A Work Project presented as part of the requirements for the Award of a Master Degree in

Management from the NOVA – School of Business and Economics.

TRAVEL HABITS OF ERASMUS STUDENTS: *HOW CAN SMART DESTINATIONS*

ATTRACT THEM

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A Project carried out on the Master in Management Program, under the supervision of:

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03/Jan/2018

ABSTRACT

Erasmus students, also considered Millennials, are heavy users of technology and have been traveling more over the years. As consequence of this growth, as well as from the use of technology in different industries, tourism has evolved into Smart Tourism, and with it, Smart Destinations were born. This paper defines Smart Tourism, the Erasmus program, and Millennials. Afterwards, a discussion that sheds light on their travel habits is done, with the purpose of finding out how Smart Destinations can attract them more easily. This is followed by recommendations the National Tourism Agency should do to allow it to happen.

Keywords: Erasmus students; Millennials; Smart Destinations; Smart Tourism.

1. INTRODUCTION

The Erasmus program was created 30 years ago and has had a wide presence in Europe since the beginning. It has had influenced many fields like the educational, cultural and economic. Such influence is brought by the students who travel across Europe to study abroad and as result of the program growth, they have also been a growing part of the tourism industry. Not only that but the tourism industry has also grown and evolved to a modern state where technologies are part of the experience. This evolution triggered the birth of Smart Destinations, destinations that leverage the use of technology to enhance the mobility and quality of visits.

Undoubtedly, the rise of an influx of students traveling through the Erasmus program and their bond with technology raises important questions regarding the future connection between them and the technology that is embedded with the Smart Destinations, as they are important players in the tourism industry future.

Even though there are studies that aim at Erasmus students, there is not enough information to understand the expectations they have towards the tourism industry and its future (Smart Tourism and Smart Destinations), and this study seeks to answer that. To achieve this,

a web-based survey was used, targeting previous and current Erasmus students. It aimed to understand their traveling habits so smart destinations can attract them more easily.

2. LITERATURE REVIEW

In this chapter, I present the literature relevant to the research topic. First, I introduce the Erasmus program and its participants, the students, the tech-savvy Millennials. Next, I review the concept of Smart tourism and the technologies that enable this new trend.

2.1 The Erasmus Program and the Millennials

The Erasmus (**EuR**opean Community **A**ction **S**cheme for the **M**obility of **U**niversity **S**tudents) program started in 1987 and has been growing ever since. It was created as one of the many initiatives to enhance the sense of European "union" (Fernández Agüero, M. 2017), starting with only a few countries. In 1987, there were 3.244 students from 12 participating countries in the program. After almost two decades, in 2015, the program grew to 291.383 students from 33 different countries (European Commission, 2017).

Additionally, the program aims at improving people's skills and capabilities, with the purpose of developing a highly skilled labor force, renovate the education systems and enhance Europe's status as a knowledge-based economy (Gonzalez, 2011). Moreover, throughout the years, the Erasmus program has suffered many changes, such as an expansion in 2007 and another development, in 2014, with the creation of the Erasmus+. The Erasmus+ program puts together all the European Union's plans for education, training, youth and sport, including the Lifelong Learning Program (where Erasmus student mobility for studies is integrated), Youth in Action and other international co-operation programs.

It can be seen that its scope and influence has been expanding, not only on an educational but also on a cultural and economic level (Beerkens and Vossensteyn, 2011). For instance, the Higher Education Authority (HEA), the department that manages the Erasmus+

program in Ireland, revealed the economic advantages that its participants can bring. Besides the expenditure students have, the average student has at least four visitors during their studying period, with stays between 3 and 15 days. This represents an influx of money in the tourism industry, plus, in this specific case, it was estimated that, on average, the visitors spend 540€ each, per week (assuming the average visitor stays a week), resulting in visits worth 14.000.000€ each year (Murray, 2016).

Moreover, the Erasmus program gives several benefits to its participants, as numerous studies suggest, however, there is also another feature that is enhanced, the internationalization (Beerkens & Vossensteyn, 2011). This can, in part, be explained due to the fact that the Erasmus students today, belong to the generation of millennials, as Brosdahl and Carpenter (2011) refer to the people born in the period of 1981-1999.

Millennials are the first generation to be born at the time of cell phones and the internet, living continuously with different technologies every day. As a result, this "Internet Generation" values technology like no other generation and access to technology is crucial in their day to day life. Another big characteristic regarding Millennials is their need to "live now", having the need to not only to be present at everything but also to show it to others (mainly through social media). These needs of being present and adventurous are one of the reasons that have taken this segment to grow in the tourism industry (Perdomo, 2016). In sum, the millennials can be described as e-travelers, who use the internet to look for information on where and how to travel, constantly with their gadgets, even during and after the trip (Huang and Petrick, 2010; IHG, 2014). This tech-savvy generation ends up being always online, either through smartphones or other devices, trying to connect two spheres: the physical and the digital world. One example that demonstrates it, is concerning reviews. Online reviews have grown in the past years, with the development of online platforms solely focused on that, as well as the promotion by companies for consumers to read and leave comments about their (hopefully

good) experience. As Mauri and Minazzi (2011) stated, reading an online review, either positive or negative, has an influence when it comes to booking intentions. Reviews posted online are a crucial source of information that can manipulate the decision-making process of a traveler. In addition, W. Duan et al. (2008) also stated that online reviews are very important in a business and that they can influence their sales. However, unlike other studies, it suggested what influenced the sales was the number of reviews rather than its quality. Plus, it also stated that the "results suggest that consumers are not influenced by the persuasive effect of online word-of-mouth". As it is possible to see, there is an agreement that online reviews are crucial and have influence, either concerning the decision-making or the revenues (which could be considered as a consequence).

The Millennials, represented in this study as Erasmus students, are an increasingly important market segment, thus, the first research question is:

RQ1: What are the characteristics of Millennials as tourists – habits along the customer journey.

2.2 Smart Tourism and Smart Destination

With hopes of responding to the need of connecting the physical and the digital world while traveling, the term Smart Tourism was introduced (Gretzel et al., 2015).

Smart tourism is a growing term that shows the influence that technology is gaining in the tourism sector. It is built on a broad info-structure and is supported by big data that is either directly (e.g. posting on social media) or indirectly (e.g. through sensors that are on mobile devices) provided by consumers. According to Gretzel et al. (2015), smart tourism has 3 main components, Smart Experience, Smart Business Ecosystem and Smart Destination, however, this paper will only focus in the latter.

As U. Gretzel et al. (2015) defines, Smart Destination is something broader than the concept of smart city, since it does not restrict itself only to the residents. As so, Smart Destination takes the ideologies of smart city to urban and rural areas and, besides the residents,

the consumers (tourists) are also taken into account, as their efforts to hold the mobility, sustainability, and quality of visits. As Lopez de Avila (2015) described, Smart Destination is an innovative tourist destination built on an infrastructure of state-of-the-art technology, that is rooted in all entities and establishments. As result, destinations will use synergies between technology and their social mechanisms in order to improve the tourist experience. Moreover, Buhalis and Amaranggana (2013) state that Smart Destinations exploit technology rooted in environments, end-user devices (such as smartphones) and involved stakeholders that dynamically make use of the platforms to benefit from information. All, to improve the experience and the satisfaction of the consumer, while improving the efficiency and the competitiveness level of a destination, to tackle any needs travelers may have, either during, after or even before the trip. However, this is only possible due to the incorporation of ICTs into physical infrastructure. For example, in Barcelona, the city offers bus shelters with USB ports to charge smartphones. Another example is Amsterdam, that through beacon technology lets touristic signs translate themselves into specific languages, or Brisbane, through the same technology, is able to communicate to tourists points of interest, if they are inside a specific radius of a location.

There are myriad interpretations of smart tourism, as technologies evolve, and travelers and service providers discover how to use the technologies to meet the travelers' needs or better manage. Understanding the prevailing interpretations may be important for tailoring campaigns and differentiating in the tourism market that is increasingly competitive. Hence, the second research question:

RQ2: What is Smart Tourism for the Millennials?

2.3. Technologies that enable Smart Tourism

The development and conceptualization of smart destinations are only possible through the usage of technology. It is this technology that enables the smart tourism to evolve and

enhance the living quality within the destinations. Plus, these technologies are also likely to comprehend, acquire and preserve knowledge, profit from experience and respond swiftly and effectively to new situations (Rudas and Fodor 2008). These technologies are commonly referred as Information and Communications Technology or ICT. In other words, ICT applications and tools allowed tourism companies to become "smarter" in the way they perform and compete through automating, modernizing and transforming their business processes and functions like human resources management, marketing, logistics management and customer service and management (Sigala and Marinidis 2012). Within the settings of smart destinations, this type of technology is the fundamental component of information systems that allows consumers (tourists) and service providers with more suitable data, greater mobility, better decision and a more enjoyable experience (Gretzel 2011; Sigala and Chalkiti 2014; Werthner 2003). These smart systems incorporate a broad scope of technologies in direct support of tourism, as example, there are the recommender systems, context-aware systems and the augmented realities systems (Venturini and Ricci 2006; Fesenmaier et al. 2006; Lamsfus et al. 2014).

Furthermore, as these systems incorporate a wide range of technologies, they are designed to focus on the traveler and aim them in several different aspects. For instance, these systems can help by predicting the travelers' needs or making recommendations, improving the travelers experience through the offering of valuable information (customized and based on their location) and by allowing travelers to share their experiences in order to help other travelers in their decision-making process.

2.4. The Internet of Things and co-creation of value amongst stakeholders

Nevertheless, comprehending the Internet of Things (IoT) will be critical for producing the smart environment that ultimately connects digital and physical infrastructures. The crucial

thought of the IoT is the continuous presence of numerous objects (like sensors, mobile devices, etc.) around us, that are able to interact and co-operate with other objects with the aim of achieving the same objective (Want et al. 2015). The IoT can be seen in the social or management dimension, or even in another domain, for instance, the sensors that are incorporated in tourism attractions are allowing tourism service providers to have the tourists' footprint (location and consumption behavior related) with the purpose of offering location-based services. It is by being connected to the internet that these objects bridge the gap between the physical world and the digital sphere.

As it is possible to notice, these smart systems will help the tourism industry, either by process automation, value co-creation, new product development, efficiency improvements, managing crisis, process automation or demand forecast (Sigala 2012a and b; Werthner 2003; Yoo et al. 2015; Wöber 2003). It is then crucial, for companies to innovate and distinguish themselves by collaborating with stakeholders, beyond typical, with the purpose of trading and sourcing resources. As said before, a stakeholder, independently of whom it is, is a player that doesn't have to be dependent on their traditional role, since they all interact and exchange resources with each other in order to co-create value (Gretzel et al 2015).

Undoubtedly, the unrestricted use of technology, specifically smartphones, opened up communication channels that boosted co-creation amongst stakeholders. Additionally, it meant a time of unprecedented connectivity, which influenced smart tourism to bridge the digital and physical world. In fact, the increased usage of iBeacon technology ensured the tourism sector that the first step was given, since smartphones were reacting to signals from the physical domain with the aim of sustaining ambient context reorganization. Consequently, having a dynamic connection between stakeholders is crucial and social media and internet tools enable companies to improve that, by allowing them to network and exchange resources with each other.

Given the dynamics of the technological advancement and its potential impact on tourism and Portuguese competitiveness in this important industry, the last research question is:

RQ3: What is the role of National Tourism Agency to develop smart tourism in Portugal?

3. DATA AND METHODS

3.1. Research Design and variables

This research study was designed with an aim to explore how smart destinations could attract more easily Erasmus Students. To achieve this aim, I looked into the travel habits of Erasmus Students in three main stages: before, during, and after the trip. I apply quantitative analysis to the data obtained from the Erasmus students via a web-based survey.

The survey was designed to capture travel habits along the following stages: booking, traveling and staying preparation, and the returning to their country of origin. The answers collected constitute a convenience sample, as the survey has been advertised only through my social network contacts.

This web-survey was open from 15th of November to 3rd of December 2017, with an indication that it is targeting current and previous Erasmus students. Only Erasmus Students from the 33 program countries were considered eligible. The eligibility was verified in accordance to the European Commission (2017) Annual Report 2015, that specified the Erasmus program countries: the 28 EU Member States, Iceland, Liechtenstein, Norway, the former Yugoslav Republic of Macedonia and Turkey, with the remaining countries in the world being considered as partner countries. I obtained 781 responses. Of these 347 answers were considered invalid, due to the nationality of the respondent (105), missing answers (188) or have never studied abroad (54).

Table 1 summarizes the data used in this research.

Nr.	Variable	Type	Source – survey questions and meaning of the variable values
1.	WTPE for Smart Room	Binary	Would you be willing to pay an extra fee to stay in a Smart Room? (1- Yes; 2- Maybe; 3- No), converted to binary variable (0- No; 1-Yes or maybe)
2.	WTPE during travel	Binary	Would you be willing to pay an extra fee during travel (better seat, etc.) (0-No; 1-Yes)
3.	Traveller	Binary	Have you ever traveled? (0-yes; 1-no)
4.	Purpose of traveling	Binary	What is the main purpose of most of your trips? (0-Business; 1-Leisure)
5.	Yearly trips	Ordinal	How often do you travel? (1- Once a year; 2- 2 to 3 times a year; 3- 4 to 5 times a year; 4- over 5 times a year)
6.	Study abroad	Binary	Have you ever study abroad? (0-Yes; 1- No)
7.	Booking location	Nominal	Where do you usually book your trip for Business/Leisure? (1- Airline counter; 2- Internet, 3- Travel agencies; 4- Other; 5- I don't travel for this reason)
8.	Internet booking location	Nominal	If in the previous question you answered "Internet", please specify. (1- Computer; 2- Smartphone; 3- Tablet)
9.	Time searching	Ordinal	How long do you spend searching before booking? (1- I don't search; 2- <1 hour; 3- 1 to 2 hours; 4- 2 to 4 hours; 5- >4hours)
10.	Time to book	Ordinal	How long before the trip do you usually book it? (1- > 2 months; 2- 1 to 2 months; 3-3 to 4 weeks; 4- 1 to 2 weeks; 5- <1 week)
11.	Reviews	Binary	Do you read reviews before booking? (0- Yes; 1- No)
12.	Influence of reviews	Binary	Do the reviews influence (positively or negatively) your decision? (0- Yes; 1- No)
13.	Online travel experience	Ordinal	The original variable is 1-5 Likert scale; the higher the value, the higher is the level of agreement towards their online travel experience
14.	Ranking Hotel aspects	Ordinal	Rank the options from the most important (1) to the least (6) when you book a hotel: Complementary discounts in touristic attractions; Complementary services (ex. meals); Conditions; Hotel Brand; Location; Price.
15.	Ranking Flight aspects	Ordinal	Rank the options from the most important (1) to the least (5) when you book a flight: Airline brand; Duration of the flight; Location of the airport (if applicable); Price; Time of departure and arrival.
16.	Type of accommodation	Nominal	In what kind of accommodation do you normally stay when you travel? (1- Airbnb (and similar); 2- Apartment Hotel; 3- Couchsurfing; 4- Friends/Family House; 5- Hostel; 6- Hotel; 7- Lodges.
17.	Accommodation experience	Ordinal	The original variable is 1-5 Likert scale; the higher the value, the higher is the level of agreement towards their accommodation experience
18.	Smart Room knowledge	Continuous	When you hear "Smart Hotel" or "Smart Room", what do you think it is?
19.	Smart Room elements	Ordinal	The original variable is 1-5 Likert scale; the higher the value, the higher is the level of interest in having elements of Smart Rooms
20.	Online presence	Ordinal	The original variable is 1-5 Likert scale; the higher the value, the higher is the level of agreement towards the online presence and interaction with companies
21.	Gender	Binary	"Your gender?" (0-male; 1-female)
22.	Age	Nominal	What age category are you in? (1- <18; 2- 18-26; 3- 27-36; 4- >36)
23.	Work situation	Nominal	What is your work situation? (1- Employed; 2- Student; 3- Work-Student; 4- Unemployed)
24.	Nationality	Nominal	What is your nationality? (1- French; 2- German; 3- Portuguese; 4- Spanish; 5- Other)

Table 1 – Data description

3.2. Analytical approach

As mentioned above, this research is based on primary data collected through a web-survey. To answer the first research question, exploratory data analysis is conducted and

complemented with a logistic regression that tests the associations between the willingness to pay extra for services during travel and stay (WTPE during travel and WTPE for Smart Room) and other variables presented in table 1. To answer the second research question, qualitative analysis of the textual entry on descriptive survey questions is conducted. To answer the third research question, a set of recommendations is developed based on the survey results and the analysis of secondary data, literature and public documents. For the statistical analysis, statistical software SPSS (Statistical Package for the Social Sciences) version 24 was used.

4. RESULTS

In total, there were 781 individuals responding the survey. Of these, only 434 were considered valid, due to the causes explained in chapter 3. Majority of respondents were female (79%). Considering age distribution, the majority (99%) of the respondents are between 18 and 36 years old, and within this group, 94% being in the interval of 18 to 26 years old and the rest (5%) from 27 to 36 years old. At the time of responding, 90% of the respondents were still students.

Top 5 of nationalities among the respondents are Spanish (15%), Portuguese (11%), German (10%), Italian (10%) and French (9%). There are in total 30 different nationalities represented in the sample. As mentioned before, the observations were only targeted at the 28 country members of the European Union and other 5 (Iceland, Liechtenstein, Norway, the former Yugoslav Republic of Macedonia and Turkey), and as a consequence, all the countries above have at least one representative in this sample (with the exception of Luxemburg, Iceland, and Liechtenstein).

Considering how often do the Erasmus students travel, 44% of the respondents are traveling more than 4 times a year, while nearly 40% only travels 2 to 3 times a year and 17% only travels once. When investigating the main reasons to travel, leisure stands out for the

majority (97%), and only three percent travel for business purposes. In addition, the vast majority books their trip using the Internet (92%), with the most used device being computers (94%). When it comes to choosing their mean of transportation, the majority (76%) prefers to travel by airplane, followed by train (14%).

The survey asked the Erasmus students to rank numerous elements regarding their importance when they book a flight or a hotel. The ranking variated from 1 (the most important) to 6 (the least important). When it came to the hotel, the elements that were provided were: complementary discounts in touristic attractions, complementary services (such as meals), hotel conditions, hotel brand, location and lastly, price. After reviewing the results, the most important element was the price, with a ranking average of 1.64, closely followed by the location (1.96). Afterwards, by order, came the conditions (2.92), complementary services (4.09), complementary discounts in touristic attractions (4.85) and hotel brand (5.55). Concerning the ranking of the flight, the elements in question were: airline brand, duration of the flight, location, price and time of departure and arrival. Once consulting the results, the element that was ranked higher was, just like in the hotel scenario, was the price with an average of 1.32. The remaining elements were ranked in the following order: time of departure and arrival (2.78), location (3.10), duration of the flight (3.35) and airline brand (4.45).

As making Smart services requires an investment, it is important to characterize the behavior of the Erasmus student, and particularly who is willing to pay extra for a better service or experience. To test if there is statistically significant association between the willingness to pay for extra service, either during travel or a stay (smart room), a logistic regression was conducted. The results are shown in table 2, which only contains statistically significant associations.

	(1)	(2)
VARIABLES	**WTPE for Smart Room**	**WTPE during travel**
Reading reviews	-0.34	-1.31**
Q21_1	0.44*	0.50**
Q22_5	0.53**	0.54**
Q14_8	0.20	-0.30**
Q15_11	0.30*	0.23
Q11_1	0.56***	0.05
Q11_2	0.27**	0.03
Q11_3	0.22*	0.33*
Q11_4	0.70***	-0.06
Q12_6	-0.42***	0.02
Q33_6	0.29*	0.05
Q33_7	0.15	0.43***
Observations	426	426
r2_p	0.367	0.206
p	0	0.0257
Robust standard errors in parentheses		
*** p<0.01, ** p<0.05, * p<0.1		
Raw coefficients presented.		

Table 2 – Logistic Regression

As shown in table 2, the willingness to pay extra during travel is negatively associated with reading reviews (p<0.05) and with Q14_8 – rating the importance of tourism attractions to be listed online – (p<0.05). It is positively associated with Q21_1 – ranking the importance of complementary discounts in touristic attractions when booking a hotel – (p>0.05), with Q22_5 – ranking the importance of price when booking a flight – (p>0.05), with Q11_3 – interest on having a Smart TV with streaming services in a Smart Room – (p>0.1) and with Q33_7 – level of agreement on leaving reviews after having an experience – (p>0.001). When considering willingness to pay extra for smart room, the mix of statistically significant variables is a bit different than for the WTPE during travel. Namely, WTPE for smart room is positively associated with Q21_1 (p>0.1), with Q22_5 (p>0.05), Q15_11 – rating the importance to have a personalized stay – (p>0.1), Q11_1 – interest on having a Smartphone/Ipad to control room aspects in a Smart Room – (p>0.01), Q11_2 – interest on having a voice activated room in a Smart Room – (p>0.05), Q11_3 (p>0.1), Q11_4 – interest on having access to an app to use more easily hotel services in a Smart Room – (p>0.01) and Q33_6 – importance for companies

to interact on social media – (p>0.1). Plus, it is negatively associated with Q12_6 – rating how much a free Wi-Fi across the destination is needed – (p<0.01)

When it came to reviews, 79% of the answers were positive when asked if they read reviews before booking. In addition, 85% said that they were influenced, either positively or negatively by the reviews they read.

Considering the needs of the Erasmus students when they travel. the survey covered the following: online check in for a flight, online check-in/out for a hotel, online ticket purchase, free Wi-Fi at the hotel, free Wi-Fi across the destination, GPS (global positioning system) and access to mobile device chargers in public spaces. These elements were ranked in five sections, on a scale ranging from not needing the element at all to needing it extremely. The element that was most needed was free Wi-Fi at the hotel, with almost 60% saying they need it extremely, followed by online ticket purchase, online check in for a flight and GPS (77%, 66%, 61% said they, at least, need it "very", respectively), free Wi-Fi across the destination and access to mobile device chargers in public spaces (57% and 50% voted "moderately" and "very" in their need to have it, respectively) and lastly, online check in/out for a hotel (with 45% voting they do not need this technology or just slightly need it).

Concerning the presence and behavior companies must (or not) have online, Erasmus students indicated their agreement with the following statements: "it is crucial for hotels and restaurants to have an online presence", "it is important for you to interact online with the hotel" and "it is important for the companies in the tourism industry to interact with clients on social media". By analyzing their results, 54% strongly agrees with the need for the service providers to have an online presence. Regarding the importance of online interactions and interactions through social media, 42% and 41% voted somewhat agrees, respectively.

When it comes to smart rooms, the Erasmus students indicated their level of agreement about these following aspects: having a smartphone/iPad to control room aspects (such as

television or room temperature), voice-activated room (using an app like Siri to switch on/off lights), having a smart TV with Streaming Services (e.g. Netflix) and having an app to use more easily the hotel services (ordering food, making reservations, etc.). The element that was indicated as the most needed was an app that enables easier use of the hotel services and a smart TV with Streaming Services (with 59% and 52% saying they need it between moderately and very, respectively), followed by having a smartphone/iPad to control room aspects and having a voice-activated room (46% and 59% said they do not need this at all or just slightly).

Another question that was asked of the Erasmus students was if they knew what Smart Room/Smart Hotel meant and to explain what they thought it was. To this question, only 324 answers were given (out of 434) and they could be gathered in 5 key areas: Cheap/Small Hotel, Unaware of the concept, Tech related, Personalization and Others. The reason these areas were put together, were due to topic similarities when the Erasmus students answered them. The Cheap/Small Hotel had little variety of replies since the majority included the words "cheap", "affordable", "small" or "simple". The Unaware of the concept, as the name suggests, were answers where the students did not know what it was, having answers such as "don't know", "no idea" or "never heard". Regarding Tech, there was a bigger variety of replies, however, some key-words were always mentioned, which led them to be gathered in the same area. These key-words were, for example, "connected", "internet", "IoT", "online", "technological" or "technology". Concerning the Personalization area, it was a topic that focused more on the personalization of the service, and some key-words were "adapted", "customized", (individual/traveler) "needs" or "preferences". As for the Others, it gathered the answers that did not fit the previous categories and had no relevance by themselves. This vast range of topics included, for instance, "eco-friendly", "expensive", no people working at the hotel or "modern" design.

The main answer was concerning technology and gathered 58% of the responses. 8% of the answers considered a smart room/hotel to be a cheap and/or small version of a standard hotel, whereas 5% considered it to be associated to the personalization of the service/stay with the purpose of fulfilling the needs of the visitors. The remaining percentage, 14% of the answers had a variety of totally dissimilar ideas, whereas the last 15% were from Erasmus students who were unaware of what smart room and smart hotel meant.

5. DISCUSSION

This study had the participation of previous and current Erasmus students, 90% of whom are still students. Their age stands between 18 and 36 years old, which corresponds to the age gap of the segment called Millennials. This interconnection of being an Erasmus student and a Millennial makes this segment propitious to be targeted by the tourism industry, given that it can even be considered the same segment due to all the similarities. Consequently, it is crucial to know who the Millennials are as tourists.

Apart from the age gap that they belong to, there are several other characteristics that makes them unique. One other characteristic is their need to be present and adventurous, given that the vast majority of them travel with the commitment of having fun, for leisure purposes. Additionally, almost 50% travel more than 4 times a year, and in these trips, the most preferred mean of transportation relies on airplanes. Nonetheless, they also have the need to show others (mainly through social media) their trips, a consequence of the easy access to technology that they have. Unlike previous generations, Millennials were born at the time technologies were booming and being developed for a day to day use, which made them, nowadays, unable to live without technology. They are also known as "Internet Generation" or e-travelers and have the constant need to be connected to the internet, on all the steps of the travel (before, during and after). As the survey showed, 92% of the Millennials book their trip using the internet, plus,

most of them, when they do book through the internet, prefer to use a computer rather than another device (such as a smartphone). Additionally, there are other steps in which Millennials also use the internet, as the survey demonstrated. Contrarily to past generations, Millennials have the opportunity to use the internet to buy products since an early stage in their life and it resulted in them preferring to buy tickets (e.g. plane tickets, museum tickets, etc.) online rather than in a physical location. They also use the internet to do their own check-in for a flight, thus, saving time before arriving at the airport. As it is possible to see, Millennials use the internet to look for information concerning their trip, where and how to travel, unable to leave this key-aspect out of the picture. Consequently, one aspect that influences their decision making is online and it is seen through the reviews. Given that they are so connected to the internet, they rely on reviews to help them make the final step of booking or traveling. As the literature and the survey presented, this segment is a high consumer of reviews and are persuaded, either positively or negatively, by them, turning reviews into a crucial feature that any traveler ought to use.

Nevertheless, in order for them to give or read reviews, there is something that must be done, that companies must have an online presence. Apart from the online presence, in this case from hotels and restaurants, Millennials also think that it is crucial for companies to interact with the consumer and not having only a consumer to consumer experience. This interaction can be done through social media, given that it is a simple, easy and effective way to reach this segment.

As the results of the survey came to light there were other characteristics that were clear. When they had to rank several aspects by the level of importance, concerning booking a hotel or a flight, the most important element regarding a hotel and a flight was, in both cases, the price. As for the least important for a hotel and a flight, the result was once again identical in both cases, the brand of the hotel/flight. This demonstrates that the brand for a Millennial is not

so important as it used to be and that this segment is price sensitive, putting the spending in the lead when thinking about traveling.

Nonetheless, traveling to a Smart Destination, and traveling to a Smart Hotel or Room can be more expensive than staying, for instance, at a hostel (the preferable type of accommodation Millennials tend to stay on). As so, it is important to comprehend who can be the best target within this segment. As price sensitive as they may be, there are exceptions, resulting in Millennials more prone to spend in order to have a better and smarter service or experience. These targets are crucial for Smart Destinations, at least in a pilot stage, given that to have a better and smarter environment it is needed someone willing to spend more.

The targets that are mentioned are two different types of targets. On the one hand, there is one more willing to pay extra during travel (WTPE during travel), characterized by attributing a higher importance in having access to complementary discounts when booking a hotel and by being sensitive about flight prices, as well as having streaming services in the hotel room. Plus, even though this target is keener on leaving reviews, the willingness to pay extra can be diminished after reading reviews from others. On the other hand, the other target type, that is more willing to pay extra for a Smart Room (WTPE for Smart Room), is portrayed as someone who desires to have a personalized stay, with access to Smart Room technologies (such as a mobile device to control room aspects, voice-activated room or streaming services) and that believes companies should interact with customers on social media. However, it is one that is negatively affected by the existence of Wi-Fi across a destination. What is more, this last target type also has similarities with the previous one. Apart from the technology both are willing to pay more for, the WTPE for Smart Room type also gives more importance on having access to complementary discounts when booking a hotel and to prices when booking a flight. As it is possible to see these two types of target are more prone to spend more, and even though they have their differences, there are some similarities that would make them easier to be targeted

together. Yet, for them, or anyone, to be willing to spend extra on a Smart Destination, it is important to understand what a Smart Destination is.

With the purpose of understanding that, an analogy is made between Smart Destinations and Smart Rooms/Hotels since both are involved in the "smart world".

A Smart Destination, as the literature showed, has several smart systems helping it to work better and to provide a superior experience to its visitors, as well as the residents. It makes technology the focal point and is able to leverage it in order to serve people. Smart Rooms/Hotels have the same goal, nonetheless, on a much smaller scale. Through the survey answers, it was possible to uncover that the Millennials did not know exactly what it was. There was a portion of answers demonstrating the lack of knowledge of what a smart room/hotel is, however, when they tried to guess, the majority predicted that it involved, at one level or another, the usage of technology. Additionally, a small percentage of the Millennials also thought it was related to the personalization of the service, which in an indirect way ends up being. Nevertheless, there still exists a big percentage of answers that showed that they are unaware of what a smart room really is, even though most of them know that, in some way, includes technology. This results in a need to educate the consumer, given that this involves a big step regarding the usage of technology, as well as the interaction with it.

Another step to understanding if Millennials are ready for Smart Destinations is to know how they view their interaction with technologies, given that ICT and IoT are key elements of a Smart Destination. Again, smart rooms were taken into account and the technology embedded with them. By analyzing their responses, something that stood out. Even though Millennials are considered to be a very technological segment, without being able to live deprived of technologies and always craving to be connected to the internet, when it came to technologies that interacted more with them and with the environment surrounding them, they were not very interested in being part of it. One of the examples of a technology that was more interactive

was having a voice-activated room, with a software similar to Siri on iPhone, and the responses were mostly not in favor of it. In addition, another case of a technology in which did not have a positive response was having a mobile device (smartphone/iPad) to control room aspects, such as the television or room temperature. On the other hand, there were some technologies that had a positive response from Millennials, yet, those technologies are more common nowadays. They were: having a mobile application to be able to take advantage of the services provided by the hotel, such as ordering food or making reservations, and the other was having a smart TV in the room with a streaming service, like Netflix or Amazon Prime.

According to these results, it can be seen that the Millennials are not prepared yet for the full amount of technologies and environment that a Smart Destination (ideally) offers its visitors. The technologies that have more interaction with its users are yet to be seen as ready, in order for Millennials to feel comfortable using them. As so, for the Smart Destinations to be able to attract this segment, it is important for the National Tourism Agency, which already has the responsibility to promote the tourism and its quality, as well as, the development of infrastructures related with tourism, to be a key player. First, they have to educate better the consumer (Millennials), given that they do not have a clear picture of what a "smart world" includes, even though they may have a general impression that includes an abundance of technologies. Nonetheless, there is a big difference between the technologies that a Smart Destination ideally has and the technologies that most people have interacted with so far. As so, for this gap to be overcome, step by step, is important to create campaigns to raise awareness of what this "smart world" involves, as well as the benefits that can produce for everyone and the help they can give to maintain the sustainability. Such campaigns could be shared in the social media, given the range it has within the segment that is being targeted. Second, since Millennials are a generation that needs to be constantly connected to the internet, it is important that infrastructures are built in order to allow them to use their devices to their full capacity and

thus, allowing them to take advantage of the smart systems Smart Destinations have, such as context-aware system or recommendation system. To be more precise, it is vital for them to have an alternative to be online across the destination, so the creation of a free Wi-Fi is a good alternative, that is growing within some smart destinations. Furthermore, another aspect that can also be enhanced is the creation and diffusion of chargers in public spaces (like in Barcelona). And thirdly, the National Tourism Agency should target first, and better, the part of the segment who is more willing to "participate" in the exploration of this "smart world". Even though several aspects of a Smart Destination won't have a direct increase on price (e.g. free Wi-Fi), there is a great need of investment, and aspects like a Smart Hotel and Smart Rooms will have a higher price than the average accommodation Millennials prefer. Therefore, the main focus should be to target the "WTPE for Smart Room" and the "WTPE during travel" type, since they are more willing to spend extra in order to have a better experience. They could be targeted using, not only the basic social media but other websites that they rely on when booking their trips (especially flights) and consulting reviews.

5.1 Limitations

The regression results should be considered as correlations, and not causations, as there may be the issues of endogeneity. This study relied on a web-based survey that was diffused on social media, making the answers collected a convenience sample. This limitation has influence in its power to generalize since subgroups of the target population can be under representation. As result, a supplementary study of the population I question should be done in order to further the knowledge.

6. CONCLUSION

The Erasmus program allowed students to visit other countries and triggered in them the will to travel. These Erasmus students are also Millennials, and they are a growing segment

of the tourism industry. This segment is known for the constant use of technology, and given that the use of technology is increasing and its involvement with many industries has developed new ways to enhance the experience for its users, it is no surprise the importance that is gaining in the tourism industry. This resulted in the rise of Smart Destinations, however, since this is a novelty, tourists are not ready yet. So, the National Tourism Agency, who has the responsibility to promote the tourism and its quality must act. It must educate the consumer (Erasmus students/Millennials) on what the Smart Tourism is and involves, develop infrastructures that allow Millennials to use the smart systems and, since a smart environment has a higher cost they should focus on the specific targets, given that they are more willing to spend extra in order to have a better and smarter experience.

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Appendix

What is your gender?

		Frequency	Valid Percent
Valid	Male	90	21
	Female	344	79
	Total	434	100

Table 1

What age category are you in?

		Frequency	Valid Percent
Valid	<18	2	0,5
	18 – 26	407	94
	27 – 36	23	5
	>36	2	0,5
	Total	434	100,0

Table 2

What is your work situation?

		Frequency	Valid Percent
Valid	Employed	36	8
	Student	307	71
	Work-Student	84	19
	Unemployed	7	2
	Total	434	100

Table 3

What is your nationality?

		Frequency	Valid Percent
Valid	Austrian	8	2
	Belgian	12	3
	British	9	2
	Bulgarian	1	0
	Croatian	9	2
	Cypriot	1	0
	Czech	13	3
	Danish	1	0
	Dutch	13	3
	Estonian	4	1
	Finnish	8	2
	French	41	9
	German	44	10
	Greek	10	2
	Hungarian	7	2
	Irish	3	1

	Italian	44	10
	Latvian	3	1
	Lithuanian	5	1
	Macedonian	3	1
	Maltese	5	1
	Norwegian	2	0
	Polish	34	8
	Portuguese	49	11
	Romanian	14	3
	Slovak	9	2
	Slovenian	5	1
	Spanish	63	15
	Swedish	6	1
	Turkish	8	2
	Total	434	100

Table 4

What is the main purpose of most of your trips?

		Frequency	Valid Percent
Valid	Business	11	3
	Leisure	423	97
	Total	434	100

Table 5

How often do you travel?

		Frequency	Valid Percent
Valid	Once a year	73	17
	2 to 3 times a year	168	39
	4 to 5 times a year	92	21
	Over 5 times a year	101	23
	Total	434	100

Table 6

Where do you usually book your trip? - Leisure

		Frequency	Valid Percent
Valid	Airline Counter	9	2
	Internet	401	92
	Travel Agencies	17	4
	Other	5	1
	I don't travel for this reason	2	1
	Total	434	100

Table 7

If in the previous question you answered "Internet", please specify:

		Frequency	Valid Percent
Valid	Computer	385	94
	Smartphone	21	5
	Tablet	3	1
	Total	409	100
Missing	System	25	
Total		434	

Table 8

Which is your favorite mean of transportation when you travel (between countries)?

		Frequency	Valid Percent
Valid	Airplane	328	76
	Boat	4	1
	Bus	18	4
	Car	25	6
	Train	59	14
	Total	434	100

Table 9

Rank the options from the most important (1) to the least (6) when you book a hotel

	N	Minimum	Maximum	Mean	Std. Deviation
Complimentary discounts in touristic attractions	434	1	6	4,85	,993
Complementary services (ex. meals)	434	1	6	4,09	,879
Conditions	434	1	6	2,92	1,020
Hotel brand	434	1	6	5,55	,792
Location	434	1	5	1,96	,849
Price	434	1	6	1,64	,907

Table 10

Rank the options from the most important (1) to the least (5) when you book a flight

	N	Minimum	Maximum	Mean	Std. Deviation
Airline brand	434	1	5	4,45	,993
Duration of the flight	434	1	5	3,35	1,096
Location of the airport (if applicable)	434	1	5	3,10	1,078
Price	434	1	5	1,32	,711
Time of departure and arrival	434	1	5	2,78	1,038

Table 11

Variables	(1) Q32_Binary	(2) Q24
Q8	-0.05	-0.06
	(0.135)	(0.161)
Q19_0	-0.20	-0.03
	(0.132)	(0.170)
Q20	-0.18	0.23
	(0.155)	(0.176)
Q21	-0.34	-1.31**
	(0.457)	(0.585)
Q20_0	-0.06	-0.90
	(0.476)	(0.856)
Q21_1	0.44*	0.50**
	(0.228)	(0.256)
Q21_2	0.33	0.24
	(0.244)	(0.269)
Q21_3	0.15	-0.06
	(0.199)	(0.222)
Q21_4	0.30	0.21
	(0.219)	(0.321)
Q21_5	0.10	0.44
	(0.236)	(0.272)
o.Q21_6	-	-
Q22_1	-0.08	-0.18
	(0.178)	(0.201)
Q22_3	0.20	-0.07
	(0.159)	(0.171)
Q22_4	0.19	0.13
	(0.162)	(0.155)
Q22_5	0.53**	0.54**
	(0.262)	(0.276)
o.Q22_6	-	-
Q14_2	-0.21	0.14
	(0.154)	(0.189)
Q14_3	-0.29	0.17
	(0.183)	(0.214)
Q14_8	0.20	-0.30**
	(0.137)	(0.148)
Q15_11	0.30*	0.23
	(0.152)	(0.176)
Q15_12	0.21	0.04
	(0.139)	(0.158)
Q11_1	0.56***	0.05
	(0.159)	(0.210)
Q11_2	0.27**	0.03
	(0.133)	(0.171)
Q11_3	0.22*	0.33*

	(0.127)	(0.169)
Q11_4	0.70***	-0.06
	(0.164)	(0.199)
Q12_1	-0.05	-0.22
	(0.148)	(0.163)
Q12_2	0.07	0.07
	(0.116)	(0.128)
Q12_3	0.09	0.22
	(0.174)	(0.197)
Q12_5	0.13	0.06
	(0.198)	(0.216)
Q12_6	-0.42***	0.02
	(0.159)	(0.191)
Q12_7	-0.11	0.17
	(0.136)	(0.165)
Q12_8	0.10	-0.01
	(0.130)	(0.145)
Q33_4	0.07	0.04
	(0.161)	(0.214)
Q33_5	0.07	-0.18
	(0.164)	(0.199)
Q33_6	0.29*	0.05
	(0.172)	(0.190)
Q33_7	0.15	0.43***
	(0.116)	(0.152)
Q3	-0.37	-0.57
	(0.349)	(0.375)
Q2	-0.87	0.15
	(0.623)	(0.543)
2.Europe_Zone	-0.27	-0.77
	(0.499)	(0.656)
3.Europe_Zone	-0.03	-0.09
	(0.462)	(0.545)
4.Europe_Zone	0.14	-0.82
	(0.433)	(0.550)
5o.Europe_Zone	-	-
Constant	-10.26**	-8.40*
	(4.364)	(4.935)
Observations	426	426
r2_p	0.367	0.206
N_cds	0	0
N_cdf	0	0
p	0	0.0257
chi2	138.3	57.98
df_m	39	39
ll_0	-294.8	-183.7
k_eq_model	1	1

ll		-186.6	-145.9
k_autoCns		4	4
rc		0	0
converged		1	1
k_dv		1	1
k_eq		1	1
k		44	44
ic		5	5
rank		40	40
Robust standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Table 12 - Full table of the logistic regression

Do you read reviews before booking?

		Frequency	Valid Percent
Valid	Yes	343	79
	No	91	21
	Total	434	100

Table 13

Do the reviews influence (positively or negatively) your decision?

		Frequency	Valid Percent
Valid	Yes	363	85
	No	65	15
	Total	428	100
Missing	System	6	
Total		434	

Table 14

How much do you need these elements when you travel? - Online check-in for a flight

		Frequency	Valid Percent
Valid	Not at all	35	8
	Slightly	33	8
	Moderately	78	18
	Very	153	35
	Extremely	135	31
	Total	434	100

Table 15

How much do you need these elements when you travel? - Online check-in/out for a hotel

		Frequency	Valid Percent
Valid	Not at all	116	27
	Slightly	77	18
	Moderately	102	24
	Very	88	20
	Extremely	51	12
	Total	434	100

Table 16

How much do you need these elements when you travel? - Online ticket purchase

		Frequency	Valid Percent
Valid	Not at all	8	2
	Slightly	23	5
	Moderately	67	15
	Very	149	34
	Extremely	187	43
	Total	434	100

Table 17

How much do you need these elements when you travel? - Free Wi-Fi at the hotel

		Frequency	Valid Percent
Valid	Not at all	5	1
	Slightly	22	5
	Moderately	42	10
	Very	116	27
	Extremely	249	57
	Total	434	100

Table 18

How much do you need these elements when you travel? - Free Wi-Fi across the destination

		Frequency	Valid Percent
Valid	Not at all	35	8
	Slightly	71	16
	Moderately	133	31
	Very	112	26
	Extremely	83	19
	Total	434	100

Table 19

How much do you need these elements when you travel? - GPS (Global Positioning System)

		Frequency	Valid Percent
Valid	Not at all	24	6
	Slightly	50	12
	Moderately	96	22
	Very	126	29
	Extremely	138	32
	Total	434	100

Table 20

How much do you need these elements when you travel? - Access to mobile device chargers in public spaces

		Frequency	Valid Percent
Valid	Not at all	59	14
	Slightly	69	16
	Moderately	114	26
	Very	103	24
	Extremely	89	21
	Total	434	100

Table 21

Rate the following statements regarding your travel experience: - It is crucial for hotels and restaurants to have an online presence

		Frequency	Valid Percent
Valid	Strongly disagree	8	2
	Somewhat disagree	13	3
	Neither agree nor disagree	47	11
	Somewhat agree	134	31
	Strongly agree	232	54
	Total	434	100

Table 22

Rate the following statements regarding your travel experience: - It is important for you to interact online with the hotel

		Frequency	Valid Percent
Valid	Strongly disagree	11	3
	Somewhat disagree	22	5
	Neither agree nor disagree	80	18
	Somewhat agree	184	42
	Strongly agree	137	32
	Total	434	100

Table 23

Rate the following statements regarding your travel experience: - It is important for the companies in the tourism industry to interact with clients on social media

		Frequency	Valid Percent
Valid	Strongly disagree	6	1
	Somewhat disagree	26	6
	Neither agree nor disagree	102	24
	Somewhat agree	176	41
	Strongly agree	124	29
	Total	434	100

Table 24

Rate the following statements regarding your travel experience: - I leave reviews after having an experience (either positive or negative)

		Frequency	Valid Percent
Valid	Strongly disagree	54	12
	Somewhat disagree	72	17
	Neither agree nor disagree	102	24
	Somewhat agree	139	32
	Strongly agree	67	15
	Total	434	100

Table 25

Rate the following statements regarding your travel experience: - I prefer to buy tickets online rather than on a physical location

		Frequency	Valid Percent
Valid	Strongly disagree	10	2
	Somewhat disagree	9	2
	Neither agree nor disagree	42	10
	Somewhat agree	84	19
	Strongly agree	289	67
	Total	434	100

Table 26

How interested would you be in having access to these elements of Smart Room while traveling? - Smartphone/Ipad to control room aspects (ex. tv, temperature)

		Frequency	Valid Percent
Valid	Not at all	108	25
	Slightly	89	21
	Moderately	127	29
	Very	77	18
	Extremely	33	8
	Total	434	100

Table 27

How interested would you be in having access to these elements of Smart Room while traveling? - Voice-activated room (ex. switch on/off lights through an app like Siri)

		Frequency	Valid Percent
Valid	Not at all	166	38
	Slightly	93	21
	Moderately	84	19
	Very	62	14
	Extremely	29	7
	Total	434	100

Table 28

How interested would you be in having access to these elements of Smart Room while traveling? - Smart TV with Streaming Services (ex. Netflix)

		Frequency	Valid Percent
Valid	Not at all	83	19
	Slightly	75	17
	Moderately	115	27
	Very	110	25
	Extremely	51	12
	Total	434	100

Table 29

How interested would you be in having access to these elements of Smart Room while traveling? - App to use more easily the hotel services (ordering food, making reservations, etc.)

		Frequency	Valid Percent
Valid	Not at all	60	14
	Slightly	71	16
	Moderately	122	28
	Very	135	31
	Extremely	46	11
	Total	434	100

Table 30

Fig. 1 – When you hear "Smart Hotel" or "Smart Room", what do you think it is?

Picture 1 Survey

Picture 2 Survey

Picture 3 Survey

NOVA
School
of Business
& Economics

Shaping
powerful
minds

Where do you usually book your trip?

	Business	Leisure
Airline Counter	○	○
Internet	○	○
Travel Agencies	○	○
Other	○	○
I don't travel for this reason	○	○

>>

Picture 4 Survey

NOVA
School
of Business
& Economics

Shaping
powerful
minds

If in the previous question you answered "Internet", please specify:

Computer

Smartphone

Tablet

Picture 5 Survey

How long do you spend searching before booking?

I don't search

< 1 hour

1 to 2 hours

2 to 4 hours

> 4 hours

Picture 6 Survey

How long before the trip do you usually book it?

> 2 months

1 to 2 months

3 to 4 weeks

1 to 2 weeks

< 1 week

Do you read reviews before booking?

Yes

No

Picture 7 Survey

Do the reviews influence (positively or negatively) your decision?

Yes

No

Rate the following statements regarding your travel experience:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I prefer to do the check in for a flight online	○	○	○	○	○
I prefer to buy tickets online rather than on a physical location	○	○	○	○	○
It is important for tourism attractions to be listed online (such as on TripAdvisor)	○	○	○	○	○

Picture 8 Survey

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Rank the options from the most important (1) to the least (6) when you book a hotel:

1 Complementary discounts in touristic attractions

2 Complementary services (ex. meals)

3 Conditions

4 Hotel brand

5 Location

6 Price

Picture 9 Survey

Rank the options from the most important (1) to the least (5) when you book a flight:

1 Airline brand
2 Duration of the flight
3 Location of the airport (if applicable)
4 Price
5 Time of departure and arrival

Picture 10 Survey

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Which is your favorite mean of transportation when you travel (between countries)?

Airplane

Boat

Bus

Car

Train

Picture 11 Survey

If your favorite mean of transportation had a higher price than other means, would you still choose it? (assume everything else is equal)

Yes, if it wasn't much higher (less than 20% more)

Yes, independently of the new price

No, I would change

While traveling, would you be willing to pay extra for a better service/experience (ex. 1º class, choosing a specific seat, etc)?

Yes

No

Picture 12 Survey

Did you travel a lot during Erasmus?

Yes

No

Picture 13 Survey

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To where did you travel the most?

Within the country I was studying

Other countries

Picture 14 Survey

How much do you need these elements when you travel?

	Not at all	Slightly	Moderately	Very	Extremely
Online check in for a flight	○	○	○	○	○
Online check in/out for a hotel	○	○	○	○	○
Online ticket purchase	○	○	○	○	○
Free Wi-Fi at the hotel	○	○	○	○	○
Free Wi-Fi across the destination	○	○	○	○	○
GPS (Global Positioning System)	○	○	○	○	○
Access to mobile device chargers in public spaces	○	○	○	○	○

Picture 15 Survey

In what kind of accommodation do you normally stay when you travel?

Airbnb (and similars)

Apartment Hotel

Couchsurfing

Friends/Family House

Hostel

Hotel

Lodges

Picture 16 Survey

40

Rate the following statements regarding your travel experience:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
It is important to have a personalized stay	○	○	○	○	○
I only book if the accommodation has Wi-Fi	○	○	○	○	○

When you hear "Smart Hotel" or "Smart Room", what do you think it is?

Picture 17 Survey

Rate the following statements regarding your travel experience:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
It is important to have a personalized stay	○	○	○	○	○
I only book if the accommodation has Wi-Fi	○	○	○	○	○

When you hear "Smart Hotel" or "Smart Room", what do you think it is?

Picture 18 Survey

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A smart hotel is a hotel that interconnects different technologies to create a better temporary living experience.

A smart room, besides interconnecting technologies, links a guest's preferences to the numerous appliances that exist in a standard hotel room.

"Imagine a world where the room knows you and you know your room" - Hilton CEO Christopher J. Nassetta

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Picture 19 Survey

How interested would you be on having access to these elements of Smart Room while traveling?

	Not at all	Slightly	Moderately	Very	Extremely
Smartphone/Ipad to control room aspects (ex. tv, temperature)	○	○	○	○	○
Voice activated room (ex. switch on/off lights through an app like Siri)	○	○	○	○	○
Smart TV with Streaming Services (ex. Netflix)	○	○	○	○	○
App to use more easily the hotel services (ordering food, making reservations, etc.)	○	○	○	○	○

Picture 20 Survey

Would you be willing to pay an extra fee to stay at a Smart Room?

Yes

Maybe

No

Picture 21 Survey

Rate the following statements regarding your travel experience:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
It is crucial for hotels and restaurants to have an online presence	○	○	○	○	○
It is important for you to interact online with the hotel	○	○	○	○	○
It is important for the companies in the tourism industry to interact with clients on social media	○	○	○	○	○
I leave reviews after having an experience (either positive or negative)	○	○	○	○	○

Picture 22 Survey

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What is your gender ?

Male

Female

Picture 23 Survey

What age category are you in ?

<18

18 - 26

27 - 36

>36

Picture 24 Survey

What is your work situation?

Employed

Student

Work-Student

Unemployed

Picture 25 Survey

What is your nationality?

French

German

Portuguese

Spanish

Other

Picture 26 Survey