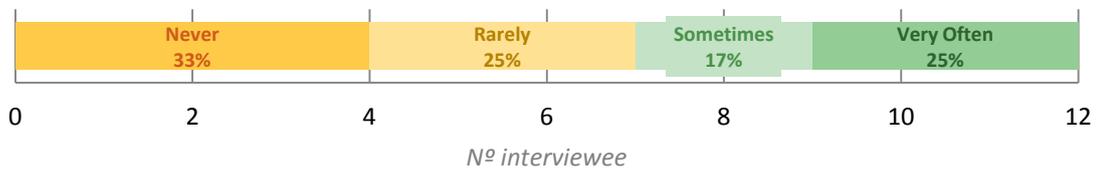
Graph 13- Have you ever used any products or services under the CE?

Q14- HOW OFTEN DO YOU “CONSUME” PRODUCTS OR SERVICES DERIVED FROM THE CE?



Graph 14- How often do you “consume” products or services derived from the CE in tourism (as a travel or as a host for example)?

Q15- HOW OFTEN DO YOU “CONSUME” PRODUCTS OR SERVICES DERIVED FROM THE CE IN TOURISM (AS A TRAVEL OR AS A HOST FOR EXAMPLE)?



Graph 15- How often do you “consume” products or services derived from the CE?

Q16- WOULD YOU BE INTERESTED IN PARTICIPATING IN THE CE IN THE FUTURE?

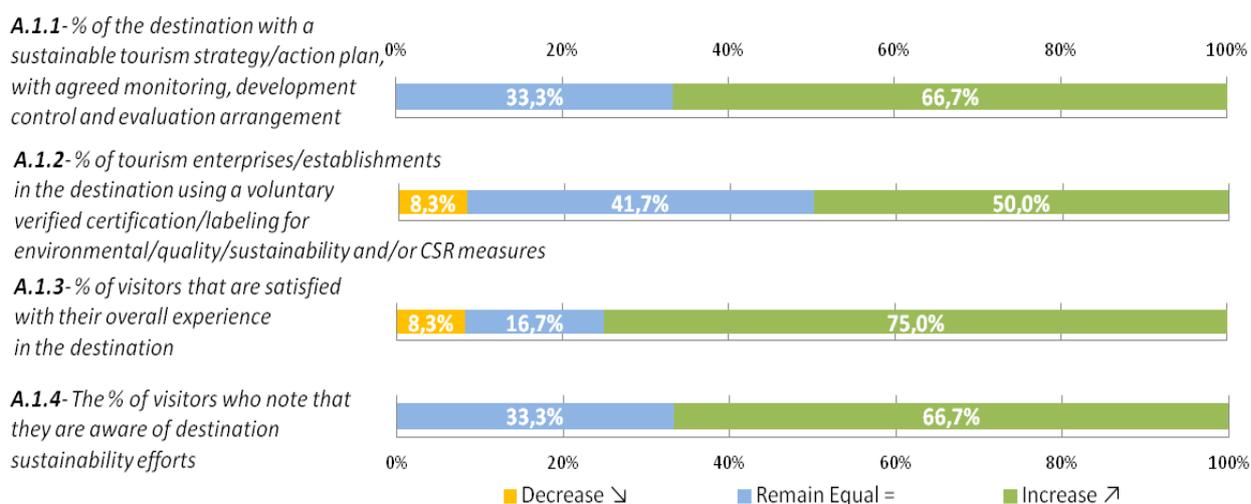
All interviewee’s would be interested in participating in the CE in the future.

6.2 EVALUATION OF ETIS SURVEY FROM EXPERTS

In this section results from the survey of the evaluation of ETIS system for ST destinations are shown. It may be recalled that the evaluation of indicators wants to show the impact of the CE into the sustainability of tourism in Barcelona, reason why interviewees answered each indicator considering the possible influence that CE might have to each of them.

The indicators are clustered to the following criteria: economic, social and cultural, environmental and management.

DESTINATION MANAGEMENT INDICATORS



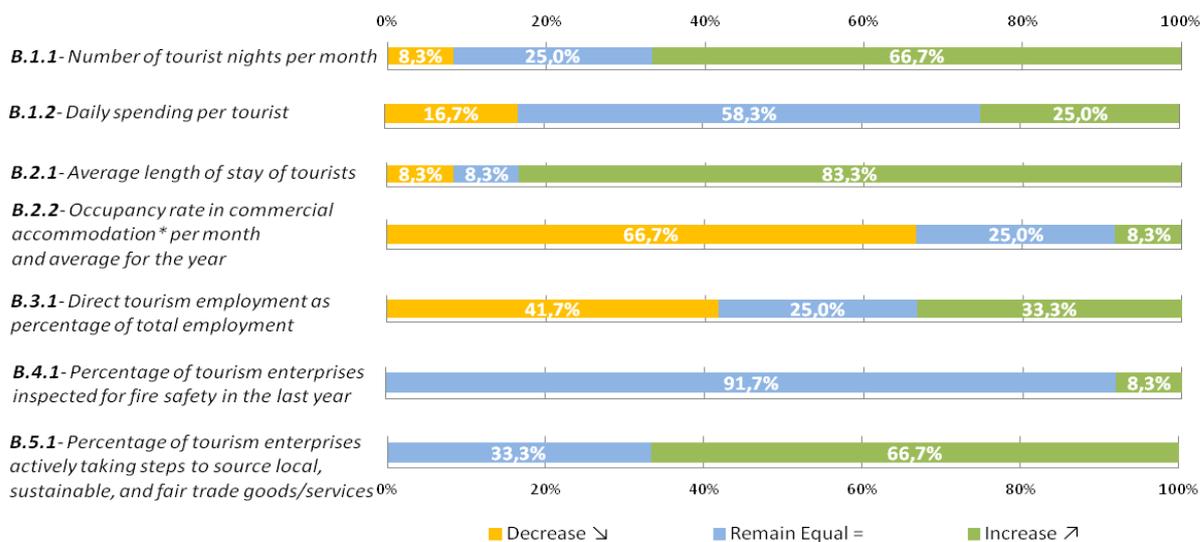
Graph 16- Results of Management Indicators according to experts

Indicators **A.1.1** and **A.1.4** of Graph 16 have the same value of results, representing 33,3 % of interviewees who consider that these two indicators would remain the same with the influence of CE, while 66,7 % think the value of those indicators would increase with CE. On the other hand, indicators **A.1.2** and **A.1.3** show a majority of respondents (more than 50 %) who believe that the value of those indicators would increase with CE. In general, indicators for destination management would increase their value with the incorporation of CE in Barcelona.

ECONOMIC INDICATORS

Graph 17 shows the results of the economic indicators of the survey. According to interviewee's responses, it can be seen a trend of those indicators that would decrease their value because of CE influence like; 1) occupancy rate in commercial accommodation (67%) and 2) the direct tourism employment as percentage of total employment (41%). On the other hand, those indicators that, according to the vast majority, won't be influenced by CE are the daily spending per tourist and the percentage of tourism inspected for fire safety. Furthermore, there are three indicators which according to the interviewees their value will increase with CE incorporation; 1) nº of tourist nights per month (66,7%), 2) average length of stay of tourists (nights) (83,3%) and 3) percentage of tourism

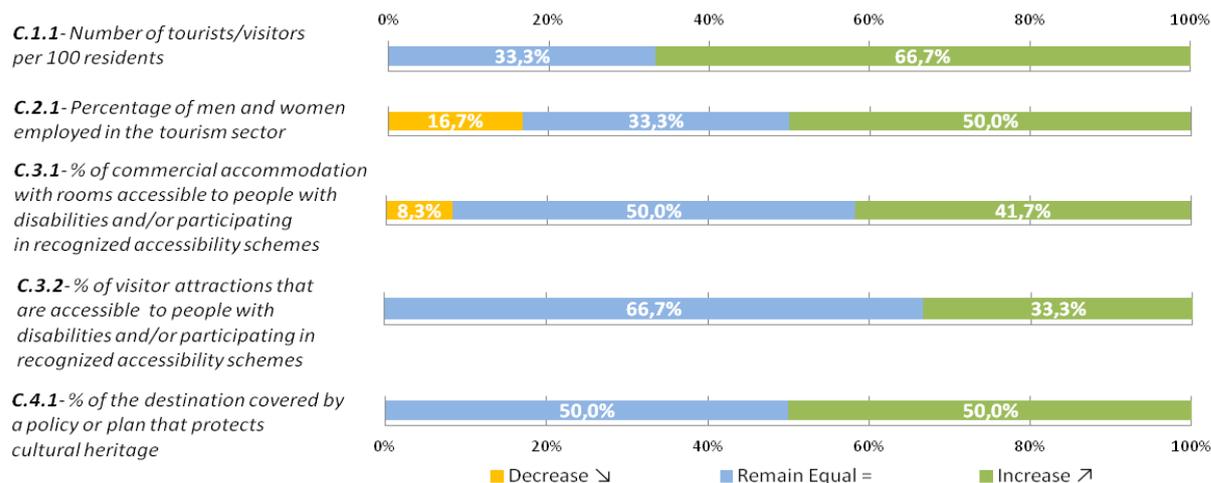
enterprises actively taking steps to source local, sustainable and fair trade goods and services (66,7%).



Graph 17- Results of Economic Indicators according to experts

SOCIAL AND CULTURAL INDICATORS

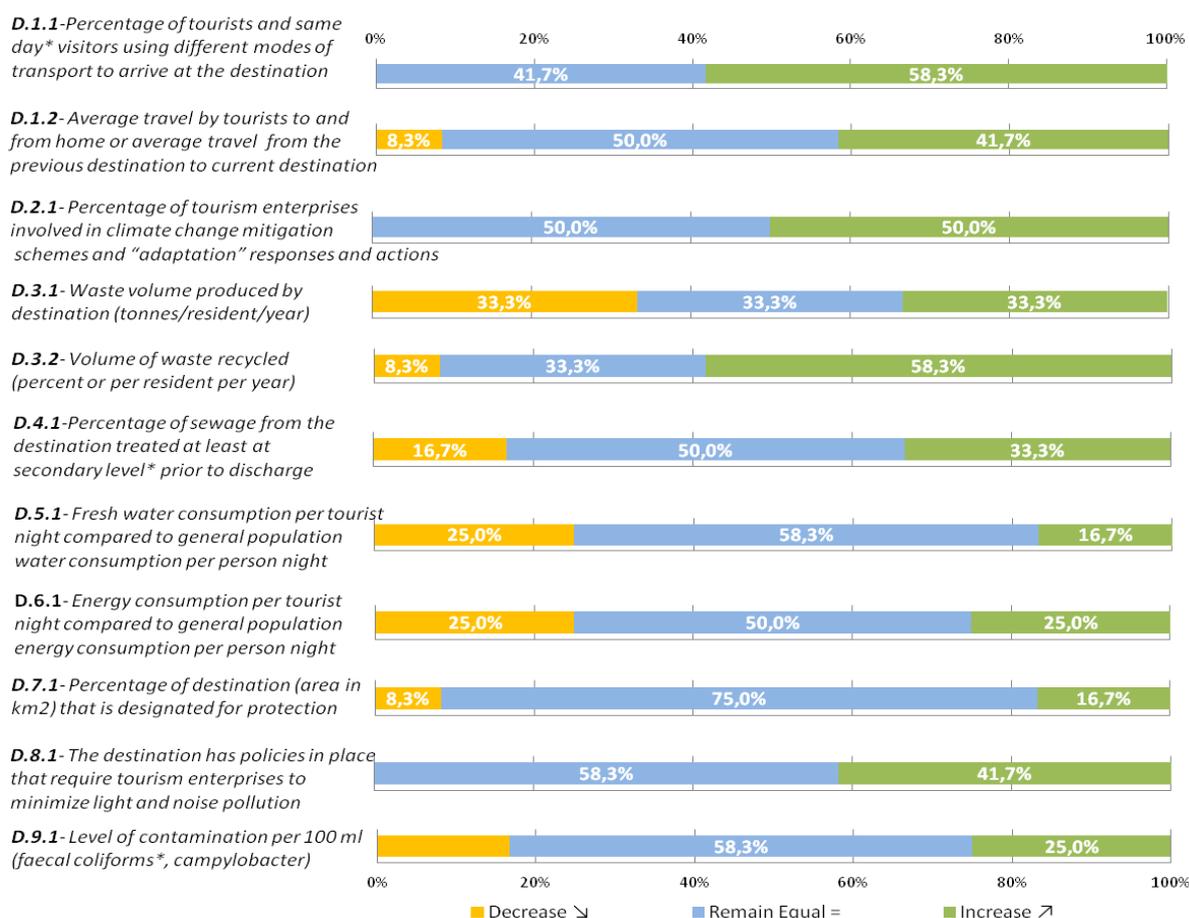
For social and cultural indicators, the trend is less clear than in the economic indicators. There is just one indicator; number of tourists/visitors per 100 residents that presents a high percentage (66, 7%) pointing an increase of the indicator’s value due to CE influence. All the other indicators shown in Graph 18 do not present a clear trend. However it can be observed that the value of social and cultural indicators, in general, trend to remain the same or increase with the CE’s influence rather than decrease.



Graph 18- Results of Social and Cultural Indicators according to Experts

ENVIRONMENTAL INDICATORS

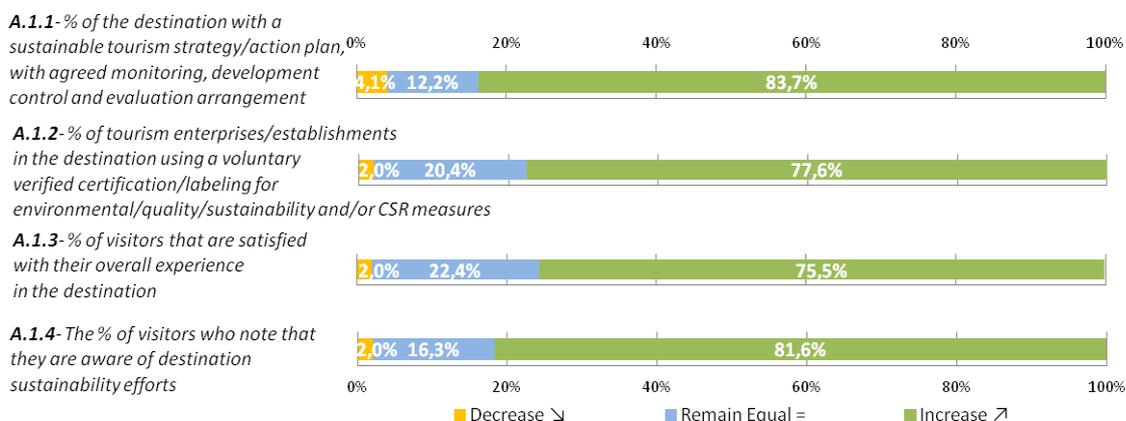
Error! No se encuentra el origen de la referencia. shows the results for the environmental indicators. The following indicators: **D.1.1**, **D.2.1** and **D.8.1** present all of them similar responses with about 50% of interviewees who consider that these indicators would remain equal with the influence of CE in tourism in Barcelona and about 50% of respondents who consider that the value of these indicators would increase. **D.3.1** indicator (waste volume produced by Barcelona) presents equal values with 33, 3% each. There are 6 indicators (**D.1.2**, **D.4.1**, **D.5.1**, **D.6.1**, **D.7.1** and **D.8.1**) which the respondents expressed a vast majority of that these indicators would remain the same, without influence. Finally, indicator **D.3.2** presenting the volume waste recycled in Barcelona would increase according to 58,3% of the respondents.



Graph 19- Results of Environmental indicators according to experts

6.3 EVALUATION OF ETIS SURVEY FROM STUDENTS

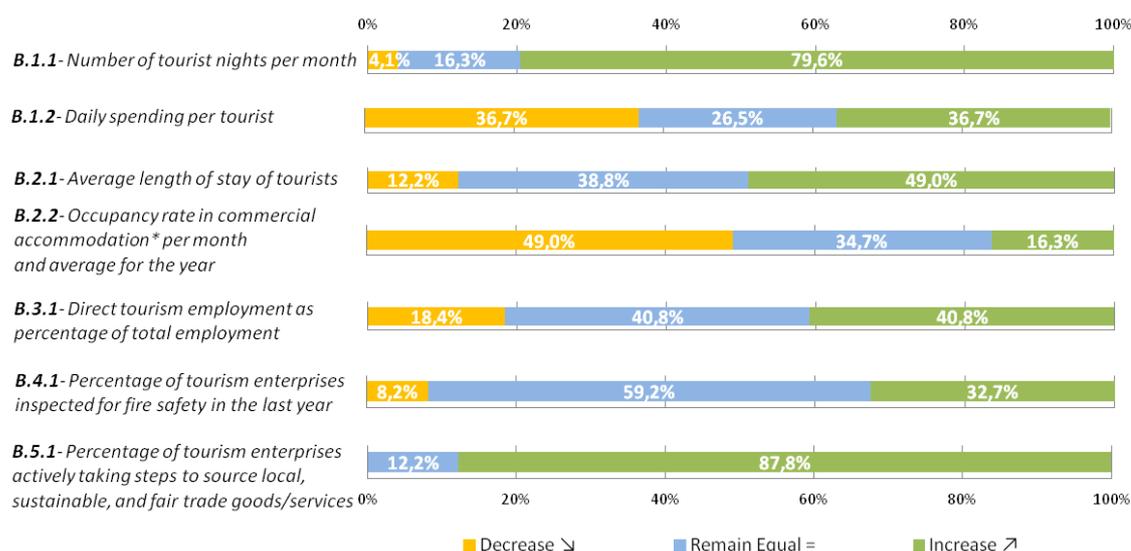
DESTINATION MANAGEMENT INDICATORS



Graph 20- Results of Management Indicators according to Students

According to the 49 students interviewed, the four management indicators from the ETIS system would increase their value with the influence of CE (as shown in Graph 20).

ECONOMIC INDICATORS

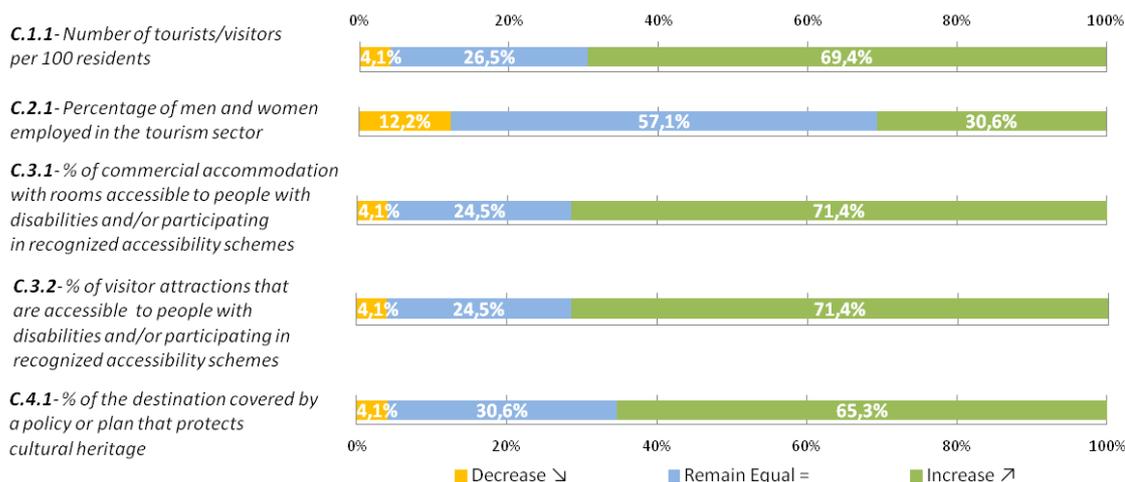


Graph 21- Results of Economic Indicators according to Students

Economic indicators B.1.1 and B.5.1 would increase according to 79,6 % and 87,7 % of students respondents, while B.2.2 (occupation rate in commercial accommodation) would decrease because of the CE for 49% of the students.

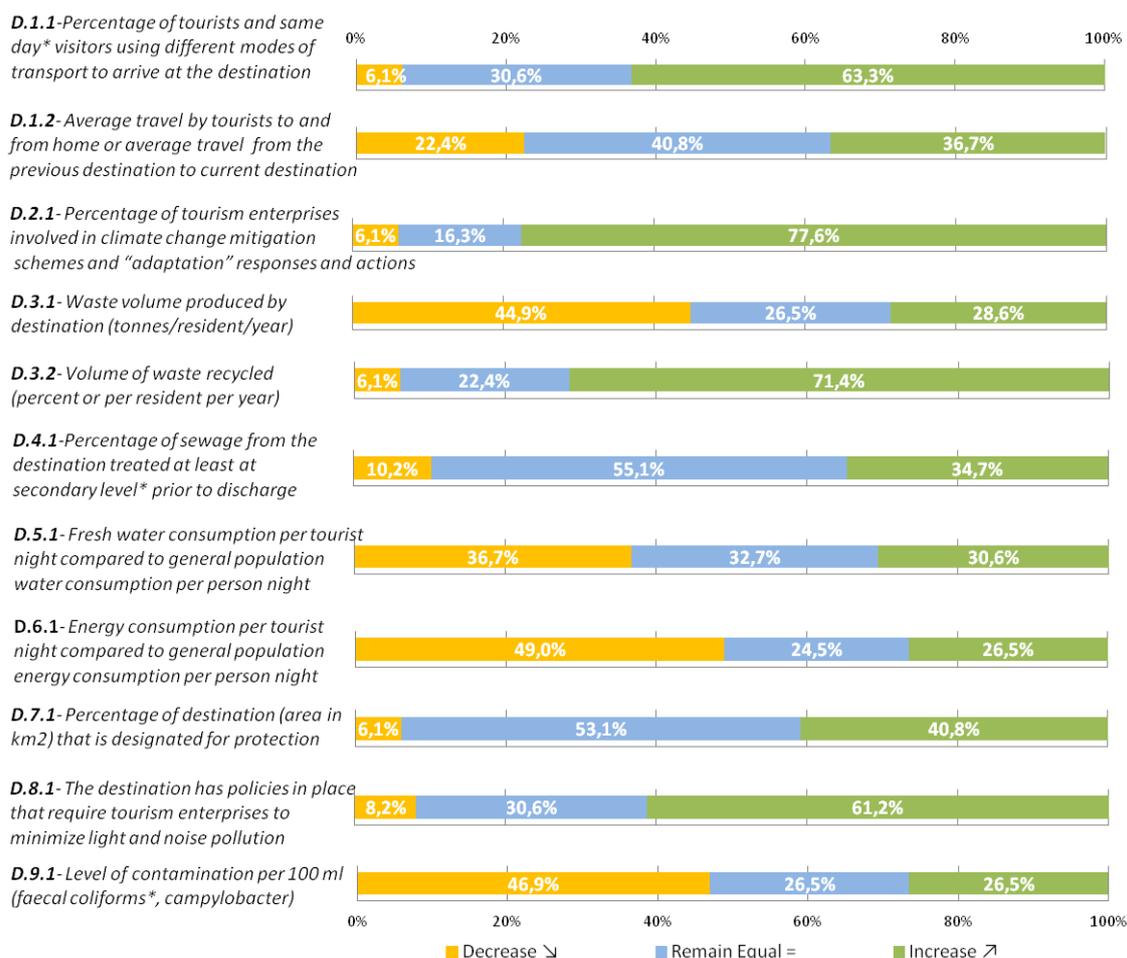
Social and Cultural Indicators C.1.1 (69,4 %), C.3.1 (71,4%), C.3.2 (71,4%) and C.4.1 (65,3%) would increase their value while indicator C.2.1 –the percentage of men and women employed- would remain the same according to 57,1 % of students respondents.

SOCIAL AND CULTURAL INDICATORS



Graph 22- Results of Social and Cultural Indicators according to Students

ENVIRONMENTAL INDICATORS



Graph 23- Results of Environmental indicators according to Students

Indicators D.1.1, D.2.1, D.3.1 and D.8.1 would increase, while indicators D.3.1, D.5.1, D.6.1 and D.9.1 would decrease their value and D.1.2, D.4.1 and D.7.1 would remain equal.

7 DISCUSSION

The main goal of this project is to explore how the CE might influence the sustainability of tourism in Barcelona. In order to achieve this, twelve interviews with experts and 49 surveys with students were carried out. The discussion of the project is made from the results and it is divided into the following sections: Collaborative Economy, Tourism in Barcelona, Sustainable Tourism, CE influence on the sustainability of tourism in Barcelona and, finally, a general discussion.

Collaborative Economy

More than 75% of the interviewees were familiar with the CE and were able to provide a definition of CE (which took into account three criteria: connectivity, community building and the purpose of satisfying needs). Nonetheless, among only 12 respondents, 17 discrete terms or criteria are used to define CE. This fact attests to the present state of CE, which seems to defy a clear definition for many stakeholders. There is still not a common definition among the stakeholders involved in this new trend. Defining the CE and providing a precise description to distinguish it is becoming increasingly challenging, but precision and accuracy are important to strengthen its identity and capacity to create impact.

AirBnb, EatWith and Carsharing, all newly founded companies which facilitate, respectively, the sharing of accommodation, meals and transport, were the best-known companies inside the CE among the interviewees. Before there were activities between people who know each other (family or friends) or occurred in special occasions that appeared casually without planning them (meeting somebody in a middle of a journey who you didn't expect and invites you to his/her house for example). Nowadays certain platforms have taken advantage of the ICTs, and transform the casualty into causality since peers willing to share a certain good or service can be chosen through this networks.

AirBnb, EatWith and Carsharing have monetary transactions between "unknown" peers for services, which attest some of the interviewees's responses when they associate CE with monetary exchanges to satisfy economic needs through building trust between strangers.

The magic of being surprised to meet somebody turns into the magic of expecting to know your new peer. Because now, you might have the security of knowing you are going to meet somebody. As Interviewee 3 expressed: "Friendship, hospitality, welcoming the stranger has always existed, but the big change now is the ability to offer it to everyone".

Tourism in Barcelona

In general terms, and to conclude this part of the discussion, the main driver forces of the city in terms of tourism according to interviewees are: the City Hall and Hoteliers. For the respondents tourism is characterized by 1) two different types of tourists (the one with sandals and socks who follows the icons of the city and the one that seeks to discover the real Barcelona trying to be a "local" for some days); 2) heterogenic and diverse model with

a 3) high volume of visitors and 4) seasonally adjusted. Diverse and Success are the two words chose to describe the tourism in Barcelona.

There are three factors needing to consider in this part. First, the definition provided by the respondents matches with the literature review done, which strengthens the power of Barcelona due to its welfare economic impact and its capacity to generate employment, opportunities and openness to the world. On the other hand, there is also a negative impact according to the interviewees and literature, basically the need *to take the pressure off* the city center, a better management of friction between tourists and locals and the capacity of the city to maintain its cultural heritage- its capacity to host millions of tourists without losing its essence. Finally the importance of improving management in some specific areas, for example, the carrying capacity of the city.

Sustainable Tourism

There is still a lack of comprehension and understanding of the concept of ST from some of the experts interviewed. Just three interviewees provided a definition of ST as a concept which includes social, environmental and economic aspects with a long term perspective and one respondent considered ST as a path or a goal. One interviewee considered ST that one minimizing its negative impacts ad maximizing its benefits. All of these agents were experts inside R&D field and one from the public administration managing tourism.

All the other interviewees, mostly from the private sector, were unable to express their comprehension of the concept, associating it to: 1) environmental issues (without considering economic and social welfare) 2) continuing doing the same things, but improving them (lack of being precise) or 3) that tourism that fulfills the expectations of tourists (tourist centered perspective). All of these characteristics give us a lack of accuracy to the concept, difficult to measure, without a holistic perspective and associating sustainability just with environmental issues. There is still a misunderstanding of ST concept.

Barcelona is considered a sustainable destination by 50% of the interviewees in terms of tourism, while 43% consider it is not. Sustainability is still a drop in the ocean as Interviewee 9 expressed; from the economic point of view, tourism should contribute to the highest percentage of benefits to local people, on a social level, tourism should reduce its punctual negative social perception with more integration of local culture, and environmentally basically deconcentration resulting in reduction of waste, improved noise and environmental management is needed.

How can the CE influence the sustainability of tourism in Barcelona according to the stakeholders?

Economically, according to the interviews the CE can improve the distribution of income to all areas of the city, rather than just the city centre, but this would also create more frictions between visitors and locals in areas there were not used to have such a large number of tourists. CE could affect a decrease of the occupancy rate in “commercial accommodation” and so it would decrease the direct tourism employment.

From a social and cultural perspective, the stakeholders claim that the CE could provide more tourists to the Catalan capital, which would mean more income but again more friction to some areas that have already a lot of tourism or to new districts which were not used to receiving tourism causing social and spatial confrontations.

The necessity to take awareness on the carrying capacity concept has also been shown from the expert's opinion. Even though it is difficult to measure, experts from different backgrounds expressed their worry about this issue. More tourists would mean bigger challenges to manage them.

At the same time, the public administrations and especially the big lobbies from the touristic sector (which are the main driver forces of the touristic industry in Barcelona) must act consequently with this situation. Since the most significant amount of tourism that the city receives nowadays is from "traditional" tourism. There must be a balance between growing and promoting Barcelona with the number of visitors that the city can support, if not Barcelona will turn into a theme Park full of hotels and souvenir shops and its historical identity would be lost without space for neighbors and locals. As interviewee 9 expressed, "*Barcelona is a cow, and we know that the cow makes milk but we don't think we have to give the cow any food. Do you know what will happen to that cow right? It will die*".

Environmental indicators would not have drastic varieties with the incorporation of CE in the city of Barcelona according to experts. There was a common confusion when asking about some indicators, such a waste of volume or sewage treatment, because they associated environmental management with the public administrations. However, the students' opinions differed from experts when evaluating the environmental indicators; as the majority of them concluded that the waste volume produced by Barcelona, the energy consumption per tourist and the level of contamination on water would decrease. On the other hand, the percentage of tourism enterprises involved in climate change mitigation schemes and the volume of waste recycled would increase because of the CE.

Finally, according to the stakeholders and their evaluation of destination management indicators, there would be more visitors satisfied and visitors who note that Barcelona is aware of destination sustainability. Also there would be more sustainable strategies to achieve a common path actively taking steps to source local, sustainable and fair trade goods and services.

Final discussion

A total amount of 67% of the interviewed consider that CE may influence positively the sustainability of tourism in Barcelona, basically because it will provide: 1) more integration between locals and visitors, which will meet the need of bringing cultures and people together and encouraging social relationships and 2) a better distribution of income from the tourism sector. That means less pressure to those zones that nowadays are overcrowded and generating influx to some districts where there were not used to receiving visitors.

On the other hand, we find 8% of the respondents who consider that CE would affect the city in a negative way because: it could cause more friction because of the increase of

visitors and could adversely affect the traditional tourism sector. Also the CE could take part of the income from the legal establishments and such initiatives may endanger the local community and the tourist experience, which is related with the discussion about regulation that the city has nowadays.

Also, as we saw, if one of the main principles of CE is to improve the sustainability, enterprises and actors involved in CE must have a better understanding of the concept and know how to make the difference for it.

Finally, all the enterprises and projects flourishing under the CE, must understand the concept of CE “in depth” to ensure that “collaborative greenwashing” is not coming up with this new trend.

As a final point, to connect the discussion with the hypothesis formulated at the beginning, the following statements are achieved:

1. The CE can improve the sustainability of tourism in Barcelona in certain aspects, especially in the social and cultural issues.
2. The main economic impact of CE is a better distribution of the income generated.
3. The social impact related to CE is highly associated with its capacity to dilute mass tourism.
4. One of the big challenges of CE is to measure its contribution to mitigate the environmental impact; nonetheless it is also a big challenge for the public institutions to evaluate the environmental impact in the touristic sector.

7.1 LIMITATIONS

- It is often difficult to identify the “right” experts when processes of institutions are interested, for example.
- The issue of time restrictions: the expert’s time to make the interview often have to be calculated and limited.
- Also, experts demand a high level of expertise from the interviewer.
- The problem of confidentiality, delicate issues for an organization, also in competition with other players in the market, are mentioned.
- Skype has the disadvantage that it is more impersonal than a face-to-face interview, and provides less contextual information. This situation may have made the interviewees feel uncomfortable and could have lead to errors such as bias or answer distortion (Diekmann, 2009, p. 446f.).
- The recorded observations about a group of people or event are never going to be the full description.
- Due to the selective nature of any type of recordable data process, it is inevitably influenced by researchers' personal beliefs of what is relevant and important.

- This is also plays out in the analysis of collected data; the researcher's worldview invariably influences how he or she interprets and evaluates the data.

7.2 CONCLUSIONS

The conclusions of the case according to the objectives are:

Experts are familiar with CE concept, but there is a lack of knowledge to describe the concept.

Managers and researchers have a better understanding of tourism compared with business people.

Duality exists when describing sustainable tourism in Barcelona. This duality exists also with the concept of sustainable tourism, since some people attribute it just to environmental factors.

CE might influence the indicator system for sustainable tourism in the following ways:

It could ensure that more visitors are satisfied, more sustainable strategies, more distribution of income and social integration. On the other hand, the CE could negatively affect the direct employment and income of the traditional tourism sector. Also, it could generate more friction in areas that they are not used to receiving tourists in the past since the greater the number of tourists it has, and these tourists are distributed around the city, the greater the social friction.

7.3 QUESTIONS FOR FURTHER RESEARCH

After concluding the present project, there are several points that would be interesting for future research:

- A better understanding of CE definition in terms of how to differentiate it from the “traditional economy” and identify common principles and issues to identify projects under the CE.
- Evaluate the ETIS indicator system in the city of Barcelona and provide a common and forward- looking system to monitor and manage sustainability of tourism in Europe with the same parameters and barriers for all destinations.
- Explore a quantitative evaluation of the impact that CE might have in the sustainability of tourism in Barcelona (for that you first need to have a complete indicator system evaluated- for example ETIS-).

8 REFERENCES

- Avancar (2014) collaborative consumption trends in Spain [WWW]. Avancar. Available from: <http://client.avancar.es/newsletter/infograficoPAYL-enero14.pdf> [Accessed:1-02-2014]
- Bakkes, J. (1997). Conclusion. In B. Moldan, S. Billharz, & R. Matravers (Eds.), *Sustainability indicators: A report on the project on indicators of sustainable development* (pp. 396–398). Chichester: John Wiley and Sons.
- Bakos, J. Yannis (1991), “A Strategic Analysis of Electronic Marketplaces,” *MIS Quarterly*, 15, 3, 295–310.
- Balibrea, M. P. (2001). Urbanism, culture and the post-industrial city: challenging the “Barcelona model”. *Journal of Spanish Cultural Studies*, 2(2), 187e210.
- Barcelona City Hall (2013a) Anuari Estadístic de la ciutat de Barcelona [WWW] Available from: <http://www.bcn.cat/estadistica/catala/dades/anuari/cap13/C1301020.htm> [Accessed: 02-05-14].
- Barcelona City Hall (2013b) Other relevant indicators [WWW]. Available from: <http://governobert.bcn.cat/es/transparencia/otros-indicadores-relevantes> [Accessed: 07-02-14]
- Barcelona City Hall (2013c) Turismo y Hostelería, Informe Sectorial 2013. [WWW]. Available from: http://w27.bcn.cat/porta22/images/es/Barcelona_treball_Informe_sectorial_turismo_hosteleria_2013_es_tcm24-32845.pdf [Accessed: 17-03-14]
- Barcelona Turisme (2012) Memoria de la sostenibilidad turística de Barcelona [WWW]. Available from: <http://w42.bcn.cat/web/cat/media-room/presentacions/index.jsp?componente=201-111315> [Accessed: 08-02-14]
- Barcelona Turisme (2013) Tourism Statistics in Barcelona and regions Barcelona for 2013. [WWW]. Available from: <http://professional.barcelonaturisme.com/imgfiles/estad/Est2013.pdf> [Accessed: 07-02-14]
- Bardhi, F., & Eckhardt, G. (2012). Access based consumption: The case of car sharing. *Journal of Consumer Research*, 39, 881–898.
- Bauman, Z. (2003). *Liquid love: On the frailty of human bonds*. Cambridge: Polity Press.
- Bauwens, M. (2005, March 01). P2P and human evolution: Peer to peer as the premise of a new mode of civilization. Retrieved from http://p2pfoundation.net/P2P_and_Human_Evolution
- Belk, R, 2013. You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*. JBR-07920
- Belk, R, 2013. You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*. JBR-07920
- Belk, R. (2010). Sharing. *Journal of Consumer Research*, 36, 715–734.

- Beloso, C (n.d) Brand building, city building [WWW]. Available in: <http://w2.bcn.cat/bcnmetropolis/en/dossier/construir-marca-fer-ciutat/> [Accessed: 20-05-14]
- Benach rovira, N. (1993): "Producción de Imagen en la Barcelona del 92", Estudios Geográficos, vol. LIV, nº 212, pp. 453-504.
- Blancas, F.J., González, M., Lozano-Oyola, M., Pérez, F., 2010b. The assessment of sustainable tourism: application to Spanish coastal destinations. *Ecol. Indicators* 10, 484–492
- Bogner, A. And Menz,W. (2002) “Das theoienerierende Experteninterview-Erkenntnisinteresse Wissensform, Interaktion“ in A.Bogner, B.Littig and W. Menz (eds.) *Das Experteninterview- Theorie, Methode, Anwendung*. Opladen: Leske & Budrich, pp. 33-70.
- Botsman, R., & Rogers, R. (2010). *What's mine is yours: The rise of collaborative consumption*. New York: Harper Collins.
- Butler, R (a) 1996. The Concept of Carrying Capacity for Tourism Destinations: Dead or Merely Buried? *Progress in Tourism and Hospitality Research* 2(3–4):283–293.
- Butler, R (b) 1998. Rural recreation and tourism. In B. Ilbery (Ed.), *The geography of rural change* (pp. 211–232). Harlow: Addison Wesley Longman.
- Butler, R (c) 1999. Sustainable Tourism: A State of the Art Review. *Tourism Geographies* 1:7–25.
- Cals, J. (1974). *Turismo y política turística en España. Una aproximación*. Barcelona: Ariel.
- Cañigüeral, A (2012) *Introduction to Collaborative Consumption*. Creative Commons
- Capron, A.M. (1989). Human experimentation. In R.M. Veatch (Ed.), *Medical ethics* (125-172). Boston: Jones & Bartlett.
- Carroll, E., & Romano, J. (2011). *Your digital afterlife:When Facebook, Flickr and Twitter are your estate, what's your legacy?* Berkeley, CA: New Riders.
- CONSUMOCOLABORATIVO (2014) *Directorio de Consumo Colaborativo en España* [WWW]. Available from: <http://www.consumocolaborativo.com/directorio-de-proyectos/> [Accessed:20-01-2014]
- Crabtree, R., & Bayfield, N. (1998). Developing sustainability indicators for mountain ecosystems: a study of the Cairngorms, Scotland. *Journal of Environmental Management*, 52, 1–14.
- Danielle Sacks (2011) *The Sharing Economy* [WWW] Fast Company. Available from: <http://www.fastcompany.com/1747551/sharing-economy> [Accessed:1-04-2014]
- David, P. (2005). From keeping 'nature's secrets' to the institutionalization of 'open science'. In R. Ghosh (Ed.), *CODE: Collaborative ownership and the digital economy* (pp. 85–108). Cambridge, MA: MIT Press.
- Deighton, John and Leora Kornfeld (2009), “Interactivity's Unanticipated Consequences forMarketers andMarketing,” *Journal of Interactive Marketing*, 23, 1, 4–10.
- Denzin, Norman K., and Yvonna S. Lincoln, eds. 1994. *Handbook of Qualitative Research*. Thousand Oaks: Sage.

- Diekmann, A. (2009). *Empirische Sozialforschung*. Hamburg: Rowohlt Taschenbuch Verlag.
- Döbler, T. (2010). Wissensmanagement: Open Access, Social Networks, ECollaboration. In W. Schweiger, & K. Beck, *Handbuch Online Kommunikation* (pp. 385-408). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Duran, P, The impact of the Olympic Games on tourism- Barcelona: the legacy of the Games 1992-2002. 2002. Chapter of Miquel de Moragas i Miquel Botella ; Barcelona: l’herència dels Jocs. 1992-2002. Centre d’Estudis Olímpics UAB, Planeta, Ajuntament de Barcelona.
- EUROPEAN COMMISSION (2014) European Tourism Indicators System: for Sustainable Management at Destination Level [WWW]. Available from: http://ec.europa.eu/enterprise/sectors/tourism/sustainable-tourism/indicators/index_en.htm [Accessed: 06-02-14]
- European Commission – Tourism Sustainability Group. (2007). Action for more sustainable European tourism. Report of the Tourism Sustainability Group.
- Farsari, Y., Prastacos, P., 2002. Sustainable tourism indicators. Case-study for the municipality of Hersonissos. In: Paper Presented at the International Scientific Conference on “Tourism on Islands and Specific Destinations”, Chios.
- Flick U. 2009. *An Introduction to Qualitative Research*. SAGE Publications Ltd
- Flick, U (1992) “ Triangulation Revisited: Strategy of or Alternative to Validation of Qualitative Data” *Journal for the Theory of Social Behaviour*, 22:175-197
- Flick, U (2004) “Triangulation in Qualitative Research” in U. Flick, E.v. Kardorff, and ISteinke (eds.), *A companion to Qualitative Research*. London: SAGE, pp 178- 183.
- Flick, U (2007) *Managing Quality in Qualitative Research*. London: SAGE.
- Gahin, R., Veleva, V., & Hart, M. (2003). Do indicators help create sustainable communities? *Local Environment*, 8(6), 661–666.
- Gansky, L. (2010). *The mesh: Why the future of business is sharing*. New York: Portfolio Penguin.
- Garcia, LI (2013), Sobre la relació entre turisme, patrimoni i ciutadania. *Revista bibliogràfica de geografia y ciencias sociales Universidad de Barcelona* ISSN: 1138-9796. Depósito Legal: B. 21.742-98
- Germann,J.(2013) Social Networking Technologies And The Moral Economy Of Alternative Tourism: The Case Of Couchsurfing.Org. *Annals of tourism Research* Volume 43, October 2013, Pages 210–230
- GERMANN,J.(2013) Social Networking Technologies And The Moral Economy Of Alternative Tourism: The Case Of Couchsurfing.Org. *Annals of tourism Research* Volume 43, October 2013, Pages 210–230
- Gossling, S.2000 Sustainable Tourism Development in Developing Countries: Some Aspects of Energy Use. *Journal of Sustainable Tourism* 8:410–425.
- Hammond, A., Adriaanse, A., Rodenburg, E., Bryant, D., & Woodward, R. (1991). *Environmental indicators: A systematic approach to measuring and reporting on environmental policy performance in the context of sustainable development*. Washington, DC: World Resources Institute.

- Hantman, D (2014) Barcelon by the numbers. Airbnb. Available from: <http://publicpolicy.airbnb.com/barcelona-numbers/> [Accessed: 15-04-14].
- Heinrichs, H (2013) Sharing Economy: A Potential New Pathway to Sustainability GAIA 22/4 p. 228– 2 31
- Heinrichs, H., H. Grunenberg. 2013. Sharing economy: Towards a new culture of consumption? Lüneburg: Centre for sustainability Management.
- Hughes, G., and P. Furley 1996 Threshold, Carrying Capacity and the Sustainability of Tourism: A Case Study of Belize. *Caribbean Geography* 7(1):36–51.
- JICK, Todd D. (1983) Mixing Qualitative and Quantitative Methods: Triangulation in Action. In: Van Maanen, John (ed.). *Qualitative Methodology*, Newbury Park, London, New Delhi: Sage Publications, 135-148
- Jick,T (1983) “Mixing Qualitative and Quantitative Methods: Triangulation in Action” in J.v. Maanen (ed), *Qualitative Methodology*. London: SAGE. Pp 135-148.
- Kelly, G., Baker, B. (2002). An evaluative framework and performance measures for the sustainable regions programme. Final report to the department of transport and regional services, Canberra.
- Kozinets, Robert V. (1999), “E-Tribalized Marketing? The Strategic Implications of Virtual Communities of Consumption,” *European Management Journal*, 17, 3, 252–64.
- Kvale, S. (1996). *Interviews. An introduction to qualitative research interviewing*. CA: Sage.
- La vaina, j. C. (ed.) (2006): *Spain is Different: Llega la fiebre del turismo*. Biblioteca El Mundo: el Franquismo año a año, Madrid, Unidad Editorial.
- Labrecque,L.I, Esche,J, Mathwick,Ch, Novak,T, Hofacker,Ch (2002) Consumer Power: Evolution in the Digital Age. *Journal of Interactive Marketing*. Volume 27, Issue 4, November 2013, Pages 257–269
- Legoupil, T 2013. Los conflictos que genera el turismo de cruceros en Barcelona y otros puertos mediterráneos. *Revista bibliográfica de geografía y ciencias sociales*. Universidad de Barcelona ISSN: 1138-9796. Depósito Legal: B. 21.742-98
- Lessig, L. (2008). *Remix: Making art and commerce thrive in the hybrid economy*. NewYork: Penguin.
- Levine, Rick, Christopher Locke, Doc Searls, and David Weinberger (2000), *The Cluetrain Manifesto: The End of Business as Usual*. New York: Perseus Books
- Lindberg, K., S. McCool, and G. Stankey 1997 Rethinking Carrying Capacity. *Annals of Tourism Research* 24:461– 465.
- Manning, T., 1999. Indicators of tourism sustainability. *Tourism Manage.* 20, 179–181.
- Mathieson, A., and G. Wall 1982 *Tourism: Economic, Physical and Social Impacts*. New York: Longman
- Meuser, M and Nagel, U. (2002) “ExpertInneninterviews- vielfach erprobt, wenig bedacht. Ein Beitrag zur qualitativen Methodendiskussion“ in A.Bogner, B.Littig, and W Menz (eds), *Das Experteninterview*. Opladen: Leske & Budrich, pp. 71-95
- Nardo, M., Saisana, M., Saltelli, A., Tarantola, S., Hoffman, A., Giovannini, E., 2005. *Handbook on constructing composite indicators: methodology and user guide*. OECD Statistics Working Paper, OECD.

- Nuñez, Juan Daniel (2014) Consumo colaborativo, ¿qué supone para el sector? [WWW]. Available in: <http://www.tecnohotelnews.com/2014/05/consumo-colaborativo-que-supone-para-el-sector/> [Accessed: 20-05-14]
- Odell, R. 1975 Carrying Capacity Analysis: Useful but Limited. In , R. Scott, D. J. Brower and D. Miner eds.. Management and Control of Growth (vol. III) pp. 22–28. Washington DC: The Urban Land Institute.
- OECD. (2009). Governing regional development policy. The use of performance indicators. OECD Publishing.
- Orb,A., Eisenhauer,L., Wynaden,D., (2000) Ethics in Qualitative Research. Journal of nursing scholarship, 2000; 33:1, 93-96.
- Owyang, Jeremiah (2013). The Collaborative Economy [WWW]. Available from: <http://www.slideshare.net/Altimeter/the-collaborative-economy> [Accessed: 5-03-14]
- P2P FOUNDATION (2006) Defining P2P as the relational dynamic of distributed networks [WWW]. Available from: http://p2pfoundation.net/Defining_P2P_as_the_relational_dynamic_of_distributed_networks/ [Accessed: 17-03-2014]
- Palou, S, 2006. La ciudad fingida. Representaciones y memorias de la Barcelona turística. Universidad de Barcelona Vol. 4 Nº1 págs.13-28.
- Parsons, A (2014) The sharing economy: introduction to its political evolution. [WWW] Share the Worlds Resources. Available from: <http://www.sharing.org/information-centre/articles/sharing-economy-short-introduction-its-political-evolution> [Accessed: 04-04-14].
- PUNCH, K. (2006) Developing effective research proposals. 2nd Edition. London SAGE Publications Ltd
- Redcliffe, M., and G. Woodgate 1997 Sustainability and Social Construction. In The International Handbook of Environmental Sociology, M. Redcliffe and G. Woodgate, eds., pp. 55–67. Cheltenham: Edward Elgar.
- Saarinen, J. 2006 Traditions of sustainability in tourism studies. Annals of Tourism Research, Vol. 33, No. 4, pp. 1121–1140, 2006
- Saveriades, A. (2000). Establishing the social tourism carrying capacity for the tourist resorts of the east coast of the Republic of Cyprus. Tourism Management, 21, 147 156.
- Shipman, Alan (2001), “Privatized Production, Socialized Consumption? Old Producer Power Behind the New Consumer Sovereignty,” Review of Social Economy, 59, 3, 331–52.
- SILVERMAN, D (2010) Doing Qualitative Research. Third Edition. SAGE
- Sinclair, M. T. (1998). Tourism and economic development: A survey. The Journal of Development Studies, 34(5), 1 51.
- Sirakaya, E., Jamal, T., & Choi, H. S. (2001). Developing tourism indicators for destination sustainability. In D. B.Weaver (Ed.), The encyclopedia of ecotourism (pp. 411–432). New York, NY: CAB International.
- Smeets, E., & Weterings, R. (1999). Environmental indicators: Typology and overview. Technical report no. 25. Copenhagen: European Environment Agency.

- SMITH, A. (2005): "Conceptualizing City Image: The 'Re-Imaging' of Barcelona", *Tourism Geographies*, vol. 7, n° 4, pp. 398-423.
- Stoeckl, N., Walker, D., Mayocchi, C., & Roberts, B. (2004). *Douglas shire sustainable futures: Strategic planning for implementation project report*. Canberra: CSIRO Sustainable Ecosystems.
- SUHETT DE MORAIS,R and PRAT FORGA,JM, 2011. *La imagen turística y la historia de la ciudad: barcelona y su atraktividad a lo largo de un siglo xx expandido*. (Libro Colectivo) ISBN 978-84-938551-5-4 XII Coloquio de Geografía del Turismo, Ocio y Recreación, 2011-01-01, ISBN 978-84-938551-5-4spafree
- SUNYER, R (2014) ¿Hacia un Turismo Ciudadano? [WWW] Universitat Oberta de Catalunya- Blog Available from: <http://ciudad.blogs.uoc.edu/post/85517779322/hacia-un-turismo-ciudadano> [Accessed: 05-04-14].
- Tribe,J., X.Font, N.Grittis, R.Vickery and K. Yale, 2000. *Environmental Manageent for Rural Tourism Recreation*. London: Cassell.
- Toni Pujol, *Barcelona City Council- Responsible Tourism Destination- 7th International Conference*. Barcelona- October 2013
- Tribe, J., X. Font, N. Grittis, R. Vickery, and K. Yale 2000 *Environmental Management for Rural Tourism and Recreation*. London: Cassell.
- UAB, 2013. *Índex Uab D'activitat Turística 2013. Conjuntura, prediccions turístiques per Catalunya i Espanya i anàlisi del turisme urbà de Barcelona*. Escola Universitària de Turisme i Diecció Hotelera. Bellaterra.
- Urtasun, A and Gutiérrez,I, 2006. *Tourism agglomeration and its impact on social welfare: An empirical approach to the Spanish case*. *Tourism Management* 27 (2006) 901–912
- VAL del, E (2013) *CulturaRSC* [WWW] Available from: http://www.culturarsc.com/RSC/20130624_entrevista_juanjo_rodriguez.php [Accessed: 14-04-14].
- Vera, J.F., Ivars, J.A., 2003. *Measuring sustainability in a mass tourist destination: pressures, perceptions and policy responses in Torrevieja, Spain*. *J. Sustain. Tourism* 11 (2), 181–203.
- WCED 1987 *Our Common Future*. Oxford: Oxford University Press.
- World Tourism Organization, 1996. *What Tourism Managers Need to Know: A Practical Guide to the Development and Use of Indicators of Sustainable Tourism*. World Tourism Organization, Madrid.

9 APPENDIX

APPENDIX 1- ASSIGNMENT TO UAB STUDENTS

TURISME I SOSTENIBILITAT

3rd ASSIGNMENT. SHARING ECONOMY IN TOURISM AND THE INDICATORS FOR SUSTAINABLE TOURISM DESTINATIONS

This assignment asks you to work with two different aspects which are closely related to sustainable tourism. On one hand, the sharing economy applied to the field of tourism. On another hand, the indicators for sustainable tourism destinations, a tool created for managing sustainable tourism.

1st part

The sharing economy, and specifically the collaborative consumption are practices that the new technologies have helped to spread and they have greatly grown in recent years and have come to the world of tourism. Searching the web you can find many examples of national and international experiences that want to promote collaborative consumption in the world of tourism. In the case of Spain, for example, in the following page you can find a directory of initiatives in this respect (see in particular sections "Turismo colaborativo", "Turismo de experiencias" and "Para comer P2P"):

<http://www.consumocolaborativo.com/directorio-de-proyectos/>

The first part of this assignment is that once you've done this search and seen some examples of these initiatives, you should write a short report (maximum 3 pages) to reflect on the relationship between sustainable tourism and sharing economy. That is, evaluate the extent to which these practices can contribute (or not) to encourage a more sustainable tourism, according to the different aspects of sustainability (environmental, social, and economic). Moreover, you should analyze and discuss, more specifically, the cases of three specific projects.

2nd part

Sustainability indicators for tourism destinations, as explained in the theory of the course, are an important tool for sustainable management of tourism, especially from the point of view of the destinations. At the European level the ETIS system (European Tourism Indicators System) has been developed by the European Union. This system aims to be the standard for all types of tourism destinations in Europe that want to evaluate and monitor the sustainability of tourism. It consists of a list of 27 key indicators ("Core Indicators") and 40 additional or optional indicators.

The second part of the assignment consists of completing a survey that aims to evaluate the extent to which the development of sharing economy in Barcelona's tourism (as an example of iconic tourism destination in Europe) may affect the value (amount) of each of the 27 "core indicators" of the ETIS system. For example, in the first case listed in the survey, in which the indicator name is "Number of tourist nights per month", you must assess whether the foreseen (in the coming years) development of sharing economy in the Barcelona's tourism (i.e. more offer of exchange homes for tourists, houses where tourists can eat, etc.), will affect the number of tourist monthly overnight stays in the city in a decrease, an increase, or remain the same (relative to the fact that there were no development of sharing economy in the field of tourism). In addition to indicating the trend that you think that may affect each indicator, in each case you also should argue briefly (one sentence) your answer in the "Comments" section. Comments can be in Catalan, Spanish or English.

You can access the survey at the following link: <https://www.surveymonkey.com/s/RQ7GDRW>

In order to know that you answered the survey, you must fill in the first two questions of the survey (name and university, as this is a survey, as you will see, also made for tourism students from other universities of Barcelona, as it takes part from a research project on sharing economy and sustainable tourism, in which the EUTDH collaborates).

Form and delivery date

The delivery deadline is 16 May 2014. The first part must be delivered exclusively through the Campus Virtual (Delivery of works section). The second part of the assignment by completing and sending the survey through the same link of the survey.

APPENDIX 2- SURVEY INTERVIEW

Answer how the value of the following indicators - there are 27 core indicators divided in four sections, used to measure the sustainability of destinations for Europe- could be affected by the collaborative economy in the touristic sector in Barcelona

ECONOMIC VALUE

CRITERIA	REF.	INDICATOR	DECREASE ↘	REMAIN EQUAL =	INCREASE ↗
B.1 Tourism Flow (volume & value) at Destination	B.1.1	Number of tourist nights per month			
	Comments:				
	B.1.2	Daily spending per tourist (accommodation, food and drinks, other services)			
Comments:					
B.2 Tourism Enterprise(s) Performance	B.2.1	Average length of stay of tourists (nights)			
	Comments:				
	B.2.2	Occupancy rate in commercial accommodation* per month and average for the year			
Comments:					
B.3 Quantity and Quality of Employee	B.3.1	Direct tourism employment as percentage of total employment			
	Comments:				
B.4 Safety and Healthy	B.4.1	Percentage of tourism enterprises inspected for fire safety in the last year			-
	Comments:				
B.5 Tourism Supply Chain	B.5.1	Percentage of tourism enterprises actively taking steps to source local, sustainable, and fair trade goods and services			
	Comments:				

*Commercial Accommodation:

SOCIAL AND CULTURAL IMPACT

CRITERIA	REF.	INDICATOR	DECREASE	REMAIN EQUAL	INCREASE
C.1 Community/Social Impact	C.1.1	Number of tourists/visitors per 100 residents			
	Comments:				
C.2 Gender Equality	C.2.1	Percentage of men and women employed in the tourism sector			
	Comments:				
C.3 Equality/Accessibility	C.3.1	Percentage of commercial accommodation with rooms accessible to people with disabilities and/or participating in recognized accessibility schemes			

	Comments:				
	C.3.2	Percentage of visitor attractions that are accessible to people with disabilities and/or participating in recognized accessibility schemes			
C.4 Protecting and Enhancing Cultural Heritage, Local Identity and Assets	Comments:				
	C.4.1	Percentage of the destination covered by a policy or plan that protects cultural heritage*			
Comments:					

*Cultural Heritage

ENVIRONMENTAL IMPACT

CRITERIA	REF.	INDICATOR	DECREASE	REMAIN EQUAL	INCREASE
D.1 Reducing Transport Impact	D.1.1	Percentage of tourists and same day* visitors using different modes of transport to arrive at the destination (public/private and type)			
	Comments:				
	D.1.2	Average travel (km) by tourists to and from home or average travel (km) from the previous destination to the current destination			
Comments:					
D.2 Climate Change	D.2.1	Percentage of tourism enterprises involved in climate change mitigation schemes—such as: CO ₂ offset, low energy systems, etc.—and “adaptation” responses and actions			
	Comments:				
D.3 Solid Waste Management	D.3.1	Waste volume produced by destination (tonnes per resident per year or per month)			
	Comments:				
	D.3.2	Volume of waste recycled (percent or per resident per year)			
Comments:					
D.4 Sewage Treatment	D.4.1	Percentage of sewage from the destination treated at least at secondary level* prior to discharge			
	Comments:				
D.5 Water Management	D.5.1	Fresh water consumption per tourist night compared to general population water consumption per person night			
	Comments:				
D.6 Energy Usage	D.6.1	Energy consumption per tourist night compared to general population energy consumption per person night			
	Comments:				

D.7 Landscape and Biodiversity Management	D.7.1	Percentage of destination (area in km ²) that is designated for protection			
	Comment:				
D.8 Light and Noise Management	D.8.1	The destination has policies in place that require tourism enterprises to minimize light and noise pollution			
	Comments:				
D.9 Bathing Water Quality	D.9.1	Level of contamination per 100 ml (faecal coliforms*, campylobacter)			
	Comments:				

*same day visitors:

*secondary levels:

*Faecal Coliforms:

DESTINATION MANAGEMENT

CRITERIA	REF.	INDICATOR	DECREASE	REMAIN THE SAME	INCREASE
A.1 Sustainable Tourism Public Policy	A.1.1	Percentage of the destination with a sustainable tourism strategy/action plan, with agreed monitoring, development control and evaluation arrangement			
	Comment:				
A.2 Sustainable Tourism Management in Tourism Enterprises	A.2.1	Percentage of tourism enterprises/establishments in the destination using a voluntary verified certification/labeling for environmental/quality/sustainability and/or CSR measures			
	Comment:				
A.3 Customer Satisfaction	A.3.1	Percentage of visitors that are satisfied with their overall experience in the destination			
	Comment:				
A.4 Information and Communication	A.4.1	The percentage of visitors who note that they are aware of destination sustainability efforts			
	Comment:				

APPENDIX3- SEMI STRUCTURED INTERVIEW

INTERVIEW NUMBER:

NAME OF THE INTERVIEWED:

DATE:

1. Are you familiar with the term of “Sharing economy” or “collaborative economy”?
2. What does it mean for you?
3. Could you tell me some examples of CE in Barcelona related with tourism?
4. Which are the main driver forces (main forces influencing touristic sector IN and OUT the system) of Tourism in Barcelona?
5. How would you describe the tourism in Barcelona? Which model has/follows?
6. Can you describe it with one word?
7. Forward looking, what are the present trends of Tourism in Barcelona? Are there model changes in these trends?
8. Do you think that the introduction of ICT (information and communications technology) innovations with the improvement of connections by social networks and may affect to the city? How do you think it affects to the city in terms of tourism? Why?
9. Which are the main challenges of the city related with Q.8 (“smart tourism”)?
10. What is Sustainable Tourism for you? Can you describe it?
11. Do you think tourism in Barcelona is sustainable nowadays?
12. Do you think that the Sharing Economy can play an important role in the sustainability of the city?
13. Have you ever used any products or services under the Sharing Economy?
Yes No
14. How often do you “consume” products or services derived from the Sharing Economy?
Never Rarely Sometimes Very often
15. How often do you “consume” products or services derived from the Sharing Economy in tourism (as a travel or as a host for example)?
Never Rarely Sometimes Very often
16. Would you be interested in participating in the Sharing Economy in the future?
Yes No

APPENDIX 4- INFORMATION PRESENTED ABOUT THE CE TO THE INTERVIEWEES WHO WERE NOT FAMILIAR WITH THE COLLABORATIVE ECONOMY

What is it?

It's a tectonic shift in how the economy works. A society changes from a top-down factory model of organization to a **peer-to-peer network model**. At its simplest, the sharing economy is the decentralization of economic power brought on by new technology, new and revived business models, and massive social change. It's made up of thousands of innovations, some for profit, some nonprofit, and some that thrive in the commons.

Collaborative Consumption is dead, long live the real sharing economy- by Nel Gorenflo (March 2013)

4 main principles:

1. **TRUST:** Different degrees of trust are required for collaboration and sharing among individuals
2. **CRITICAL MASS:** Also known as "tipping point", famously named by Malcolm Gladwell, at which there is enough momentum in a system to make it self-sustaining
3. **IDLE CAPACITY:** Refers to the unused potential of resources
4. **BELIEF IN "THE COMMONS":** "The commons" refers to resources that belong to everyone. Believe that by providing value to the community individual value is achieved

Botsman, Rachel and Rogers Roo, "What's Mine is Yours: The Rise of Collaborative Consumption", 2010

There are **two commonalities** in these sharing and collaborative consumption practices: 1) Use of temporary access non-ownership models of utilizing consumer goods and services 2) Reliance on the Internet, and especially Web 2.0, to bring this about. Web 2.0 "...refers collectively to websites that allow users to contribute content and connect with each other"

BELK, R. You are what you can access: Sharing and collaborative consumption online. Journal of Business Research. September 2013

Drivers

1. **ECONOMIC RECESSION-** people are more conscious about their purchasing decisions, giving more importance to practicality rather than consumerism
2. **ENVIRONMENTAL CONSCIOUS-** Greening, Cleaning, and Sustainability have been hot topics for years.
3. **SENSE OF COMMUNITY-** evolution from generation me to generation we with "millennial's" as the main drivers of change
4. **NEW TECHNOLOGIES-** The evolution and maturity of internet had created an adequate context to build trust in the sharing economy (social networking technologies, new mobile technologies and payment systems)