Ca' Foscari
University
of Venice

**Department
of Economics**

Working Paper

**Luis Nobre Pereira,
Margarida Santos, Dario
Bertocchi, Nicola Camatti,
Jan Van der Borg**

**Tourism Observatories 3.0:
A Transnational Experiment
in the MED Area**

ISSN: 1827-3580
No. 21/WP/2018

Tourism Observatories 3.0: A Transnational Experiment in the MED

Luis Nobre Pereira

University of Algarve, Portugal

Margarida Santos

University of Algarve, Portugal

Dario Bertocchi

Ca' Foscari University of Venice

Nicola Camatti

Ca' Foscari University of Venice

Jan Van der Borg

Ca' Foscari University of Venice

Abstract

Following the precedent set by the Virtual Tourism Observatory run by the European Commission-DG GROW a few years ago, several initiatives have taken place to design and manage tourism observatories at both the transnational and local level. However, these initiatives do not yet seem able to provide adequate operational responses to the challenges that the Commission launched with the original VTO. While the opportunities offered by the Web 3.0 still do not seem to have been sufficiently taken advantage of, such initiatives also have not yet developed suitable methodologies to operationally include the tourism industry in the studies and monitoring performed by the OTs. This work presents an OT prototype including a participatory DSS (PDSS) designed specifically to overcome the aforementioned limits. The prototype was tested in 2017 on the entire eligible area of the 2014-2020 MED Programme covering 52 regions. The potentialities of this PDSS are shown through two case studies, one Italian and the other Portuguese.

Keywords

Tourism Observatory, Destination Management, Decision Support System, participatory processes, coastal and maritime destinations

JEL Codes

L83, O18, R58

Address for correspondence:

Nicola Camatti

Department of Economics

Ca' Foscari University of Venice

Cannaregio 873, Fondamenta S.Giobbe

30121 Venezia - Italy

E-mail: nicola.camatti@unive.it

This Working Paper is published under the auspices of the Department of Economics of the Ca' Foscari University of Venice. Opinions expressed herein are those of the authors and not those of the Department. The Working Paper series is designed to divulge preliminary or incomplete work, circulated to favour discussion and comments. Citation of this paper should consider its provisional character.

Tourism Observatories 3.0: A Transnational Experiment in the MED Area

Luis Nobre Pereira ^a, Margarida Santos ^a, Dario Bertocchi ^b, Nicola Camatti ^b, Jan Van der Borg ^b

^a University of Algarve, Portugal

^b Cà Foscari University of Venice, Italy

Abstract: Following the precedent set by the Virtual Tourism Observatory run by the European Commission-DG GROW a few years ago, several initiatives have taken place to design and manage tourism observatories at both the transnational and local level. However, these initiatives do not yet seem able to provide adequate operational responses to the challenges that the Commission launched with the original VTO. While the opportunities offered by the Web 3.0 still do not seem to have been sufficiently taken advantage of, such initiatives also have not yet developed suitable methodologies to operationally include the tourism industry in the studies and monitoring performed by the OTs. This work presents an OT prototype including a participatory DSS (PDSS) designed specifically to overcome the aforementioned limits. The prototype was tested in 2017 on the entire eligible area of the 2014-2020 MED Programme covering 52 regions. The potentialities of this PDSS are shown through two case studies, one Italian and the other Portuguese.

Keywords: Tourism Observatory, Destination Management, Decision Support System, participatory processes, coastal and maritime destinations

Address for correspondence:

Nicola Camatti

Department of Economics

Ca' Foscari University of Venice

Cannaregio 873, Fondamenta S.Giobbe

30121 Venezia – Italy

e-mail: nicola.camatti@unive.it

1. Introduction

As underlined by a recent UNWTO report for the European Commission, Directorate-General for Enterprise and Industry (EC, 2016), international tourism has shown exceptional development from World War II onwards. International tourist arrivals worldwide have increased from just 25 million in 1950 to 1.087 million in 2013, while international tourism revenues have increased from \$2 billion to US \$1.159 billion. In European Union member countries, international tourist arrivals have increased from 153 million in 1980 to 433 million in 2013. However, according to UNWTO estimates, international tourist arrivals to destinations in the EU-28 are expected to grow by 2.1% per year up to 2025, while the 1995-2010 period averaged 2.4%. With emerging and developing countries attracting increasing numbers of tourists, European tourist destinations will have to face both growing competition and further structural changes relating, for example, to demographic trends, climate change, and the impact of new technologies. People over the age of 65 should reach 20% of the population in 2020. The tourism industry will soon have to adapt its tourism offer to this new target consisting of individuals with purchasing power and leisure time but also special needs. Climate change may lead to water scarcity, a decline in snow cover in mountain regions, coastal corrosion, pressure on biodiversity, and risks to cultural heritage, particularly in destinations affected by over-tourism. Tourism policies will have to intervene with an appropriate mitigation investment strategy. Although ICT's development has strengthened destinations' competitiveness, small tourism businesses have yet to fully exploit this situation by investing in professional skills and infrastructures (EC, 2010).

To address these challenges, the European Commission proposes a series of initiatives aimed at: (1) Stimulating competitiveness in the European tourism sector; (2) Promoting the development of sustainable, responsible, and high-quality tourism; (3) Consolidating Europe's image as a collection of sustainable and high-quality destinations; (4) Maximizing the potential of EU financial policies and instruments to develop tourism. All four of these priorities must be implemented to "provide the skeleton for a new action framework for tourism". To fulfil priority two, the Commission focuses on consolidating the tourism sector's socioeconomic knowledge base to boost competitiveness, underscoring the importance of Directive 95/57/EC on the collection of statistical information in the tourism sector. The directive considers both European tourism trends and users' needs. Tourist destinations will soon have to routinely predict these new trends, examine their origins, and develop response strategies by renewing their destination management models and using operational tools in collaboration with stakeholders.

2. Consolidating the Socioeconomic Knowledge Base for Tourism

To consolidate tourism's socioeconomic knowledge base, the European Commission also makes operational proposals highlighting the necessity of encouraging cooperation between Member States, destinations, industry representatives, and public and private operators to strengthen data related to tourism.

While the commission's role coordinating statistical activity at the European level has devolved to Eurostat, the Commission still considers itself responsible for supporting the development of knowledge networks between research institutions, universities, and public and private monitoring units. These networks should be based on an integrated and synergistic approach in collaboration with other European and international organizations, such as the OECD and WTO.

The European Virtual Tourism Observatory, designed to coordinate socio-economic research on European tourism conducted by various national research institutes, represents an important first step in achieving the commission's vision. The Virtual Tourism Observatory, as explained on its official website, is an online portal that provides access to a full range of information on the tourism sector, its

environmental impact, and the origin and profile of tourists. The portal consists of five sections as shown in Table 1.

Table 1 - The five sections of socio-economic knowledge regarding tourism

Country Profiles	The country profiles offer a snapshot of key tourism indicators for the European Union and each of its member countries. A user-friendly interface allows the user to personalise the analysis, benchmark two or more countries, and download economic indicators and tourism data.
Statistics Illustrated	Statistics Illustrated is a visualisation tool that displays monthly and annual data on tourist flows, accommodation capacity, occupancy, expenditure, and other aspects of EU residents' trips. The tool lets the user visualise data as maps, tables, or graphs. The dynamic dashboards help users to comparatively analyse and evaluate tourism trends. This tool has been developed by the Directorate-General (DG) for Internal Market, Industry, Entrepreneurship, and SMEs, as well as Eurostat.
Eurobarometer Surveys	The European Union is a major source market for destinations, as many Europeans travel in the EU and worldwide. Flash Eurobarometer surveys reveal preferences and attitudes of Europeans towards tourism. The Eurobarometer surveys offer a portrait of the current situation and the outlook for the upcoming year.
Studies and Reports	The Observatory is also a repository for reports, studies, and papers relevant to tourism policy makers and businesses. A user-friendly tool allows users to search the extensive library by country, theme, or year of publication. This section offers access to all relevant publications of DG Internal Markets, Industry, Entrepreneurship, and SMEs, and the Commission, as well as to a wide range of works published by other institutions, international organisations, member states, and academia.
More Data Sources	A useful collection of links to national and international organisations and observatories providing facts and figures on the tourism sector in Europe and worldwide.

Source: VTO official web page <https://ec.europa.eu/growth/tools-databases/vto/>

The VTO established protocols for designing and testing tools to support comprehensive study of tourism, exceeding the limits of official statistics. Still, lacunae remain regarding three aspects::

- Although Observatories such as the European VTO and others born out of this initiative's momentum (for example the INSTO network promoted by the UNWTO) accept the challenge of merging their information into a single shared virtual space also containing in-depth analysis based on official statistics, each institution's data has still been collected at the national level. This represents an important limit to the development of destination management tools, which instead require at least regional-level information focused on the specific destination features in relation to their positioning on the life cycle.
- As highlighted by the European Commission, knowledge networks must also include the tourism industry in analysis and monitoring. This inclusion leads to a twofold advantage. Firstly, the tourism industry possesses data only partially recognized by official tourism statistics (e.g. spending, travel motivations, special visitor needs) that could help to improve analyses' quality and usefulness. Secondly, if included through suitable surveys, the tourism industry can make its sensitivity and knowledge of a certain territory available, thereby improving and consolidating studies of future tourism trends.
- The ICT, as already mentioned, adds value within the tourism sector. Moreover, the sharing economy (i.e. Airbnb, Zipcar, Couchsurfing, etc.) that is regulated within virtual and online networks such as Web 3.0, Facebook, and TripAdvisor represents an invaluable source of information that, if properly used, can help tourist stakeholders define their policies and strategies.

3. The ShapeTourism Project Proposal

Based on the challenges launched by the European Commission, a consortium of five scientific groups proposed the idea of building a transnational tourism observatory within the framework of the 2014-2020 MED programme. This idea took form in the ShapeTourism project lead by Ca' Foscari University of Venice's Department of Economics. Through this project, the consortium developed a Smart Integrated Tourism Data System (SITDS) to monitor tourism development dynamics and assess the Mediterranean coastal regions' sustainability, as well as to support decision-making using scenario maps on tourism trends. This system, still open and available, takes the form of an online, interactive, and user-friendly tool with data visualization. The SITDS supports stakeholders who wish to improve their business or undertake management decisions in the Mediterranean regions, as quickly as possible, based on reliable data covering the 52 Mediterranean Regions. The primary data supporting this tool was collected from various official statistical sources (Eurostat, ESPON, and local national institutions), as well as unofficial (TripAdvisor), and used to construct four regionalised indicators of:

Reputation: This indicator considers feedback tourists post on TripAdvisor regarding attractions, restaurants, and the hospitality sector within a single municipality/city.

Attractiveness: Based on the ATTREG project (Attractiveness of European Regions and Cities for Residents and Visitors), the attractiveness indicator is subdivided into macro components (or sub-indices) capturing different aspects of "territorial capital" (environmental, economic, human, socio-cultural, and institutional capital).

Competitiveness: The point of reference indicator is the World Economic Forum's Travel & Tourism Competitiveness Index (TTCI), which is calculated at the national level. The TTCI calculation methodology's main work concerns the indicator's regionalization based on the main variables considered and the building weights that reflect the position of a given region with respect to the average of each variable.

Sustainability: According to the World Economic Forum sustainability index, this indicator considers factors such as diversification of local and regional economies, pressure on tourism resources, regulatory frameworks, social impact, and pollution.

These indicators already overcome some of the limitations of other European observatories by providing regional in addition to national information. A further tool called PDSS (complementary to SITDS) has been developed by the ShapeTourism project in response to the need for the tourism industry's active involvement in analysis and monitoring activities.

This PDSS (Participatory-Decision Support System) consists of a supplementary online tool that aims to automate the collection of opinions from a portfolio of public and private tourism stakeholders, providing insight into the health of Mediterranean tourism. The system is based on a series of questions that can be periodically addressed to the portfolio of stakeholders (see questionnaire in the appendix). The questions' objectives are as follows:

- Evaluate the tourism industry's dynamics and trends;
- Predict the possible impact of global changes on sustainable tourism development;
- Understand local reactions to global trends in tourism sustainability;
- Measure tourism externalities;
- Assess stakeholders' perceptions of their destination's life cycle stage;

- Identify sustainable practices being incorporated into private stakeholders' operations, as well as barriers and challenges to adopting these practices;
- Appraise public stakeholders' opinions of how to enhance the sustainability of tourism development and operations.

This tool focuses on the peculiarities of a destination in relation to the life cycle model of the tourism sector (TALC), providing the respondents with methodological support in identifying trends or future problems of their destinations. According to Butler (2014) the purpose of developing TALC was:

“To draw attention to the dynamic nature of destinations and propose a generalised process development and potential decline which could be avoided by appropriate interventions (of planning, management and development), or as suggested in the title of the article, the management of resources. It did this by proposing a common pattern of development of resorts that had multiple stages (exploration, involvement, development, consolidation, stagnation, and then a range of possibilities from rejuvenation to decline, Figure 1). Key to this was the concept of carrying capacity, in the sense that it was argued that if the carrying capacity of the resort was exceeded, the relative appeal of the resort would decline, it would become less competitive, and this would be reflected in declines in visitation, investment, and development. The appropriate interventions noted above would be the key to ensuring that the various carrying capacities (economic, social-cultural and environmental) of the resort were not exceeded, or where possible, were increased to meet growing pressures”.

Figure 1 – The Tourism Area Life Cycle (TALC)

Source: Butler, 1980.

One of the features of Butler's model (1980) is to introduce a definition of each specific phase of the life cycle of the destination with which certain descriptive criteria are associated. The author identifies six different stages, as shown in Table 2.

Table 2 – Describing the different stages of the TALC

Stage	Characteristics
Exploration	<ul style="list-style-type: none"> - Tourist numbers are small; - the attractiveness of the destination is based on primary tourist resources (natural or cultural); - no created attractions; - tourism has no economic or social importance to residents.
Involvement	<ul style="list-style-type: none"> - The number of tourists increases gradually; - contact between tourists and the local population remains high; - tourists tend to travel to the destination at a given time of the year; - reservations must be formed through increasingly organized structures; - local authorities are required to provide infrastructure for tourists; - local authorities are also required to promote the destination.
Development	<ul style="list-style-type: none"> - The destination acquires a well-defined image; - the local population tends to lose control over the development process; - strong foreign investment starts; - foreign investment gradually excludes small local entrepreneurs; - some discontentment arises among residents regarding the course of the destination's development; - natural and cultural resources that make the destination famous are heavily marketed; - initial impact on the destination's physical characteristics becomes visible; - local and/or national authorities are called upon to plan and develop infrastructure to support tourism; - at peaks of demand, the number of visitors may supplant the resident population; - importing labour from other parts of the country or even from other countries becomes sometimes necessary.
Consolidation	<ul style="list-style-type: none"> - Growth rates begin to decrease, although the total number of tourists visiting the area can continue to increase; - the number of tourists exceeds the number of permanent residents; - the tourism sector predominates; - strong investment in promotion to maintain market share and decrease seasonality; - the main tourist groups will be present at the destination; - new investments become scarcer; - the first equipment to be developed shows signs of poor maintenance; - the high number of tourists is likely to cause some discontentment among the local population.
Stagnation	<ul style="list-style-type: none"> - Stagnation occurs as soon as the number of visitors reaches the highest point; - load capacities are very high and may well have been exceeded; - this has a negative impact on the environment (natural, cultural, and social); - the destination loses the ability to attract new tourists; - the excess capacity in terms of accommodation requires a very high promotion effort to keep the current number of tourists; - natural and cultural attractions are supplanted by artificial attractions; - the destination moves away from the geographical characteristics that made it famous in the first place; - the destination presents a well-established image in major markets, but ceases to be fashionable.
Decline	<ul style="list-style-type: none"> - The destination loses the ability to compete with other destinations and accentuates the loss of market share; - the average stay in the destination suffers a high erosion; - if the destination is close to areas with high population density it is likely to depend on same-day visitors; - a high percentage of properties at the company level change ownership; - it is possible that the same properties return to the possession of local investors who can assign to them a non-tourist use.

Rejuvenation	<ul style="list-style-type: none"> - The rejuvenation phase which may be more or less noticeable; - it is necessary to coordinate efforts between the public and private sector to carry out the rejuvenation of the destination; - even existing attractions may lose their competitive ability.
---------------------	--

Source: Butler, 1980.

Over the past decades, the TALC model (Butler, 1980) has allowed researchers and governments to analyse the historical path and expected future development trends of different destinations' typologies. This perspective highlights the importance of long-term planning and control, which should be also considered for more effective, sustainable, and responsible management of coastal and maritime tourism development.

The purpose of the PDSS is to incorporate the indications suggested by TLAC model using the life cycle paradigm as a descriptive model projecting the destinations' expected future evolution. While the life cycle describes the problems to be solved within a specific phase, PDSS encourages stakeholders to anticipate the challenges that likely await them according to their positioning on the life cycle.

4. Application of the PDSS to Three Case Studies

This research presents case studies of three different destinations: two Italian cultural cities, Venice and Naples, similar in tourism offers and appeal, and one Portuguese natural destination, Algarve, a territory wider than a urban area and a different type of tourism destination according to Butler's TALC Model (Butler, 1980). This model indicates the level of competitiveness and the impact of tourism on both destinations. This analysis shows the potential of the PDSS to compare similar destinations (the Italian cases) or different types of destinations (a vast natural territory like Algarve). Tourism affects destinations in both positive and negative ways, since it involves many different spheres of its residents' lifestyle and economy. This study provides an analysis of the level of competitiveness and the impact of tourism on three of the main tourist destinations in Europe: Venice, Naples (IT), and Algarve (PT).

The framework used to conduct the analysis was based on a questionnaire, which has been proposed to stakeholders of local and national companies living in all three destinations. The questionnaire was structured according to seven different phases:

1. Interviewees were asked which cities they perceived as the region's main competitors.
2. They were then asked to identify which TALC (Tourism Area Life Cycle) Phase the destination is currently experiencing.
3. Keeping their region in mind as a tourism destination and reflecting on the period from 2014 to 2016, interviewees were asked to express their opinion regarding the state of the destination.
4. A series of questions asked about the negative impact of tourism on the interviewees' region.
5. Another series of questions asked about the positive impact of tourism on the interviewees' region.
6. Stakeholders were asked to evaluate the extent to which they incorporate sustainability practices into their businesses.
7. The questionnaire ended with barriers and challenges.

The study was based on a survey questionnaire developed in a working package of the ShapeTourism project proposed to a sample of respondents belonging to the category of private stakeholders from the

three destinations, the majority of which believe that both Venice and Naples are at the stage of Development of their TALC, while Argarve is at the stage of rejuvenation, since tourism demand is increasing (or increasing again in a different way), creating new jobs and helping to recruit more workers in the region (Figure 2).

The survey also examined tourism's positive and negative impact on the three destinations. Even though stakeholders believe that tourism has positive effects on the cities' and territory's economies and the life quality of their residents, for example increased cultural exchange and volume of cultural events, data shows that Venice perceives it as a source of negative effects that must be confronted. Indeed, overdevelopment, overcrowding, and the incremental cost-of-living increase are only three of the problems the city is currently facing due to massive tourist flows.

It is important to remember that tourism involves the issue of sustainability. The report shows that the destinations need to increase their efforts to ensure economic, social, and environmental sustainability. However, Naples is less prepared than Venice to meet growing concerns about health and climate change.

Figure 2 – TALC stages perceived by private stakeholders of Venice, Naples, and Algarve

4.1 Venice Case Study

4.1.1 Venice Destination Overview

Venice is one of the main Italian tourist destinations. From the survey, most of the interviewees (40%) perceive Florence as its main European competitor e, followed by Rome (20%) and Barcelona. The results of the survey also indicate that, among secondary competitors, there are mostly Italian cities like Naples, on which attention will be focused since, like Venice, it is a cultural destination linked to a maritime past.

During the survey, interviewees were also asked which phase of the Tourism Area Life Cycle (TALC) they think the region is at now. Most respondents (40%) think that we are currently in the development phase, but they are counterbalanced by the 33% who believe that we are experiencing a period of stagnation. In relation tourism's impact on Venice (Figure 3), the graphic (fig.1) shows general agreement that the tourism demand is increasing (3,933 on 4,000).

Figure 3 – Tourism's impact on Venice

Regarding the initiatives taken by the region in tourist matters, results show that interviewees tend to agree with the idea that the region is cutting down prices to encourage sales this year, with 40% in agreement (of which 13% are in strong agreement) and only 10% dissenting.

When asked about the efforts taken by the region to diversify distribution channels, a high percentage of interviewees responded neutrally. Eight out of fifteen reports did not take a defined position. On the other hand, general belief holds that the region is trying to diversify tourism, increase marketing efforts, and promote new markets to attract more tourists this year. From this point of view, it is worth reminding that, speaking of number of tourists, the Veneto is the first regional destination in Italy and Venice, as we have seen previously, plays a central role as major attraction. However, Venice does not need to attract more tourists, since it would threaten the tourist sustainability of the city. Nonetheless, the Veneto region is investing more in tourism this year, as demonstrated by the positive response to this question.

Specifically, when compared to other factors, such as diversified distribution and slashed prices, it is evident that the rate of the recorded data concerning the promotion of new markets is superior to them, and it is equal to those records relating the diversification of tourism offers and the region's economic investments (3,667 each).

Interviewees were asked to express their degree of agreement with the Veneto's efforts on certain issues so that regional initiatives. Global warming and rising sea levels threaten the city's survival. Interviewees were asked whether they believe the region is ready to cope with the consequences climate change may have for its main attraction. Excluding neutral responses, results indicate that residents of Venice think their city is prepared, even though only 33% agrees with that their region is aware of climate change's risks.

Concern for health and wellbeing is also mounting, and the survey has accordingly inquired about the city's readiness to meet certain criteria. Data indicates a general agreement upon the subject's importance.

40% of interviewees think that Big Data is being used while only the 6% disagree. In the same vein, more than 50% believes that the destination is using digital marketing channels to its advantage. The same positive agreement exists regarding terrorism: people tend to align with the idea that the city is working to deal with a possible terrorist threat. However, from the point of view of economic sustainability, there is the perception that the region is not putting enough effort into the matter, with 46% of dissenting. Similar results concern the issue of social sustainability; the graphic shows that only seven percent think the Veneto and Venice municipality are working to ensure it. The factor of social sustainability is probably one of the most tangible phenomenon linked to tourism in Venice, where the

massive tourist flow is perceived as a threat to the city's cultural authenticity and the identity of its inhabitants. The city is gradually becoming a museum (a phenomenon which takes the name of "venicefication" or "Disneyfication of Venice") thus causing resident communities to lose their identities and unique culture.

On the issue of economic and social sustainability, interviewees think that much work remains, but the survey shows reversed attitudes regarding environmental sustainability. Indeed, in relation to the environment, if we do not consider neutral responses, 60% believe that the region is working to take measures to reduce energy and water consumption.

As has already been said, Venice is not the only tourist destination and, in a country like Italy, where every centre could be a potential tourist location, the region must work to face the entry of new competing destinations in the tourist market. From this point of view, the survey has shown that there is a balance between those who agree (40%) and those who disagree (40% of which 20% strongly) with the idea that efforts are being made to keep Venice's standards high and face new competitors. Nonetheless, 54% of the records report that the region is working to take advantage of the collaborative economy to keep Venice appeal high as a tourist destination.

Hence, to sum up the opinion of the venetian private sector regarding the initiatives taken from the Veneto region and Venice as a destination, what came out from the poll is that, on the one hand, it is investing in using the digital marketing channels, it is working to ensure environmental sustainability, to take advantage of the collaborative economy and it is perceived to be prepared to meet the growing concern for health and well-being. However, on the other hand, people think that work has still to be done to ensure social sustainability.

4.1.2 Negative Impacts of Venice Tourism

The following part of the survey asked stakeholders to show their degree of agreement regarding the negative impacts of Tourism on the destination Venice to better understand the externalities connected to a particular stage of Butler's TALC and tourism industry in the destination in general.

The first question regarded the problem of overcrowding, which is perceived as an urgent issue in Venice all year round. As a matter of fact, Venice is one of the few tourist destinations whose attractiveness does not depend on the season, thus causing an excessive presence of tourists in every time of the year. Being these the premises, it appears clear that the situation can only worsen in conjunction with events like the biennale of art and architecture and the Film Festival, which are an enticement for people from all around the world. The massive and continuous tourist flow is negatively perceived by residents, whose everyday lifestyle, activities and timetable must be regulated based on tourist presence. As a matter of fact, the results of the interview confirm that overcrowding is perceived as a negative outcome of tourism in Venice, with more the 67% agreeing.

A high tourist flow also means the necessity of structures to allow their hospitality. For this reason, among the negative impacts on the city, most of the stakeholders interviewed (70%) agrees with the idea that Tourism is the main cause of overdevelopment and over construction, which implies the presence of too many structures in a limited space like that of Venice. The necessity of new structures to host tourists has led to a monoculture of tourism, which, for instance, implies that structures are built or reused only with the aim of containing the massive tourist flow and not for the benefit of residents.

Another compelling problem in Venice is the overuse of natural and recreative resources. For example, this matter concerns also the problematic of the management and disposal of garbage, the amount of which is in continuous increase due to the high number of tourists in the city. For this reason, the results of the poll show that, according to most of the interviewees (66%, if we gather together those who agree and strongly agree), Tourism is perceived to be among the causes of the overuse of resources.

Furthermore, when asked about the correlation between Tourism and Crime, interviewees' opinion was divided, with 47% believing that the presence of massive tourism is a cause for the increase of criminality levels and 37% disagreeing.

Still among negative impacts, 40% agree with the idea that Tourism increases levels of pollution in its different forms, from air to noise and even soil pollution. For instance, it is a scientifically proven truth that the presence of big ships in the lagoon, in addition to polluting the air and the water with the fuel combustion, potentiates the movement of the waves, causing water to rise and eroding old buildings, thus damaging centuries of history and art. Thus, as long as water pollution is concerned, interviewees tend to agree with the idea that tourism is one of its causes, through the introduction of cruises in the lagoon and their consequent strengthening of waves and water corrosive effects.

In the same way, excluding those who think they do not possess the necessary knowledge to give a proper answer and those who are neutral about the issue, most of the interviewees believe that Tourism will have a negative impact on the environment on the long term.

Moreover, excluding again neutral responses, it can be observed that almost all the interviewees think that the presence of Tourism has the negative effect of increasing prices of goods and services not only for visitors, but also for residents, thus rendering life in the city a privilege more than a right. As a matter of fact, higher prices of houses have reduced residents' possibility of living in the city, forcing them to move away from the old town.

The opinion is divided regarding the issue of the loss of landscape value: as a matter of fact, only 33% believes that Tourism puts strong pressure on the land use and causes the loss of aesthetic landscape value.

The prestige of Venice as a tourist destination is one of the reasons for the high prices of houses. Consequently, it is no surprise that only 5% disagrees with the idea that Tourism has a negative impact on the city from this point of view. On the contrary, almost everyone thinks that tourist flow is among the causes of the raising of real estate values. As already mentioned, in the last decades prices of housing and of the land have become higher, thus causing residents to leave the city in favour of cheaper locations where to live.

In order to recapitulate the survey results about the negative effects of tourism (Figure 4) on the city, it appears clear that the majority of interviewees see Tourism as a cause for the high prices of living (housing, goods and services), the overcrowding of Venice, its over development (with too many constructions in a restricted space) and of the dangers connected to air and water pollution.

Figure 4 – Negative impacts of tourism in the destination of Venice

4.1.3 Venice Tourism Positive Impact

The third part of the survey focuses on the positive effects of tourism in the city. The first effect considered regards its being beneficial for other economic activities in the city and most of the stakeholders interviewed (60%) agree that, from this point of view, tourism is advantageous for the city since it allows the hospitality sector to develop and real estate agencies to grow. Moreover, it is interesting to notice that, excluding neutral responses, all the remaining interviewees agree with the idea that Tourism has a positive impact on the creation of jobs for local residents, of new and broader markets for local products and in encouraging Cultural Exchange in Venice.

Interviewees were also asked regarding the way Tourism can provide an impulse for the development of better infrastructures and public transportations and responses show that, even in this case, apart from who have assumed a neutral position, the rest of them agree.

Things are slightly different as long as the positive effect of tourism on the preservation of the socio-cultural authenticity and identity of the Venetian region is concerned: what emerges from the survey is that, even though most of the interviewees (more than 50%) have provided a positive response, in this case it is present a percentage of dissent, with 30% disagreeing.

The responses about the positive impact on the preservation of the regional Cultural Heritage have provided a more articulated graphic, with 46% agreeing, almost the 20% disagreeing. Regarding the preservation of Natural Heritage, it can be noticed that only one of the interviewees thinks that tourism has a negative impact, while the majority thinks that its effects are beneficial. On the other hand, it can be observed that the proportion is inverted when we talk about the positive impact of tourism on the residents' quality of life. As a matter of fact, 40% of the interviewees disagree (more than 26% strongly) and only 20% see tourism as a benefit for residential life in the city, since it makes prices rise and renders more difficult to find accommodation (especially on the long term).

Since, as already mentioned, in time Venice has become a cultural centre for manifestations such as the Biennale, the Venice Film Festival, international expositions like those held in Palazzo Grassi and Punta della Dogana, together with prestigious collections like the Peggy Guggenheim Museum and famous theatres like La Fenice, it was worth examining also what people think about the effect of tourism on the number of cultural and recreational events for local residents. In this case, results show that almost all the interviewees agree with the idea that tourism provides a source of benefit for the city.

They were also asked if, according to them, tourism has positive impacts on the standard of living, increasing income levels. Not considering neutral responses, what has come out from the inquiry is that only one of them thinks that Tourism lowers standards of living, while the majority agree on its positive effect.

To conclude this part, Tourism has also positive impacts on the destination (Figure 5), since, on the one hand, it creates new markets for local products, increases the number of cultural and recreational events for local residents and encourages cultural exchange. However, on the other hand, there is a certain amount of uncertainty regarding its benefit on the quality of life of residents, who tend to perceive the tourist flow as a hindrance to their everyday life and regular activities.

Figure 5 – Positive impacts of tourism in the destination of Venice

4.1.4 Venice Tourism Sustainable Practices

In this phase of the poll, interviewees were asked about the application of sustainable practices in their business. The first question concerned energy efficiency (for example the use of low energy lighting) and, it can be observed that, most of the interviewers sustain that they apply those practices, while only 5% of them have done nothing at all. Another question regarded the effort interviewees put in incorporating the creation of business linkages within tourism and other economic activities in the region and from the results emerges that more than 50% have incorporated the practice.

The situation is reversed when the investment of funds or in-kind services to green initiatives in interviewees' activities are considered, since in this case it can be observed that most of them completely avoid taking those initiatives, only few to some extent while no one has made a great effort.

However, a slightly different result emerges from the analysis of responses concerning the effort in the establishment of a "green culture" in the workplace, for example encouraging car-pooling or riding bike to work. Even though only one out of all the stakeholders think that effort has been made to a great extent, there is a balance between those who are endeavouring to establish it to some extent and those who have taken no initiative at all.

From the analysis of results, it emerges that most of the interviewees is putting an effort in creating environmental education programs for visitors, with initiatives like #EnjoyRespectVenezia, an awareness-raising campaign with the aim of inviting tourists to assume respectful and responsible behaviours towards Venice and its historic and artistic patrimony.

The number of visitors in Venice is currently at the centre of a heated debate and many initiatives have been proposed to reduce visitors' access to sensitive cultural and historic resources. Among the practices proposed for the reduction of the tourist flow there are turnstiles, the limitation of the number of visitors and a booking system that would allow to access the city like it was a museum. As a matter of fact, one of the main problems of Venice is its carrying capacity: being a small city with historical and geographical limitations, Venice is currently facing the problem of having to host more people than it can, and it is thus going through a series of problems and damages connected with the issue of the overcrowding. When asked about reducing the access of visitors to sensitive cultural and historic resources, most of the interviewees have declared to have taken some measures, while only few claim that they are not doing anything to face the problem.

Almost the same responses came out when inquiries were made regarding the limitation of visitor access to sensitive nature resources. Moreover, being Venice a city which lives on an interdependent relationship with water, an important issue to be addressed is that of wastewater: in this

concern, most of the people interviewed sustain that they are trying to incorporate sustainable practices concerning the preservation of water. To improve environmental sustainability, as long as the production of solid waste is concerned, 60% of the interviewees sustain that they are putting an effort in managing, reducing and recycling solid waste.

In addition to the preservation of sensitive nature resources, another important issue concerns the maintenance of the cultural and historical identity of the City and, in this case, results show that almost the totality of the interviewees declared that they are incorporating sustainable measures to protect it.

Among sustainable practices there is also the habit of purchasing from companies with certificates of green practices. In this concern, the majority of those undergoing the questionnaire have declared that they tend to follow this trend to assure themselves that they are buying eco-sustainable products. In the same way, to improve local economy, there is a general tendency towards the purchase of products from local suppliers and to recruit and hire local people for job opportunities.

As already mentioned, one of the main problems of Venice is the threat of water level rising, which is a direct consequence of global warming which, in turn, is a result of the greenhouse effect. A way to limit the problem is the reduction of greenhouse gas emissions and from the data emerging from the poll, it seems that there is a general effort in trying to incorporate sustainable practices to reduce the production of those dangerous gases. However, there is not a great concern regarding the need to reduce the consumption of fresh water (only 30%).

On the contrary, the survey reports that efforts are being made to reduce noise in the city, to incorporate the training and education of employees in sustainability practices and to use green products such as biodegradable or recycled materials for business. However, from the point of view of the use of renewable energy sources such as solar and wind ones, it can be observed that the path is still long. If we do not consider the four neutral responses, the 60% declared that they do not use those forms of energy in their business, with 40% using them to a great extent.

4.2 Naples Case Study

4.2.1 Naples Destination Overview

The region of Naples is one of Venice's main competitors in the tourist market. This is the reason why it has been chosen to compare the impact of tourism on both destinations. Even in the case of Naples interviewees were asked to tell which the main tourist competitors of their own city are. The results of the survey showed a peculiar situation in which the most feared competitor is the Naples itself (64,29%) followed by the near city of Salerno (14,29%) and this is probably because interviewees work in the private domain. The situation changes when attention is focused on second competitors and, in this case, 21,43% of interviewees indicated Rome as their main competitor.

When asked to locate Naples in a TALC phase (Figure 6), most responses (57,14%) indicated that Naples is currently experiencing the Development phase, and thus the city is considered to have an increasing tourist appeal. In addition, from the point of view of tourism impact in Campania Region among interviewees there is a strong belief in the fact that tourism offer is growing in the region (3,92 out of 4,00) and that tourism demand in the region is increasing this year (3,85), but also that tourism is creating more jobs and recruiting more workers in their region (3,45).

Figure 6 – Tourism impact in Naples destination

The second part of the survey concerned the state of the destination and interviewees were asked to express their level of agreement regarding initiatives taken by their region during the period from 2014 to 2016. For example, when people were asked if their region is cutting down prices to encourage sales, if we cut out the percentage of neutral responses (35,72%), it appears that not much is being done, with only 21,43% of interviewees agreeing with the statement.

Regarding the diversification of distribution channels in the region, there is a balance between those agreeing and those disagreeing, with most interviewees not taking a definite position. The situation changes when we consider the diversification of tourism offer, since the highest percentage (50% of which 7,14% strongly) agrees with the idea that the region is making efforts in the matter, while only 21,43% showed disagreement.

Worth noticing are the survey's results concerning the increase of marketing efforts to attract more tourists, from which emerges that, even though the highest percentage of records (42,86%) agrees, there is still dissent, with 14,28% disagreeing (half of which strongly), and the same results came out from the inquiry about whether the region is investing more in tourism in general.

Even regarding the idea that the region is promoting new markets and segments there is the tendency towards agreement, but here the percentage of dissent is higher, with 28,57% disagreeing (of which 7,14% strongly).

Thus, from a general overview of regional efforts in the field of tourism, it emerges that, according to the interviewees, on the one hand Campania region is diversifying the tourism offer, increasing marketing efforts to attract more tourists, and investing more in tourism but, on the other, not much is being done to cut down prices and encourage sales.

The following part of the survey concerns the preparation of the region to face compelling problems. The first issue considered is that of climate change, it is worth noticing that, if we cut out neutral responses (28,57%) the quasi-totality of interviewees (64,29% of which 21,43% strongly) believes that Campania region is not ready to face one of the most compelling problem now.

Even from the point of view of the regional preparation to cope with problems of health and wellbeing, there is a high rate of disagreement (64,29% of which 14,29% strongly) and only 21,43% believing that Campania is ready to deal with the issue.

As long as big data are concerned, there is a strong disagreement with the idea that the region is taking advantage of the knowledge enabled by big data, with only 14,28% (half of which strongly) believing the contrary.

Results were quite different regarding the question of digital market channels. As a matter of fact, if we cut out neutral responses, it emerges that most interviewees 50% believes that the region is taking advantage of digital market channels, while 28,57% disagree.

Another compelling problem now is that of terrorism, and thus interviewees were asked if, in their opinion, Campania region would be ready to cope with this eventuality. From the survey emerges that most interviewees (42,85%) believes that the region is prepared to face such emergencies. Yet, manifestations of dissent are still quite high (35,73%).

From the point of view of Sustainability, the three factors considered are Economy, Environment and Society. According to the survey it is worth noticing that there is a general disbelief in the Region's efforts to ensure economic sustainability, with 57,14% of interviewees sustaining that not much is being done. Data are more balanced regarding environmental sustainability, since it emerges that, cutting out neutral responses, there is a difference of 7,14% between those who agree (majority) and those who disagree. The last - but not least – aspect of sustainability is the social one, which concerns the effort put in the preservation of cultural authenticity and in the promotion of inclusive society from the part of the region and even in this case the majority outnumbers the minority of only 7,14%.

But, is Campania region ready to face new competitors and to benefit from collaborative economy? From these points of view, it is worth noticing that on the one hand, according to the major part of people interviewed (42,86%), Campania is working to face the entry of new competing destinations in the tourist market while, on the other, 50% of them (of which 14,29% strongly) believe that it is not working to take advantage of collaborative economy.

To sum up, from the general overview it emerges that Campania region is working to face the entry of new competing destinations, to deal with a possible terrorist threat and that it is using the digital marketing channels. Yet, at the same time, much is still to be done to be prepared to face the compelling menace of climate change and to take advantage of collaborative economy.

4.2.2 Negative Impact of Naples Tourism

The following section of the survey dealt with the issue of the negative impacts tourism has on Naples as a tourist destination. For example, if we cut out neutral responses, most interviewees (35,72%) do not believe that tourism is a cause of crowding out of other economic activities. An important issue, particularly if compared with the situation of Venice, is that of overcrowding. From this point of view, it is important to notice that, contrarily to Venice, in Naples overcrowding is not deemed to be due to the negative impact of tourism on the city, with only 14,28% of interviewees providing a positive response to the question.

In the same way, even the problem of overdevelopment, namely the construction of too many structures in a limited space, is not believed to be a negative effect of tourism on the city. As a matter of fact, from the survey it emerges that, not considering those who provided neutral responses, most of the interviewees (42,86%) disagreed with the statement, while only 7,14% agreed. A similar outcome emerged from the inquiry about the overuse of resources, since, even in this case the majority (42,86%) believes that tourism is not causing exploitation of natural and recreational resources.

Among negative aspects there is also that of crime, and results show that only 7,14% of interviewees think that it is increased by tourism.

Another negative impact considered concerns pollution and environmental impact. From this point of view, if we do not consider neutral answers, there is a prevalence of those who think that tourism is not responsible for air, noise and soil pollution, with 35,71% of negative responses over 21,43% of positive ones. In the same way, talking about water pollution, the survey shows that most interviewees (35,71%) disagrees with the idea that tourism increases its levels, and interviewees' opinion remains the same when talking about long term effects of tourism on the environment. Moreover, taking away neutral opinions, it is worth noticing that only 7,14% of interviewees believe

that tourism puts strong pressure on land use causing the loss of aesthetic landscape values, against the remaining 57,14% of negative responses.

On the other hand, contrarily to what has been seen regarding Venice, it is interesting to notice how, when talking about Naples, data show that interviewees tend to disagree with the idea that Tourism is a reason for the increase of prices of goods and services for residents. Nonetheless, as the graphic shows, there is a strong tendency to agree (57,14% of which 7,14% strongly) with the idea that the massive presence of tourism in the city has caused real estate values to raise, thus negatively impacting residents' lives.

Thus, recapitulating this section of the survey, what emerges from the graphic (Figure 7) is that only the raise of real estate values is perceived as a negative impact of tourism on the city, with a rating of 3,50 out of 4,00, while every other impact is rated around 2,50.

Figure 7 – Negative impacts of tourism in the destination of Naples

4.2.3 Positive Impact of Naples Tourism

The third part of the survey inquired about the positive impacts of tourism on the Naples region. The first factor analysed concerned whether, according to the interviewees, tourism benefits other economic activities. From this point of view, data analysis shows that there is a strong belief in the positive effects of tourism on other economic activities, with a significant 71,43% of interviewees agreeing (of which 57,14% strongly) and only a small 7,14% of them disagreeing. In the same way, most people interviewed (71,43%) believes that tourism contributes in the creation of new jobs for local residents. Percentages are similar concerning the positive effect of tourism in the establishment of new markets for local products, since 57,14% of responses agreed with the statement.

In addition, it is interesting to notice that no interviewee disagreed with the idea that tourism encourages cultural exchange in the city. On the other hand, when it comes to public transportations, there is a percentage of dissent (21,43%) towards the idea that tourism helps improving infrastructures and public transports, even though the majority of those agreeing (28,57% out of 50%) believes the contrary.

Other important factors are the preservation of Authenticity and identity and of cultural and natural heritage. When asked whether tourism helps to preserve socio-cultural authenticity and historic identity of the region, records show that most interviewees (57,14%) agreed, while only 7,14% - though strongly – disagreed with the idea. Similarly, from the survey emerged that there is the preponderance of agreement (64,28% of which 28,57% strong) in the idea that tourism helps preserving cultural heritage. A higher rate of dissent (21,43%) was registered concerning the preservation of natural

heritage, even though most interviewees still agreed upon the idea that tourism can help safeguarding it.

As long as residents' life is concerned, it is curious to notice that, whereas in Venice a general discontent was registered, in Naples opinions are more balanced, with only 14,28% of interviewees believing that tourism does not improve the residents' quality of life. Moreover, 71,43% of people interviewed agrees with the idea that tourism increases the number of cultural and recreational events not only for visitors, but also for local residents.

The last positive effect investigated by the survey questioned about the impact of tourism on income levels and standards of living. Even in this case, if we do not consider neutral responses, most records (57,14%, half of which strongly) agrees on the idea that tourism increases standards of living.

To sum up, the recapitulative graphic (Figure 8) shows that, in Naples, there is a general agreement regarding the positive effects of tourism.

Figure 8 – Positive impacts of tourism in the destination of Naples

4.2.4 Naples Tourism Sustainable Practices

The last section of the survey concerned the employment of sustainable practices in the interviewees' business. From this point of view, all the interviewees declared that they tend to be energy efficient - 62,50% to a great extent and the remaining 37,50% to some extent – using, for example, low energy lighting in their activity. Similarly, records show that, as long as the creation of business linkages between tourism and other economic activities in the region is concerned, all the interviewees stated that they put efforts in this direction (75% to a great extent and 25% to some extent).

The situation is completely reversed when it comes to donating funds or in-kind services to green initiatives, since the survey shows that 62,50% do not take any measure in this regard, and only 32,50% do (of which only 12,50%). Results are more balanced regarding the establishment of a green culture in the workplace - encouraging car-pooling or riding the bike to work – with 50% of interviewees declaring that they are doing nothing at all, and the other 50% taking measures in this concern (12,50% to a great extent and 37,50% to some extent).

Positive results are shown by the graphic regarding the implementation of environmental education programs for visitors, which shows that most interviewees are putting a great effort in this concern (75% of which 50% to a great extent) while 25% are not taking any measure at all.

Similarly, to the Venice case study, even in Naples most of the people involved in the survey (62,50%) tend to limit visitors' access to sensitive cultural and historic as well as natural resources.

Another sustainable practice considered regards the management of wastewater, and from this point of view it is worth noticing that only 12,50% of interviewees declared that they are not doing anything to prevent it, while 87,50% (of which 25% to a great extent) are trying to limit the problem. Moreover, when it comes to the reduction and recycling of solid waste, all the interviewees claim to be employing sustainable practices.

One of the most important domains in which sustainable practices should be applied regards the preservation of cultural identity. From this point of view, the graphic from the survey (fig. 16) shows an encouraging picture, with the totality of the people interviewed declaring that they are employing sustainable practices to preserve their cultural identity, of which 87.50% stating that they are doing so to a great extent.

Another encouraging picture shows that all the interviewees are trying to some extent to purchase from companies with certificates of green practice and, to a great extent, to purchase from local suppliers. Moreover, records report that every company taken into account tends to hire local people for job opportunities (62,50% to a great extent).

Compelling issues are those linked to environmental sustainability and, from this point of view, from the survey emerges that only 12,50% of interviewees are not doing anything to reduce gas emissions in their business. However, not so encouraging are data concerning the employment of sustainable practices to reduce freshwater consumption. Indeed, from the report emerges that, even though most interviewees declare that they are making efforts, there is still 37,50% of them who are not taking any measure in this concern, whereas higher attention is put towards the reduction of noise in the city.

On the other hand, from the survey it appears evident that in every business efforts are being made to train and educate employees on sustainability practices on to use green products like biodegradable materials, recycled paper and so on.

Lastly, the situation changes when we talk about the use of renewable energy resources, in which case there is a high percentage (50%) of interviewees declaring that they are not trying to use those forms of energy in any way.

4.3 Algarve Case Study

4.3.1 Algarve Destination Overview

The Algarve is situated at the western edge of the Iberian Peninsula, in the south of Portugal. The Algarve covers an area of 4,996.8 square kilometres with a resident population of about 444,390. This region is divided into three geographical areas. The coastline is where most of the region's economic activities are based. The Algarve coast is highly diverse with steep cliffs dropping sharply into the sea, extensive stretches of sand, marshes, dunes and lagoons with many inlets, among other natural features. The barrocal is the transitional zone between the coast and uplands, consisting of limestone and schist landscapes. The uplands occupy 50% of the region, with features made up of schist and some granite. The main mountain ranges are the Serra do Espinhaço de Cão, Serra de Monchique with the highest point in the Algarve and Serra do Caldeirão (Turismo do Algarve, 2018).

Most tourism stakeholders (50.0%) perceive the Algarve to be in the rejuvenation stage and a further 20.8% believe the destination is either in the development or consolidation phase. These results provide proof of what has been reported in the literature, namely that stakeholders avoid saying that their destination is in a less favourable stage. In the PDSS survey, only 4.2% of all stakeholders report

that their destination is in the decline stage – the least favourable stage in the TALC mode. In terms of the region's competition, respondents from the Algarve are more likely to report foreign destinations as the main competitors within the MED regions. The Algarve's main competitors are Huelva (20%), Malaga, Antalya and Sevilla (10% each) and Malta, Lisboa, Mallorca (7% each).

The tourism stakeholders surveyed also gave their opinion on tourism dynamics in the region. Overall, these stakeholders agree that tourism demand and supply is growing in the region. They also concur that the Algarve's organisations are recruiting more workers and investing more in tourism. These results are in line with the available secondary data (i.e. growth in the number of guests and overnights in accommodation establishments).

In general, the stakeholder respondents disagree that their region is reducing prices, but they agree that the Algarve is diversifying its tourism offer, increasing marketing efforts, promoting the region in new markets and diversifying its distribution channels. The observed increase in tourism demand could be partially explained by the political instability in competing destinations located in Southeastern Europe, North Africa and Western Asia.

However, the stakeholders surveyed perceive the Algarve as inadequately reacting and adapting to global trends. The respondents only slightly agree that this region is working hard to counteract the entry of new competing destinations into the market. All other statements have lower value, which means that the respondents feel that the Algarve is not developing enough initiatives to deal with global trends (Figure 9).

Figure 9 – Tourism impact in Algarve destination

4.3.2 Negative Impact of Algarve Tourism

In general, negative economic impacts are evaluated with slightly less than positive scores, indicating that the tourism stakeholders surveyed do not see extremely negative economic tourism impacts as common. This may be explained by the stage of the destination life cycle perceived by most respondents: the rejuvenation phase.

They tend to overestimate the positive tourism impacts and underestimate the negative ones. Nonetheless, the respondents agree or strongly agree that tourism raises real estate values in the region, increases prices of goods and services for residents and causes the crowding out of residents from other economic activities.

Like negative economic impacts, negative environmental impacts are not given high values by these stakeholders. However, the respondents agree that tourism increases other types of pollution, intensifies water pollution and produces long-term negative effects on the environment. Notably, the stakeholders neither agree nor disagree that tourism increases crime since this item has the lowest score of any negative impact.

Overall, the results for stakeholders' perceptions of tourism's impacts are in line with analyses of the secondary data available and the respondents' perceptions of tourism dynamics and local reactions to global trends. The Algarve's tourism stakeholders agree on perceived positive economic and socio-cultural tourism impacts, while not perceiving extremely negative economic and environmental tourism impacts (Figure 10). This may be because their destination is in a rejuvenation phase.

Figure 10 – Negative impacts of tourism in the destination of Algarve

4.3.3 Positive Impact of Algarve Tourism

The respondents from the Algarve are quite enthusiastic about tourism's positive economic impacts. These stakeholders agree or strongly agree that tourism creates jobs for local residents, develops new markets for local products and benefits other economic activities in the region. The respondents also agree that tourism increases income levels and the standard of living in the Algarve.

These stakeholders also tend to evaluate tourism's socio-cultural impacts as positive. In general, the respondents agree that tourism encourages cultural exchange, helps preserve cultural heritage, increases the number of events for local residents and helps to preserve the region's cultural heritage. The lowest mean score, although positive, is given to the preservation of natural heritage and environments (Figure 11).

Figure 11 – Positive impacts of tourism on Algarve

4.3.4 Algarve Tourism Sustainable Practices

This section analyses tourism sustainability in the Algarve. Frequency of answers about incorporated sustainability practices in the Algarve. The results below from the private sector stakeholders show that the largest percentage incorporate sustainable practices in their operations to some extent and a slightly smaller number incorporate sustainable practices at a great extent. The stakeholders incorporate sustainable practices to a great extent, from what the results show, mostly in recruiting and hiring local people for job opportunities, preserving the cultural and historic identity and being energy efficiency. Purchasing products from local suppliers and creating of business linkages within tourism and other economic activities of your region are also areas where several stakeholders, even a smaller percentage, incorporate to a great extent. The areas of lesser incorporation of sustainable practices are the limiting the visitor access to sensitive natural resources, Limit visitor access to sensitive cultural and historic resources and donating funds or in-kind services to green initiatives.

It is possible to say that the extent to which the listed barriers impacted the ability of the private sector stakeholders to adopt sustainable practices in their practices. The greater barriers according to the percentages seems to be the lack of sustainability incentive programs (e.g. government incentives) and limited access to suppliers who sell sustainable products (e.g. organic food, alternative fuels, biodegradable items, etc.). The next following seems to be the lack of available money to invest (e.g. equipment, renovations, systems, etc.). The barrier that less impacts the ability of private stakeholder to adopt sustainable practices is the lack of appropriate legislation.

Results show that there is not a consensus if tourism respects sustainability. On average, 34% of public stakeholders agree that that tourism respects sustainability, while 31% disagree. There is only one exception, most stakeholders agree that economic instruments are used to influence the sustainability of tourism developments.

Furthermore, 35% of public sector respondents do believe that tourism operations meet sustainability standards while 21% have the opposite opinion. Most respondents express agreement that regulations consider environmental standards, that certification schemes are being implemented, and that economic instruments are being used to influence the sustainability of tourism operations

5. Conclusion

This paper illustrates the potential of using participatory tools in the monitoring, analysis and forecasts of megatrends in tourism, testing the usefulness of a Participative Decision Support System on three case studies. The results show that any user (i.e. policymaker or private operator) can carry out a case study on a particular tourism destination – or a set of competing tourism destinations – and use the study's findings in their decision-making process. The Tourism Life Cycle Target Model (TALC) was chosen as a key methodology to enable private and public stakeholders to interact with the PDSS and move more easily in exploration of possible future scenarios distinguishing their destinations.

From this experimentation a series of considerations emerge also for future research in the field of participatory tools for tourism monitoring and tourism observatories setting up. First, as initially mentioned, the PDSS is a component of the more general OT of the ShapeTourism project, which must dialogue with the SITDS module. This dialogue must be two-way: the indicators generated by the SITDS must be used to allow the management of a destination to interpret the results obtainable from the simple use of the PDSS and in turn, further surveys contained in the PDSS must be suggested by the analyses emerging from the SITDS. It would be useful, for example, taking advantage of the Reputation Indicator elaborated by the SITE on data extracted from Web 2.0, to query the stakeholders

through the PDSS on the measurement of online reputation detected by this indicator and based on the responses to elaborate the appropriate marketing policies or in line with the Web 3.0 strategies.

Secondly, the PDSS presented here lays the groundwork for a methodological and operational approach in relation to two aspects in particular: how to support stakeholders in intercepting possible future scenarios and how to operatively include them in the analysis. However, further inclusion methods can be easily implemented. For example, by regularly establishing working groups with stakeholders, it would come back very advantageous that some issues of study were advanced directly by them. Currently (see the VTO of DG GROWTH) the topics of study are decided from top to bottom, increasing the chances of investing in research that is not strictly useful for industry.

Finally, PDSS could be used not only as monitoring tool, able to give insights on the management and governance on negative but also positive impacts of the tourism industry and pressure, but also as a benchmark device between destinations. The benchmark through the PDSS model will support destination management organizations to compare similar destinations (in the same TALC stage, with the same primary resource able to attract tourists, alike tourism products e.g. Venice and Naples), small and big destinations in a same context (e.g. in a Region or a country), different type of tourism offer and destinations (e.g. eco-tourism and cultural tourism as developed analysing Algarve (a natural territory) and a urban destination (Venice or Naples)).

References

Butler, R. W. (1980). The concept of the Tourist Area Cycle of Evolution: Implications for Management of Resources, *Canadian Geographer*, 24(1), 5-12

Butler, R. (2014). Tourism Area Life Cycle. In C. Cooper (Ed.), *Contemporary Tourism Reviews*, Vol. 1 (pp. 183-226). Oxford: Goodfellow Publishers Limited

European Commission, 2016, Report “International tourism trends in EU-28 member states Current situation and forecasts for 2020-2025-2030”, Ref. Ares (2016)2465198 - 27/05/2016

European Commission, 2010, COM(2010) 352 final “Europe, the world's No 1 tourist destination – a new political framework for tourism in Europe” Brussels

Shapetourism PDSS Observatory (2018), official site <http://www.shapetourism.eu/main-output/>

Appendix

Tourism Stakeholders' Questionnaire of the PDSS

Section 1: Personal and organizational characteristics

1. Region where the organization is located (if your organisation is located in more than one NUTS III, you will be asked to fill in one per region NUTS III)

_____ [including a drop down list: NUTSIII]

2. Age: _____

3. Gender:

☐ Male

☐ Female

4. Educational attainment:

- ☐ Elementary school
☐ High school
☐ Bachelor, master or PhD degree

[If option bachelor, master or PhD is selected] Area: _____

5. Number of years of experience related to the tourism industry (employment or other): _____

6. Type of key stakeholder that you represent:

- ☐ Public sector (national, regional or local government bodies)
☐ Private sector (tour operators, transport operators, hospitality sector, retail travel, visitor attractions)
☐ Civil society organizations (e.g. non-governmental organizations, trusts and environmental charities, environment, wildlife, human rights, and worker rights)

7. Your role in the organisation:

- ☐ President/CEO/director/business owner
☐ Senior management staff
☐ Middle management staff
☐ Other

8. What is the level of the cooperation of your entity?

- ☐ Local
☐ Regional
☐ National
☐ International

Section 2: Tourism dynamics and trends

1. Please identify three main competitors of your region from the following list:

- Competitor 1 (including a drop down list: Country – NUTSIII)
- Competitor 2 (including a drop down list: Country – NUTSIII)
- Competitor 3 (including a drop down list: Country – NUTSIII)

2. Having in mind your region as a tourism destination and reflecting on period from 2014 to 2016, express your agreement with the following statements:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I do not know/I cannot assess
My region is investing more in tourism this year						
Tourism is creating more jobs and recruiting more workers in my region this year						
Tourism demand for my region is increasing this year						
Tourism offer of my region is growing this year						
My region is diversifying the tourism offer this year						
My region is cutting down prices to encourage sales this year						
My region is increasing marketing efforts this year to attract more tourists						
My region is promoting this year in new markets /segments						
My region is diversifying its distribution channels this year						

Section 3: Local reactions on global trends for tourism sustainability

Please indicate how much you agree with each of the following statements:

My region is ...

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I do not know/I cannot assess
... is working to face the entry of new competing destinations						
... is working to deal with a possible terrorist threat						
... is working to ensure environmental sustainability (e.g. reducing energy and water consumption)						
... is working to ensure social sustainability (e.g. cultural authenticity, inclusive society)						
... is taking advantage of the knowledge enabled by big data (<i>link explaining the meaning of big data</i>)						
... is using the digital marketing channels						
... is prepared to meet the growing concern for health and well-being						
... is prepared to face climate change						
... is working to ensure economic sustainability						
... is working to take advantage of the collaborative economy						

Section 4: Destination life cycle

Considering the figure below, please indicate in which phase (1 to 7) you perceive your NUTS III region is in terms of tourism development:

Note:

1. **Exploration:** Small number of tourists visits, place unspoilt and few facilities exist.
2. **Involvement:** Some facilities for tourists, tourist season recognition.
3. **Development:** Some advertisement to the area. The area becomes recognised as a tourist destination.
4. **Consolidation:** The growth in tourist numbers is weaker. Some conflicts between the host and the tourists.
5. **Stagnation:** The facilities for the tourists could decline and become old. The numbers of tourists may decline.
6. **Rejuvenation:** Investment and modernisation on the destination to increase the number of tourist attraction.
7. **Decline:** If the destination is not rejuvenated (stage 6) then it will go into decline. People lose their jobs related to tourism. The image of the area suffers.

Source: Butler (1980)

Section 5: Tourism externalities

1. Please indicate how much you agree with each of the following statements concerning the **positive impacts** of tourism in your region.

Tourism ...

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I do not know/I cannot assess
... creates jobs for local residents						
...increases income levels and standard of living						
... creates new markets for our local products						
... benefits other economic activities in my region						
... helps to develop better infrastructures and public transports						
... helps to preserve the natural environment and natural heritage of our region						
... helps to preserve the cultural heritage of our region						
... increases the number of cultural and recreational events for local residents						
... improves residents' quality of life						
... helps to preserve socio-cultural authenticity and historic identity of our region						
... encourages cultural exchange						

2. Please indicate how much you agree with each of the following statements concerning the **negative impacts** of tourism in your region.

Tourism...

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I do not know/I cannot assess
... increases prices of goods and services for residents						
... raises real estate values (price of land and housing)						
... causes crowding out of other economic activities						
... produces long-term negative effects on the environment						
... increases water pollution						
... increases other types of pollution (air, noise, soil)						
... causes overdevelopment (concerning over construction)						
... causes overcrowding						
... causes overuse of natural and recreational resources						
... increases crime						
... puts strong pressure on land use and loss of aesthetic landscape values						

Section 6: Sustainability of tourism development

Private sector (if respondent represents a stakeholder from the private sector)

Sustainability practices incorporated

1. To what extent have you incorporated each of the following sustainable practices into your business operations?

	To a great extent	To some extent	Not at all
Recruit and hire local people for job opportunities			
Purchase products from local suppliers			
Creation of business linkages within tourism and other economic activities of your region			
Purchase from companies with certificates of green practices			
Reduce and manage greenhouse gas emissions			
Manage, reduce and recycle solid waste (e.g. composting of waste)			
Reduce consumption of freshwater (e.g. use of a low use water management system)			
Manage wastewater			
Reduce noise			
Be energy efficient (e.g. use of low energy lighting)			
Use renewable energy sources (e.g. solar, wind, etc.)			

Use green products for business (e.g. biodegradable materials, recycled paper, etc.)			
Limit visitor access to sensitive natural resources			
Limit visitor access to sensitive cultural and historic resources			
Preserve the cultural and historic identity			
Implement environmental education programs for visitors			
Train and educate employees on sustainability practices			
Obtain a “green certification”			
Donate funds or in-kind services to green initiatives			
Establish a “green culture” in the workplace (e.g. encouraging car-pooling, ride your bike to work day)			

Barriers and Challenges

2. To what extent has each of the following barriers impacted your ability to adopt sustainable tourism practices in your operations?

	To a great extent	To some extent	Not at all
Lack of available money to invest (e.g. equipment, renovations, systems, etc.)			
Lack of sustainability incentive programs(e.g. government incentives)			
Lack of time to plan for sustainability due to other business priorities			
Limited access to suppliers who sell sustainable products (e.g. organic food, alternative fuels, biodegradable items, etc.)			
Lack on information on how to be more sustainable			
Lack of commitment to the need for sustainable tourism practices			
Lack of appropriate legislation			
Low importance attached by clients to sustainability			
Other: _____			

Public sector or civil society organization (if respondent represents a stakeholder from the public sector or from a civil society organization)

Tourism development respects sustainability

1. Please indicate how much you agree with each of the following statements about tourism development in your region:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	I do not know/I cannot assess
In general, the impacts of tourism developments and proposals are considered a problem						
Sustainability issues, including resource constraints, are taken into account in tourism plans						
Individual tourism developments are controlled by effective land use planning processes						
Environmental/Sustainability Impact Assessment is effectively applied to tourism developments						
Economic instruments are used to influence the sustainability of tourism developments						
Advice is available and given to developers on the sustainability of their projects						

Tourism operations meet sustainability standards

2. Please indicate how much you agree with each of the following statements about tourism operations in your region:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I do not know/ I cannot assess
Regulations are in place and implemented concerning the environmental impact of tourism operations						
In general, tourism service providers are taking steps to improve the sustainability of their operations						
Tour operators are taking account of sustainability issues in the products they promote and information they provide						
Economic instruments are being used to influence the sustainability of tourism operations						
Certification schemes are being used to identify businesses complying with sustainability standards						
Capacity building and advice are being provided and promoted to tourism businesses on enhancing the sustainability of their operations						
Actions have been taken to make tourists aware of sustainability issues in the country and to influence their activities						

3. To what extent has your region incorporated each of the following sustainable practices?

	To a great extent	To some extent	Not at all
Limit visitor access to sensitive natural resources			
Limit visitor access to sensitive cultural and historic resources			
Preserve the cultural and historic identity			
Implement environmental education programs for visitors			
Train and educate employees on sustainability practices			
Donate funds or in-kind services to green initiatives			
Use residents' opinion to support decisions on tourism development			