MASTER THESIS

Master in Direction and Planification of Tourism

Influence of online reputation on prices of vacation rental properties: case study estate agency in Tenerife

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Abstract

Reputation online is important for marketing strategy and for increasing business results by establishing higher prices and obtaining higher conversion rates. Good opinions and evaluations of vacation rental properties have positive influence from one side on added value and from another one on decision making process of customers. A principal objective of this Master Thesis (by its Spanish abbreviation TFM) is to analyze existence of relationship between online reputation of vacation rental properties and its prices. For case study is taken the data from estate agency located in Canarias, the island of Tenerife. The objective is reached through realizing of scientific literature review and implementation of selected methodology for the TFM. The data about accommodations with its detailed characteristics and statistics is being collected from the platform Booking.com. Later it is processed and visualized in order to create appropriate data base and to reach valuable result with the selected homogeneous sample of accommodations. The apartments with 1-bedroom in touristic zone of Arona municipality (38% of total agency base) confirm the direct relation between reputation online and its prices. In the platform properties offer prices from 5% (one point of difference in evaluation) to 20% (five or more points) higher than those who have lower scores. Apart from this, with improving of reputation online properties become more visible in the platform and therefore have higher possibility to being reserved by customers.

KEY WORDS: online reputation, OTAs, price, vacation rental properties, booking.com.

Content

1. **Introduction**

Development of science and technology gives rise of a world full of possibilities which leads to new trends as well as social changes. Technologic revolution has significantly influenced on tourism sector and transformed it from standardized approaches to personalized ones (Ferreira Dias and Alves Afonso, 2020). With the growing development of web 2.0 and OTAs (online travel agencies) consumers have taken advantages of being fully informed for planning and buying products or services for journeys (Chung, Um and Koo, 2018), while companies have opportunity for its cost reduction, additional marketing tool and revenue growth by implementation of dynamic price policies (Kourtesopoulou *et al.*, 2019). It causes constant increase in number of users who demand multiply services of OTAs as accommodation, transportation and variety of other travel activities making its ranking more stable and competitive in the tourism market (Hwang, Kim and Byun, 2019).

With the implementation of new business, P2P networks and P2P accommodations, users can easier make social connection by sharing properties, paying online for booked products/services, asking for compensation and leaving feedbacks (Botsman and Rogers, 2011). P2P accommodations have increasing number of rental properties worldwide over last several years (Guttentag, 2015) where clients with help of web 2.0 and OTAs have access to online reputation with its opinions, photos, videos, reviews among others of previous users of property experiences. This information is very valuable for clients because it is impossible to find in the official pages of accommodations or to be provided by the same companies. From another part, hosts have access to the information left by clients, its competitors and prices in the market that helps to react faster by recognizing advantages/disadvantages and to improve both reputation corporate and online (Tussyadiah and Pesonen, 2018).

P2P businesses have led to the great boom and expansion of vacation rental properties that is analyzed in the relationship between reputation online and its prices. According to the case study of TFM, Tenerife was chosen as the place of investigation where the number of vacation rental properties is following to increase during last years (for example, in 2019/2020 in average the number grew by 21% within 31 municipalities). Not just number of vacation properties is growing, however, its presence on touristic platforms rises (data taken from platform AirDNA). Tenerife is one of the favorite destinations of international and national tourists of Spain. According to Instituto Canario de Estadística (ISTAC), the number of visitors is growing constantly in the last decade reaching six million of tourists and thousands million euros generated for the economy every year. Tourism sector creates the highest number of jobs in the island and moreover, it is the principal driver of both island and country economy.

Online reputation is a significant driver of consumers behavior, providing a way to discover, evaluate and compare products/services before experiencing it (Zervas *et al.,* 2015). For businesses it is crucial that clients have possibility to find an updated and wide list of reviews, scores and online profiles in

order to come to the point of realization product or service purchasing (Erskine, 2018). That is why online reputation becomes a new influential marketing capacity to capture clients (Rodrigues Diaz and Espino Rodriguez, 2017). Assessing reviews and opinions clients take decision on becoming consumers or no, what in the future have a direct influence on establishing of price, number of reservations and results of businesses.

In the scientific literature reviewed there was not enough evidence of works dealing with the issue of relationship between online reputation and prices of tourist accommodations. There are practically inexistent works related to analysis of vacation rental properties and neither of them has been carried out in Tenerife. This scientific gap and the necessity to study in depth a subject of such actuality and important issue for tourist industry has motivated the realization of the present investigation. This TFM will have as its general objective to analyze if there is a relationship between online reputation and prices of vacation rental properties in Tenerife. To meet this objective, it is broken down in the following specific ones:

- Realize a scientific literature review which serves as theoretical basis for the analysis of relation between online reputation and prices of vacation rental properties in Tenerife.
- Select an appropriate methodology that allows determination of the relationship between online reputation and prices of vacation rental properties.
- Apply in detail every step of the selected methodology, in order to reach scientifically validated results on this relationship.

The present research will be structed in following parts: scientific literature review with required concept content, case study of Estate Agency X in Tenerife, selected methodology for collection and processing the data and finally the results obtained from application of appropriate methodology to reach conclusions from the theoretical and business perspectives at the same time.

2. <u>Literature review</u>

2.1 WEB 2.0

Over the last decades technological revolution strongly influenced the development of the world and especially tourism industry (Ferreira Dias and Alves Afonso, 2020). With wave of this revolution tourism sector has experienced constant growth and diversification to become one of the largest and fastest-developing industries in the world (World Tourism Organization, 2017). The sector has passed different stages of evolution from group tours to trend of independent one and from standardized approaches to personalized business models in order to follow wishes of every (Kaplan and Haenlein, 2010; Ferreira Dias and Alves Afonso, 2020).

Before usage of internet with touristic direction, people mostly journeyed with help of travel agents and tour operators. People traveled with them because of experienced knowledge, guaranteed support before, during and after trip and their deep understanding of certain local markets (O'Connor, 2003). These were followed by introduction of internet and tremendous transformative effect on communication technology in which was included as well tourism sector. For contemporary travelers it means to experience unique and personalized products and services having a huge variety of options and possibilities to choose. It empowered new generation of travelers to the exceptional value for their money and time by election of direct connections with a destiny (Jinhyun Hong and McArthur, 2017). The evolution of tourism leads to the fact that from one side travelers want interaction with suppliers to satisfy specific and unique requirements and from another one a destination wishes to reach potential client by providing comprehensive, personalized and advanced product or service with using of Information Communication Technologies (ICTs) (Holloway, Christopher & Taylor, 2006).

The development of revolutionary new information and communication technologies significantly affects the existing behavior patterns of both tourism suppliers and its consumers. The latter becomes more independent from travel agents and tour operators and, therefore, more able to organize their own journey. In these dynamic market conditions, where the situation is very mobile, it becomes more difficult for travel agencies to meet the rapidly growing and evolving needs of customers (Kourtesopoulou *et al.*, 2019). The accessibility and variability of tourism products and services in internet lead to customers allowing to make more accurate choices by themselves and to demand higher standards without third part assistance. Consequently, travelers use new searching tools and systems created on basis of ICTs (Nyurenberger *et al.*, 2019).

One of the main transformations that have been brought about the implementation of ICTs in sector is the possibility of direct interaction between potential clients and tourism companies (Buhalis and Law, 2008). As a result, a number of important changes have taken place, especially in the way marketing and management are conducted, generating new and greater business benefits (Ivars-Baidal *et al.*, 2019).

The set of ICT tools gives introduction to the concept of web 2.0, which is simply a neologism applied to the tourism sector where the relationship between company and client become more close and travelers generate and control more information by tools for sharing and consuming experiences (Tavakoli and Wijesinghe, 2019). There are several extensive web 2.0 examples which have influence on travel sector:

- o Web pages with product, price and quality description or comparison (TripAdvisor, Trivago, Booking.com among others)
- o Information search and editing features (blogs, travel diaries and communities)
- o Interactive maps with multimedia materials (Google Earth)
- o Travel planning which helps to schedule trips based on data provided by users (Groople)

All these called as Web 2.0 technologies can be considered as *the tools of mass collaboration*. By using Web 2.0 travelers become co-makers, co-designers, co-producers and co-costumers of travel experience (Sigala, Christou and Gretzel, 2012). Information produced by consumers is named user-generated content (UGC) and this social intelligence serves as a basis and lifeblood for travel industry (Kaplan and Haenlein, 2010).

Therefore, to meet the expectations and priorities of the new generation of travelers and to align with technological progress, the tourism industry has to transform and/or redefine its traditional business models and get in line with the trends of the growing influence of web 2.0. All of this with the objective to maximize the interaction of clients with supplier on the web and procuring the contact of these with other possible consumers and pushing them and showing advantages for the consumption of products and services offered (Christou, 2005). Moreover, Web 2.0 provides an opportunity to change the traditional approach to internal and external operations in order to offer travelers more attractive and targeted business models (Sigala, Christou and Gretzel, 2012). This is what has importance for tourists during searching, choosing, taking decision and buying a product or service in wide spaces of internet.

2.2 Platforms and OTAs

Talking about the influence of new business models and technologies in the 21st century, it is impossible to ignore the development and importance achieved by online travel agencies (OTAs) and its great influence on the sector. According to Kourtesopoulou *et al.*, (2019), OTAs are online platforms which allow consumers to book various travel related services directly via internet and even provide the opportunity to complaint or to have after-service. In fact, OTAs are relatively easy to use, where tourists tend to plan their own schedules, purchase accommodation or transport services and require many relevant information for setting, comparing and taking decision about trips to any region of the world (Alavi and Buttlar, 2018). Therefore, there are more and more consumers who want to take advantages

of this type of instruments with which they can be fully informed, plan and buy products and services they want for realizing trips and receive the most desired experience (Chung, Um and Koo, 2018).

From the perspective of travel companies have their advantages working with OTAs such as significant cost reduction, direct marketing with customers and revenue growth by having dynamic rate policies with implementation of Revenue Management and improved cash liquidity (Lee, Kim and An, 2008; Hwang, Kim and Byun, 2019; Kourtesopoulou *et al.*, 2019). In addition, OTAs provide competitively priced booking services with constant and qualitative support from managers in case of necessity. As it becomes evident, the advantages of these agencies are multiple and beneficial for both tourists and businesses, causing an increase in the number of users who demand their services. It may include such services as accommodation in hotels or in rental apartments, flights, travel packages, different activities and rental cars. Therefore, OTA is diversifying and making its position more stable in tourism market (Hwang, Kim and Byun, 2019).

OTAs offer variety of services as reservation of flights, tourist packages, car rentals, accommodation among others. In the TFM it will be given special attention to the booking and contracting section of the accommodation service. Several companies in the market developed specialized platforms for advertising and reservation accommodations (Tussyadiah and Pesonen, 2018). Some of the best-known OTAs in this category are Booking.com, Expedia, TripAdvisor Rentals, Airbnb, HomeAway, Vrba and FlipKey. These platforms provide multiple advantages for hosting managers such as access in the real-time to analytics of pace reports, sales statistics, guest review scores, loyalty policy reports, rating boards etc (Smithson, Devece and Lapiedra, 2011). From another part tourists have access to a wide range of options of accommodations with price comparison within direct competitors and also by date or season, information from previous customers and their evaluations (Ivars-Baidal *et al.*, 2019). Within variety of OTAs existed it was chosen Airbnb, Booking and TripAdvisor for been well-known and significant platforms to make a deeper analysis and examine its characteristics and role within the tourism industry.

According to official data of Airbnb.com, in 2019, this platform lists more than six million properties in more than 81.000 cities across the world, also over the last 10 years, about 300 million guest check-ins were performed and on average, two million people stay in an Airbnb accommodation every night (Sherwood, 2019). Airbnb properties can be differentiated based on three types of accommodation: single or private room, entire house and shared apartment or room. Airbnb, currently, offers four additional filters of property types such as vacation home, unique space, boutique or bed and breakfast (Jet, 2018). Based on this wide listing of properties and its diversification customers can find the best option for their accommodation from a tree house to a castle. There are a wide range of prices varied based on type of accommodation, its location and rating (Tussyadiah and Pesonen, 2018). According to Farronato, C. & Fradkin, A., (2016), Airbnb is a good example of market equilibrium with healthy competitors where one of the fundamental rules of market economy works by implementation demand

is equal to supply. In addition, Airbnb was the first company which influenced on the creation of such notion as P2P accommodation (the concept will be discussed in next section).

Booking.com is another leading platform for accommodation services where interested people can find for renting not just apartments but as well hotels. Founded as a small startup in Amsterdam this platform became one of the world largest travel companies. According to statistics presented in the official webpage of platform in 2018, it offers over 27 million total listing and covers more than 130.000 destinations in 227 countries, where more than 1.5 million properties nights are reserved daily. In difference with previous platform, Booking.com has its loyalty system for clients where guests can obtain some benefits and discounts already after making two reservations with the usage of this OTA. According to the policy of the OTA, 15% commission is charged on every booking transaction. In addition, before, during or after reservation clients (both tourist and owner of accommodation) get support about each issue which can appear in the process of placing an offer or making the reservation. Moreover, the Booking.com system is available in 44 languages to facilitate communication and the process of providing service in most territories worldwide. The case of this platform shows that travelers are ready to pay higher price for higher quality services.

The third and the last platform which is analyzed in this TFM is TripAdvisor. This platform differs significantly from previous ones by its main objective to receive feedbacks, opinions and reviews on all kind of touristic products and services presented. However, more recently TripAdvisor made huge step forward giving possibility to book accommodations or other travel experience in different destinations. It transforms from the model of just providing information to another one where you can realize booking process what leads the platform to be converted into OTA. According to official page, TripAdvisor is the largest social website in tourism industry with about 500 million reviews. Website receives 456 million views monthly that means one out of 16 people in our planet visit platform every month for building the unique experience and visiting new places (Kinstler, 2018). This platform was first one which provided a service that implies constantly updated information about prescribed product or service not just by suppliers, but also by customers who share their opinions on received experiences. Nowadays, TripAdvisor is some kind of a *'tourist google'* with the high participation level and strong reputation (Kinstler, 2018).

After previous analysis it is observed that Airbnb, Booking.com and TripAdvisor have some common characteristics as possibility to compare and then to book accommodations or other related with tourism services by having dual communication between host and traveler. Moreover, not just number of published properties or received reviews are important to take notice of its significance but also the fact that every of platforms are complementing one other on global market of tourism. According to World Tourism Forum, (2019), 88,4% of accommodation offers are published on more than one platform with aim to have higher opportunity to be found by a client and then to be reserved. The purpose of platforms

is to engage travelers and to work closely with property holders to increase rate level for both accommodations and OTAs.

Technological revolution and intensive development in digital technologies with implementation of ICTs and creation of web 2.0 and OTAs have introduced significant changes in tourism sector and society's behavior. All these transformations caused and gave rise to the introduction of new business models for better interactions between business structures. It was named as P2P networks which created set of fundamental advantages for sales and marketing (Ivars-Baidal *et al.*, 2019).

2.3 P2P accommodations

P2P networks ('Peer-to-peer) are based on set of computer systems which are connected one by one via internet (Deepthi, 2013). P2P networks gave a chance for development of new touristic concept as 'P2P tourism' which is based on application of platforms or communities of travelers to share touristic products and services (Sammy et al., 2017). According to Dredge and Gyimothy (2015), the rise of concept P2P has been stimulated by a range of following social, economic and technological factors:

- ✓ Willingness to move away from ownership towards temporary possession of goods;
- ✓ Usage of intermediary transactions between producer and customer;
- ✓ Establishment of direct communication between the host and the guest that leads to higher level of perceived authenticity of experience;
- ✓ Feedback aimed at the establishment of trust relationships in the model producer-customer.

According to Botsman and Rogers (2011), due to webs 2.0 which facilitate shared consumption, direct P2P engagement and exchange of personal experience allow participants to create and maintain social connections with each other. Using the theory of increasing connectivity by online social platforms it allows people to share their properties, to book transportation (flights, cars or bicycles), to pay for booked services or to ask for compensation (Belk, 2014, pp.1597) that help travelers to receive wide and needed service mostly in easy access.

The growth and improvement of tourist intermediaries such as social networks and OTAs lead to the development of P2P accommodations and relatively increase in number of rental apartments. This phenomenon to share house, apartment or just room is called as peer-to-peer (P2P) accommodation (Guttentag, 2015). It experiences rapid expansion over the last several years because of creation and higher participation of such rental platforms as Airbnb or Booking.com that introduce more and more enormous influence on the sector (Kinstler, 2018). Increasing connectivity facilitated by online interactivity allows people to share accessibility of properties as primary product or service of tourism activity for a charge or other type of compensation (Guttentag, 2015).

It has to be mentioned that phenomenon of P2P accommodations created and still creates huge worries for hotels which now need to compete not just between each other but as well with rental accommodations. For this reason, the whole sector is being interfered with the speed of changes in the market with implementation of digital technologies and its extent influence to get used of all opportunities for being competitive in the market of accommodation with aim to increase benefits (Diana-Jens and Rodríguez Ruibal, 2015). Table 1 is going to explain those major factors that push people to use P2P accommodations and why there are travelers who still prefer using hotel industry by going to vacations or having journey for some other reasons.

Table 1. P2P market accommodation with its advantages/disadvantages

Positive drivers	- Social motivation with opportunity to connect with local communities (Guttentag, 2015); - Economic attractiveness due to lower cost for good quality housing (Botsman and Rogers, 2011; Guttentag, 2015); - Sustainability factor that decreases creation of new products. Consumption of materials which have a great support from local communities and economies (Botsman and Rogers, 2011); - Enjoyment with ease of use and sufficient amount of information provided by hosts on platforms of distribution (Zekanovic-Korona and Grzunov, 2014).
Negative barriers	- Lack of interpersonal trust and trust towards technology, platform or reputation of companies (Botsman and Rogers, 2011); - Value factor when receiving of bad quality products or services is not worth of effort (Olson, 2013); - Familiarity difficulties that need participation in mastering complex technology platforms and payment systems (Belk, 2014); - Privacy and security reasons (Guttentag, 2015).

SOURCE: Tussyadiah and Pesonen, (2018)

After reviewing the table, it can be summed up that hotels and P2P accommodations have different target groups. P2P option is more attractive mainly for customers who have lower budget, however with growth of popularity of this business model every client can receive necessary solution for its budget and not always for low one. Scientists still have different opinions about home-sharing effects on hospitality and tourism as a whole. According to Ytreberg (2016), the growing number of P2P housing has a negative impact on the hotel industry, specifically 10% increase in Airbnb supply in Norway decreases hotel revenue by 0,3%. By contrast, Hooijer (2016) claims that the hotel revenue increases in

line with a growing Airbnb presence, the research was made in fourteen European cities. According to Zervas, Proserpio and Byers, (2015), in most cases Airbnb compete with mid-to low-end hotels.

2.4 Reputation online

The TFM will be concentrated on investigation of rental properties with touristic usage to observe if exists the relationship between reputation online and prices. To start with the section, it is needed to define what corporate reputation is and how it transforms into reputation online. The notion of reputation will be analyzed from different perspectives. Reputation with its impact on businesses can be viewed from financial, marketing, sociological or strategic perspectives. According to Del Frenso, (2012), reputation is the social concept based on credibility, reliability, morality and coherence of an entity, organism, institution, company, etc. For this reason, it is only partially controllable by the subject since it is created and recreated from the perceptions that shape a state of opinion, consideration and evaluation of others. Furthermore, corporate reputation is a social construction, a product created and accumulated collectively and that inevitably has positive or negative effects on social and economic development by having an obvious public impact (Chung *et al.*, 2018).

Moreover, reputation is strategically important for being competitive on any market (Del Frenso, 2012). It is difficult to neglect that the importance of opinions and evaluations on decision-making process of customers is increasing. From above mentioned definition it can be highlighted some key features of reputation:

- Reputation is created from lived experiences;
- Reputation can be controllable just partially by businesses;
- Reputation is created collectively even though clients add comments;
- Reputation always has effects, positive or negative on businesses.

With the wave of technological revolution and rapid expansion of platformization reputation was transformed into reputation online. According to Del Frenso (2012), next definition was given to the term reputation online: the concept shaped on results of what customers, past and future ones, or employees say, write and transmit to others anywhere in the internet or social networks from their observations and experiences in relationship, directly or indirectly, with brand or business. Analyzing the previous term businesses have to manage online reputation not just by the usage different marketing strategies in the Internet but also by continuing to provide high quality services which can boost competitiveness of certain entity and let customers to leave a positive review or evaluation on received product or service (Hernández Estárico, Fuentes Medina and Morini Marrero, 2012).

Article of Erskine (2018) was concentrated on asking travel business owners and executives in the United Stated of America and around the world about key industry trends. Their answers made clear the

importance of maintaining a positive online footprint and digital engagement with current and potential customers. According to answers, net important areas of businesses (with percentage of responders) were identified:

- reputation management – 97% (of all responders)
- online reviews – 98% (of all responders)
- social reviews – 92% (of all responders)

For businesses it is crucial that a client finds with an impressive and updated list of positive reviews, scores and online profiles. If not, that impression might cause that a business loose potential customer. According to statistic data of Forbes (Erskine, R., 2018), businesses risk to miss 22% of sales when future customer finds one negative article on the first page of search results. Three negative articles can be the reason that the number increases till 59,2%. The benefits of good made review profile are difficult to overstate, because 84% of people trust online reviews as much as a personal recommendation (Erskine, 2018).

As a result, online reputation becomes a new influential marketing capacity to capture clients and to offer better price for buying products or services via internet (Rodrigues Diaz and Espino Rodriguez, 2017). According to Litvin, Goldsmith and Pan (2006), online reputation has crucial importance because tourism products are perceived as high-risk items. During the selection process many customers assess reviews and opinion and it has a huge impact on final decision and in future on benefits of businesses.

2.5 Relation between reputation online and businesses results

After defining what online reputation is, it becomes clearer that in the age of internet technologies reputation always has an impact on the results of company and it can be increased through appropriate policies and measures for its implementation. The following positive results can be achieved under the above mentioned conditions (Hernández Estárico, Fuentes Medina and Morini Marrero, 2012):

- ✓ Higher customer satisfaction;
- ✓ Rising number of sales and increase in profits;
- ✓ Loyalty and fidelity of clients;
- ✓ Healthy relationship between producer and customer;
- ✓ Ability to recruit prepared and well-skilled staff.

Reputation online has influence on management of prices, moreover reputation is one of the most important elements for it (Diana-Jens and Rodríguez Ruibal, 2015). In practice there is no single method for setting price. All available information (costs, competitors and demand) is used to make the best price decision using its own way. The price policy causes extreme importance not just for business and

its results, but as well for client because of direct association with its revenue management (Noone and McGuire, 2013).

There is not enough scientific literature that studies the impact of online reputation on a company's policy pricing and its economic results. However, it has been possible to analyze some of the most relevant articles on the issue.

According to Diana-Jens and Rodríguez Ruibal, (2015), the Internet has changed the way how accommodation businesses set their pricing policies. Firstly, the Internet increases the speed of pricing decisions: properties that used to change prices once per season, currently, have to change prices once per day in order to adapt to ups and downs of demand and its generators. Secondly, the Internet immediately provides company with a large amount of information on consumer behavior: what they have bought, when, how much, how long they have been on a web etc. Thirdly, the Internet provides information on prices of competitors (Phillips, 2005).

According to Resnick *et al.*, (2006), who studied the impact of online reputation of a seller on eBay[1] and buyer's propensity to pay, the research shows that the market awards (i.e. desire of customer to pay more) the eBay seller who has generated a plenty of positive feedbacks. Customers are ready to pay on average 8,1% more to businesses with strong reputation and good reviews than a new seller without possibility to check its reputation online.

According to Graham and Moore (2007), whom conducted a study of airline customers' tendency to pay, the research proves both that consumers value a good reputation among airlines and ready to pay more for a better reputation. The reason is that a good reputation implies a higher quality of business products and services, as well as assuming that they respect and treat its customers favorably. Specifically, the results of his study indicated that for every increased point in the airline's reputation, customers are prepared to pay $18 more for one airline ticket. Reputation has an important weight in the relationship between company performance and customer payment willingness having implications at the strategic level. It suggests that companies, which want to increase turnover, will have to draw up good corporate reputation management plan to improve online reputation.

According to Dellarocas and Zhang (2007), online movie ratings provide measurable evidence of face-to-face information that should be used by film production companies to forecast and plan revenues. The study was made in field of cinema films by revising value of online scores in predicting the sales of these films.

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[1] eBay is an American corporation that facilitates consumer to consumer and business to consumer sales through its web page.

According to De Maeyer, (2012), who reviews the impact of online reputation on sales strategies and pricing policy. It comes to the conclusion that online reviews can increase sales, reduce price sensitivity and increase post-sales satisfaction by informing customers about the most important product features and reducing their uncertainty at the time of purchase. Consumers who make an informed decision are more open to pay a higher price and usually more satisfied what leads in future to online brand supporters.

Several sectors were being investigated to study the impact of online reputation on companies. It can be concluded that online reputation has a great impact on economic results of diverse businesses. And it is time to investigate impact of online reputation on P2P accommodation as an important part of tourism sector for planning and reservations.

According to Yacouel and Fleischer (2010), OTAs, as they call cyber travel agents, publishing customer ratings and opinions can affect the market price. In their research it is proved that the high scores obtained via positive reviews in Booking.com allow accommodation service managers to charge higher prices than competitors with lower scores. Therefore, they establish a direct and positive relationship between reputation online and price.

In the study of the Kelsey Group (Diana-Jens, 2015), it is shown that customers are ready to pay more for a better-valued service in exchange for a better quality service. Specifically, the results of their research indicate that the clients of touristic accommodations are ready to pay at least 20% more for services that have a rating of 'excellent' (a score of 5 out of 5), then for the same service with a rating of 'good' (4 points out of 5).

According to Kohni and Suri (2011), it is easy to compare prices and quality because higher prices can only be established in proportion to higher added value. For example, P2P companies bring customers together by performing deep analyses of correlation between supply and demand in tourism which creates market added value (Zekanovic-Korona and Grzunov, 2014). Added value can be based on attributes, advantages or corporate image. At this point linkage between the company reputation and pricing strategy can be highlighted: a good reputation provides added value for customer and therefore the customer is ready to pay more (Kohni and Suri, 2011).

To sum up, property managers are motivated to invest in improving the quality and increasing standards in order to have opportunity to rise prices due to good evaluations and high level of online reputation. Apart from that it is necessary to emphasize that OTAs helped to transform the flow of information creating a better relationship not only between producer and customer but also between price and quality. Due to this direct dependency on having good reputation, tourism companies are interested in increasing their online visibility and quantity of reviews from real people who have used their services.

3. <u>Case study – Real Estate Agency X in Tenerife</u>

Analysis of the influence of online reputation on vacation property prices will be carried out on the basis of data taken from a real estate agency working with short-term rentals. The real name of the agency will not be mentioned in TFM for reasons of data protection and privacy policy; it will be replaced by the fictive name Agency X. Since the company is located in Tenerife (Canary Islands, Spain), some indicators of the tourism sector on the island will be reviewed especially those related to holiday rentals.

Tenerife is the largest island of the Canary archipelago and at the same time the one that receives the highest flow of tourists. According to data from the Instituto Canario de Estadística (ISTAC), the entry of tourists to the island has maintained a constant growth in the last decade reaching a number of around six million tourists annually. The importance of tourism for Tenerife is obvious, as the four thousand million euros generated annually by this sector makes it main economic driver and in the same time generates the highest number of jobs on the island.

In recent years, in addition to the maintenance of traditional tourism and travel agency channels, there has been a significant increase in OTAs. As stated in the literature review, the weight of online platforms is very close to the expansion of the P2P tourism model. According to the report of the Department of Tourism, Culture and Sports of the Canary Islands Government in 2019, in comparison with the previous year, the number of publications in the seven studied OTAs increased by 5,6% and reached 74.267 active publications. Figure 1 shows the distribution of these within the main platforms.
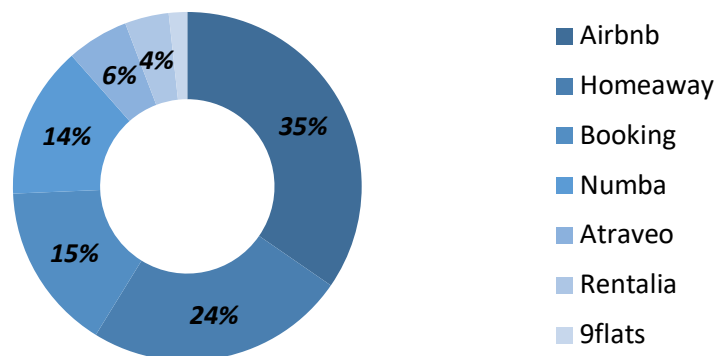
Figure 1. Distribution of active properties in platforms (2019). SOURCE: Department of Tourism, Culture and Sports of the Canary Islands Government

As it can be observed, Airbnb and HomeAway constitute 59% of the total properties advertised on the platforms with containing of 42.245 publications, while Booking occupies the third position with 11.178 properties. Another fact is that 55,31% of total offers are related to just one property, this means that the rest of the participants in the market model (44,69%) manage more than one property for rent. This is a good example of passing from an isolated business model (such as publishing a property on a platform to have a passive income) towards larger and better managed companies.

Next, in the table 2 will be presented a comparison with numbers of important indicators related to holiday homes between 2019 and 2020. For this purpose, web AirDNA will be used with its large number of offered data about the properties published in Airbnb (main distributed platform in Tenerife) and Vrbo.

TABLE 2. Characteristics of vacation rentals in municipalities of Tenerife, 2019/2020.

TENERIFE	N viviendas		Creci-miento	PRECIO MEDIO		RATIO OCUPACIÓN			REVENUE	
	2019	2020		2019	2020	2019	2020	Drop	2019	2020
SANTA CRUZ	946	1070	13,1%	60 €	60 €	75%	65%	10%	946 €	874 €
EL SAUZAL	92	126	37,0%	83 €	88 €	66%	61%	5%	1 008 €	1 216 €
TACORONTE	175	219	25,1%	74 €	74 €	67%	58%	9%	914 €	970 €
LA MATANZA	147	176	19,7%	79 €	81 €	75%	61%	14%	1 190 €	1 211 €
LA VICTORIA	28	28	0,0%	70 €	63 €	75%	59%	16%	816 €	880 €
SANTA URSULA	209	218	4,3%	100 €	104 €	67%	60%	7%	1 346 €	1 306 €
LA OROTAVA	306	356	16,3%	80 €	81 €	75%	54%	21%	1 058 €	1 030 €
PUERTO DE LA CRUZ	692	897	29,6%	56 €	53 €	81%	63%	18%	852 €	751 €
LOS REALEJOS	219	261	19,2%	60 €	65 €	64%	55%	9%	776 €	831 €
SAN JUAN DE LA RAMBLA	57	82	43,9%	80 €	68 €	69%	60%	9%	1 120 €	939 €
LA GUANCHA	43	45	4,7%	52 €	58 €	75%	52%	23%	819 €	665 €
ICOD DE LOS VINOS	498	589	18,3%	54 €	56 €	63%	55%	8%	665 €	756 €
GARACHICO	112	166	48,2%	59 €	60 €	71%	50%	21%	955 €	777 €
EL TANQUE	70	78	11,4%	88 €	80 €	96%	63%	33%	1 555 €	961 €
LOS SILOS	61	73	19,7%	53 €	56 €	73%	57%	16%	702 €	683 €
BUENAVISTA	112	125	11,6%	69 €	70 €	60%	55%	5%	898 €	945 €
SANTIAGO DEL TEIDE	663	832	25,5%	72 €	71 €	78%	59%	19%	1 165 €	928 €
ARONA	3006	3886	29,3%	73 €	74 €	81%	65%	16%	1 281 €	1 068 €
ADEJE	3134	4043	29,0%	85 €	87 €	76%	61%	15%	1 449 €	1 249 €
GUÍA ISORA	478	562	17,6%	74 €	75 €	67%	52%	15%	1 129 €	954 €
SAN MIGUEL DE ABONA	560	651	16,3%	70 €	76 €	75%	56%	19%	1 038 €	965 €
GRANADILLA DE ABONA	1214	1391	14,6%	67 €	69 €	73%	60%	13%	1 000 €	910 €
VILAFLOR	41	50	22,0%	84 €	78 €	57%	35%	22%	1 071 €	710 €
ARICO	468	513	9,6%	71 €	75 €	75%	56%	19%	1 030 €	912 €
FASNIA	45	56	24,4%	64 €	85 €	60%	49%	11%	768 €	923 €
GUIMAR	233	294	26,2%	57 €	57 €	76%	63%	13%	821 €	756 €
ARAFO	42	49	16,7%	80 €	97 €	76%	58%	18%	985 €	1 138 €
CANDELARIA	290	347	19,7%	63 €	63 €	67%	60%	7%	900 €	919 €
EL ROSARIO	251	332	32,3%	70 €	73 €	75%	63%	12%	1 080 €	1 085 €
Tegueste	54	73	35,2%		61 €	60%	50%	10%		800 €
LA LAGUNA	589	693	17,7%	51 €	54 €	70%	57%	13%	770 €	701 €
TOTAL	**10405**	**18281**	**21,2%**	**70 €**	**71 €**	**72%**	**57%**	**14%**	**1 004 €**	**929 €**

SOURCE: Own elaboration from AirDNA

According to the table 2, there is a growing tendency of number of rental properties in Tenerife, it increased by 21,2% between 2019 and 2020. Every of 31 municipalities has expanded its quantity with just one exception, La Victoria de Acentejo, where the number has not changed (28 rental apartments)

and it is the lowest figure within the island. The highest growth is in Grarachico with 48,2%, San Juan de la Rambla with 44% and El Sauzal with 37%.

The average occupation on the island has decreased by 15% since 2019 and now it reaches 57%. This reduction was noticed in each of the island municipalities, to a greater or lesser extent. The largest drop is observed in Garachico (33%), then in La Guancha (23%) and La Orotava (21%).

Indicator of average daily rate (ADR) is not changed significantly during studied period, in 2019 it was 70 euros and in 2020 it is 71 euro. Monthly revenue per apartment fell by 7,5% (in 2019 – 1004 euro and in 2020 – 929 euro) having been explained by noticeable drop of occupancy rate and similar ADR (mentioned previously with numbers) what is caused by the growing number of rental apartments in the island in 2020 and lower demand on the market. After conducting this analysis on the behavior of tourism on the island and in particular the development of vacation rentals, it is time to describe the company under research in this TFM.

Company provides set of services related not just with short-term properties but as well with buying/selling and long-term rentals. It has helped to become owners of properties for citizens from more than 40 countries, including the United Arab Emirates, Oman, Japan and China. The company follows to be developing permanently reaching in total seven offices in 2019.

In 2020 company has an extensive database of vacation accommodations for short term rent with total amount of 118 properties which have been collected during 10 years. These ones are situated in different zones of Tenerife, majority in touristic area in south of the island from Palm-Mar to Los Gigantes in four municipalities: Arona, Adeje, Guia de Isora and Santiago del Teide. The Agency X has started its activity in July 2010 and till today it is operating as a leader in local market.

According to information provided by the department of short-term rentals, in 2018 occupancy rate was the highest for last 10 years (21% higher than in 2019). The company cares to provide a respectful treatment for both – owners of accommodations and its consumers, as a result Agency X follows to increas number of properties and as well its direct clients. A lot of owners trust the estate agency authorizing for renting homes on company's behalf. From another part travelers become repetitive clients of Agency X coming back to Tenerife.

In spite of having a big quantity of direct clients Agency X for further development makes advertising and publishing properties on such online travel platforms as Booking.com, Airbnb, TripAdvisor and Holiday Letting. In most cases online presence on different OTAs of the same property has positive impact on visibility and then on possibility to receive higher number of reservations for increasing benefits. Moreover, these platforms offer advantages of making wide use of data and statistics on the properties and its competitors, permitting to realize analyses that contribute to improve the management of them.

Another fact for maintaining of profit growth in the Agency X is automatization of processes using of required software. With this propose the company uses Lodgix system to provide a meaningful simplification during short term bookings of apartments and to have friendly channel manager. The management system gives an opportunity to process reservations and place requests of every user (clients throughout platforms, owners of properties and managers of Agency X) in one common calendar. The software also offers for both owners and estate agency an opportunity to check calendar of reservations, prices, occupancy rate of properties among other statistics at real time. Furthermore, the software minimizes time spent on the reservation management process, reducing manual work to an absolute minimum. The example of the interface of this software is shown in figure 2:
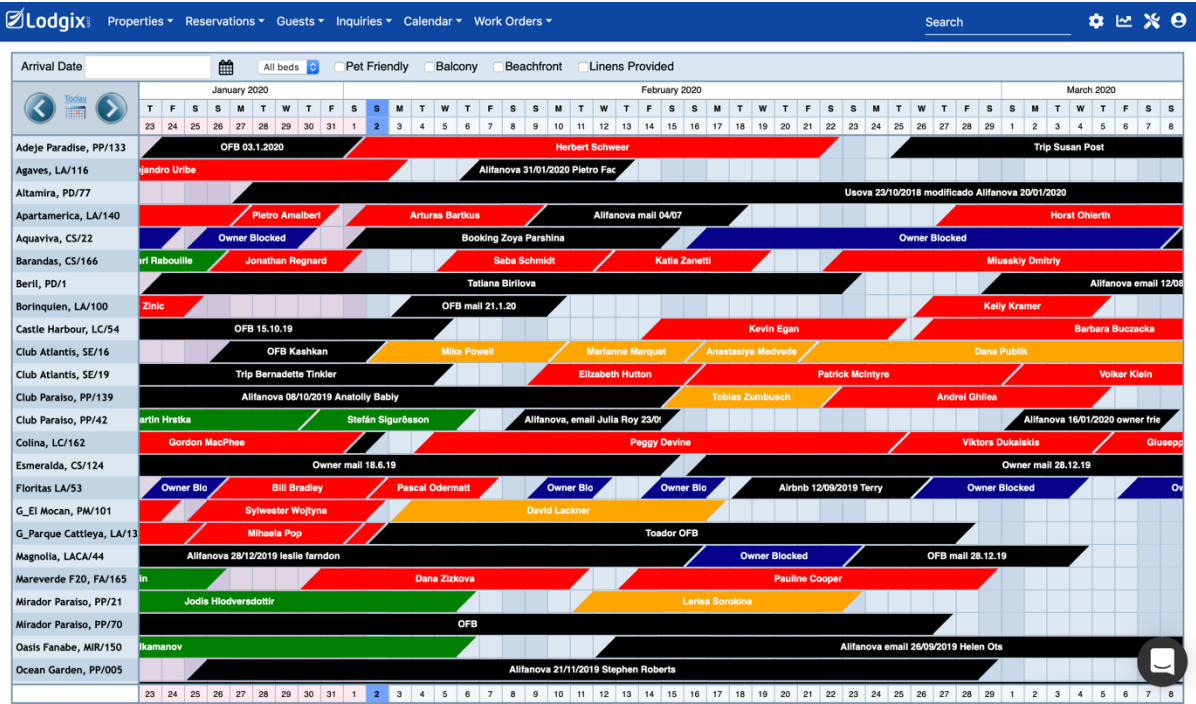

Figure 2. Interface of the software. SOURCE: Lodgix system

The data collected from both OTAs and Lodgix used in the company will be used as basis for the analysis of the relationship between online reputation and prices in respect of reservations for the properties taken for this study.

4. <u>Case study methodology</u>

This chapter of the TFM describes type of approach procedures used to analyze relevant data from the case company in order to achieve main objective and to answer the question (by following the presented structure) if there is a relationship between reputation online and prices of vacation rental properties in Tenerife. It is necessary to propose an appropriate methodology for implementation and good analysis to reach valuable conclusions. A detailed treatment is needed to make an informed decision about importance of reputation online for vacation rentals and fully understanding of evolution of business models and approaches in tourism sector with the aim of reaching highest results. The aim is to define impact of reputation online on prices of vacation accommodations as specifically and narrowly as possible such that subject and scope of interest is unambiguous. All issues associated with the topic would be analyzed on information basis of case study company in order to develop theory by studying existing estate agency and evaluate how important reputation online can be for property's results.

The scientific literature review presented in the previous chapter has already shown high importance of online reputation for businesses in the 21st century, especially for organizations and companies based on Web 2.0 concept. However, it can be stated (as previously mentioned) that the TFM carried out up to the present time, in which an in-depth analysis is made on the relationship between online reputation and prices of accommodations, are not comprehensive enough. This gap becomes even more evident when it comes to scientific researches that study the phenomenon in form of rental touristic properties. In accordance to the above mentioned, there was not found any scientifically validated procedure in literature review that meets the needs of the TFM. Because of this, it was necessary to define a methodology that would be in line with requirements of the present one. This methodology (see figure 3) is based on other methodologies used by different researchers in similar works 'Hotels in the Murcia region facing social networks and online reputation' (María-Dolores *et al.,* 2012), 'The role of online reputation management in strategic business decisions in Ericsson' (Tafesse, 2012) and 'Online reputation and its influence on policy pricing in hotel'(Diana-Jens *et al.*, 2015). Four steps of the methodology will be described below.
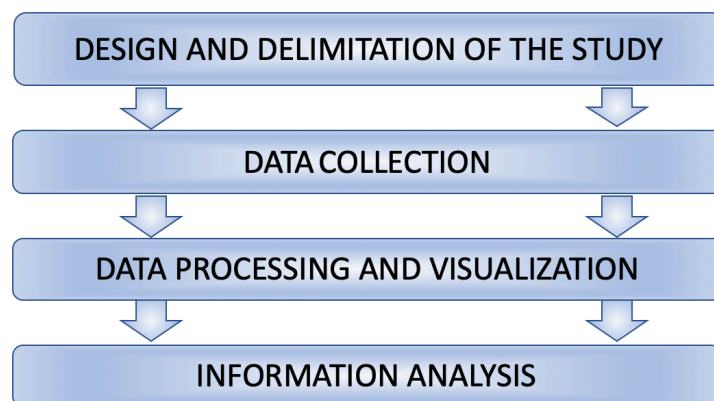
Figure 3. Methodology for importance of online reputation. SOURCE: Own elaboration

Step 1. Design and delimitation

Design is the starting point for a realization of this type of TFM. This is where the plan will be drawn up to link the problem of conceptual research with relevant and feasible empirical one (Ghauri and Gronhaug, 2010). According to Saunders, Lewis and Thornhill (2019), if the emphasis is not placed on appropriate design, it will eventually lead to erroneous conclusions and therefore losing the credibility. In this sense, the proper delimitation of research for each specific case study is required. For such delimitation, an adapted selection of representative samples (accommodations) has to be realized in order to be included in the analysis. This sample needs to be sufficient with regard to quantity in order to be considered representative of studied segment of population. In addition, the selected entities will have a high degree of homogeneity among each other in order to avoid possible variance during the data analysis process. Furthermore, a period or periods, low or high seasons selected to be taken into account will be extended to ensure that peaks (positive or negative) in sales prices caused by external variables have no significant influence on the results. After defining the above aspects, in next section it will be selected the source(s) of data and the parameters that will be taken as a basis for measuring the online reputation and monitoring the sales prices of the accommodations.

Step 2. Data collection

According to Ghauri and Gronhaug, (2010), there are several classifications of data: primary or secondary and qualitative or quantitative. Regardless of these types, it plays a primary role in any scientific work and can be used in a wide range of typologies. For this reason, a detailed data collection process is required. This step in the chain should result data collection capable to provide an appropriate feedback and in future relevant conclusions. To achieve it, it is necessary that the set will be homogeneous having integration between sources of extraction and also clarity about aims to be reached.

The amount of data that currently exists is immense, and it is being driven by growth of Internet and digitalization of contents. New digital technologies have radically changed the way how information is consumed (Rivera Martin, 2019). With evolution in growing quantity and quality of an available data arises idea of Open Data, an attempt to make the data accessible for public. The dynamic of Open Data favors the idea of linking and integrating data of the Internet (Ericson, 2010; Lamsfus and Alzua-Sorzabal, 2013). It involves a new paradigm that pretends to explore the Internet as a global information space in which resources are related (interlinked), establishing methods and tools that facilitate access to data, its publication and reutilization through webs. An example of the implementation of this paradigm is efforts (still insufficient) made by multiple OTAs to offer data that is valuable for both customers and property owners/managers. For this reason, use of these platforms or websites associated with them as a primary source of data is considered of great usage for such type of investigations. However, it is necessary to pay attention to the selection of which one to use, since these are very varied

and in many cases the results and statistics offered are quite distinguish. The selection will depend mostly on the ease of access to each of these and characteristics of every particular case study.

Step 3. Data processing and visualization

Data processing is an act of giving order and meaning to large amount of structured and/or unstructured data collected during execution of the previous steps (Ghauri and Gronhaug, 2010). It becomes impossible to standardize a procedure because data processing in each case study solves proper problems of each of these. Nevertheless, the techniques to manage Database (DB), information aggregation systems, multidimensional models etc will be always used. This establishes to process the data obtained and extract information that is capable of providing and useful to investigation.

The above is practically impossible without the incorporation of Big Data tools, which will allow a rational use of resources for the management of information and the reduction of costs when it comes to transfer and share it among organizations (Rivera Martin, 2019). The introduction of Big Data within the organizational structure of companies generates knowledge and allows quick spreading of it, which favors an effective and efficient decision-making process. This philosophy is currently used by all leading companies in online reservation business, whether it is traditional accommodation, holiday homes or any other service related. Therefore, this TFM will be based on analysis and statistics provided by pioneer websites using of these tools. Once the data processing has been finished, the information obtained from the process needs to be visualized. As a result, possibilities for analysis and understanding are maximized and findings can be promptly reported. For this purpose, there are several tools that allow development of dynamic reporting visualizations, dashboards, broadcastings, etc.

Step 4. Information analysis

After processing and visualization of the data, detailed analysis has to be carried out to capture valuable information. Nowadays it is possible to obtain information that in past decades was unthinkable to handle. With such knowledge, an in-depth analysis of behavior of different parameters related to the sector can be realized. However, it is necessary to make an optimized management of available data and to know how to differentiate between useful and non-useful information, thus avoiding time-consuming, processing costs and possible mistakes in results. The objective is to observe certain patterns in the field data and to find answers to initial questions (in some cases even to formulate new ones). Historical events are studied in order to reach conclusions and propose possible solutions for each particular problem. For this purpose, the visualization tools used in the previous step are taken. The information offered by these tools is not a "fixed image", rather it presents information that evolves over time and is capable to predict the future. As a result, it is possible to foresee future actions and to react better when face on with changes in environment. All methods used in will finally lead to explore how reputation online influences on shaping level of prices for tourist rental properties.

5. <u>Application of methodology</u>

Once the literature review and methodology on the relevant topic have been studied, the information will be analyzed systematically by using data of case company in order to validate objectives of this TFM. This part will give detailed application of every presented step of methodology by providing real data from estate Agency X in Tenerife.

STEP 1. DESIGN AND DELIMINATION OF THE STUDY

As the methodology indicates, the starting point is the selection of sample which has to be homogeneous and representative in order to achieve a coherent analysis that leads to valuable results of the TFM. According to the case study, the company manages 118 accommodations (all of them are entire ones), where 57% of total amount are properties with 1-bedroom, then continuing with 19% of 2-bedroom apartments (see figure 4). Because of its majority the TFM will be concentrated in 1-bedroom apartments.
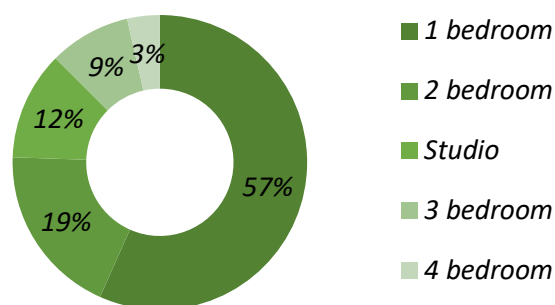
Figure 4. Segmentation of rental housing of agency X by number of rooms in 2020. SOURCE: Own elaboration

Another indicator explained why the prices of properties vary based on its location according to municipalities of the island. For this reason, it is necessary to separate 1-bedroom apartments for its localization to maintain the homogeneity by one more indicator. As it is presented in figure 5, half of apartments situated in the area of Las Americas, then with 15% in Callao Salvaje and 11% in each area of Adeje and Palm-Mar. As Las Americas, Palm-Mar and Los Cristianos belong to the municipality of Arona, these destinations are recognized as homogeneities. It was determined 67% of 1 bed-room properties in Arona or 38% of total base (45 properties) that will be analyzed in the next sections to collect and procedure data received from Agency X.
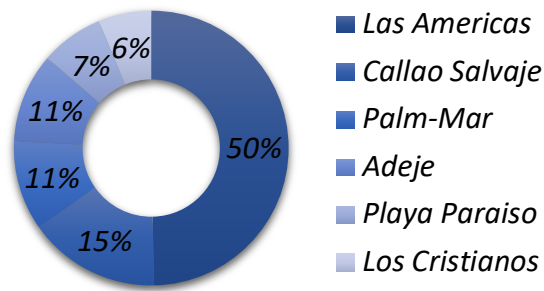
Figure 5. Segmentation of rental housing of agency X by location in 2020. SOURCE: Own elaboration

The company provided all necessary information for 2019 month by month and in the TFM, it will be converted in average figures for year in order to avoid monthly ups and downs because of island seasonality and price levels. The selected sample of 1-bedroom properties in Arona municipality is decided as representative accommodations in quantity and by homogeneous characteristics for the analysis of relationship between online reputation and prices of vacation homes.

STEP 2. DATA COLLECTION

In order to collect the data and create data base for further processing and analyzing of the topic, it is necessary to choose reliable sources used by Agency X. Nowadays, travelers actively publish comments and reviews in Social Media by giving access to photos, videos, comments and reviews made in real time by other consumers living similar experiences. According to Market Metxix, figure 6 presents top review sites in different region of the world in 2018. TripAdvisor is the platform leader in Europe with 27% and in Americas with 22%, the second place in Europe ranks Booking.com with 10% and Facebook with very close percentage of publishing reviews.
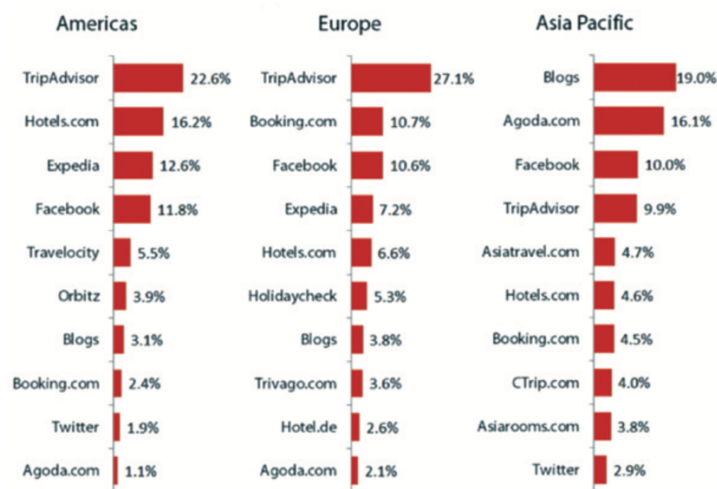
Figure 6. Top online review pages in the hospitality sector. SOURCE: Market Metrix

As it was already confirmed in the literature review in the model of P2P tourism OTAs play crucial role for establishment of prices, opportunity to be more competitive in the market and to have higher business results. Talking about Agency X, it has to be defined that 38% of made reservations are received from direct request. The rest of the bookings are distributed by four OTAs as Booking.com, AirBnb, TripAdvisor and Holliday Letting (see figure 7). Agency X receives more than half of reservations (58%) by the platform Booking.com and then 28% from AirBNB.
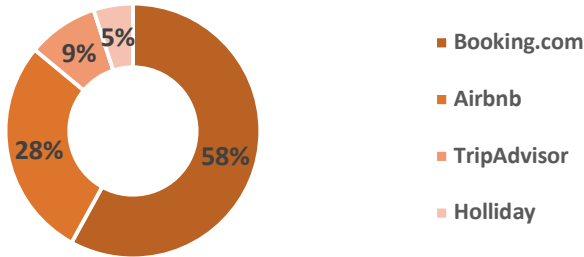

Figure 7. Distribution of platforms in Agency X. SOURCE: Own elaboration

After analyzing both figures 6 and 7, top review pages in different regions of the world and used platforms in Agency X for capturing new clients and reservations, Booking.com was chosen as valuable source for the data collection. Moreover, the platform gives a large number of data and statistics for active properties and its competitive market. There is opportunity to receive information about some defined accommodation (see figure 9) or for some sets (see figure 8) choosing groups by different variables as region, price, type of property among others. One more reason that makes the TFM significant, the platform Booking.com has the highest level of data protection by providing security for customers and avoiding any possibility to receive data if it is no going about apartment owner or manager who requests it. In the next figures 8 and 9 it is presented some examples of internal part of Booking.com extranet.

Figure 8. Set of listed properties of Agency X in the platform. SOURCE: Booking.com Extranet

Figure 9. Profile of a listed property of Agency X. SOURCE: Booking.com Extranet

Once the importance of Booking.com for both reference of online reputation and obtaining reservations has been established, this TFM will be concentrated in collection of data taken from this source based on Agency X's vacation rentals. On the figure 8, it is presented that for the selected properties (1 bedroom in Arona municipality) in 2019 booked average daily rate was 78,06€ and number of stayed room nights is 924 (realized from the beginning of 2020 till 1st March) generating 77.230,95€ of earnings (revenue).

For the creation of data base statistics has to be taken separately about every property of representative sample in order to obtain detailed information on points presented in figure 10. The analytics dashboard gives performance overviews (comparing with competitive set, peer group and market), pace report (for different periods – week, month, 90 days or 1 year), sales statistics (for gross or net reservations), booker insights (travel purpose, country/region and device of origin), cancelations, data regarding guest review scores, ranking, among others. All these characteristics used from Booking.com give opportunity to use the tool as the basis for creation of wide DB and possibility to analyze the influence of reputation online on prices of vacation rental properties.
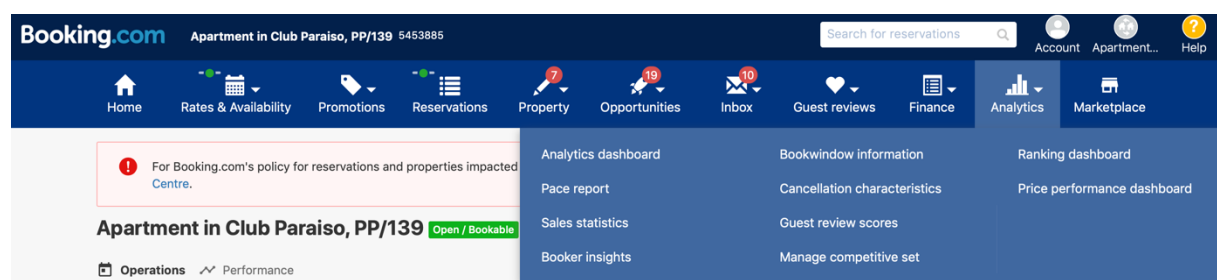
Figure 10. Variety of analytics gave by platform. SOURCE: Booking.com Extranet

Figure 11 presents sales statistics of one selected property during 2019 in comparison with the previous year using two variables as room nights of stayed (net) reservations and its ADR (monthly). As it can be observed in the figure 11, the level of stayed room nights was higher in June, August, September and December and in the rest of months this indicator was lower comparing with 2018. In 2019 ADR was higher in May, June, August and September in comparison with other months.

Figure 11. Sales statistics for reservations of a property. SOURCE: Booking.com Extranet

Figure 12 shows property performance for 90 days (starting point is 7th December). It includes daily search results which converts into property views and then in reservations. For example, the highest number of search views (458) is pointed on 13th December, 2019. As it was claimed in literature review and will be showed in this section, the visibility rate is crucial for overall conversion rate.
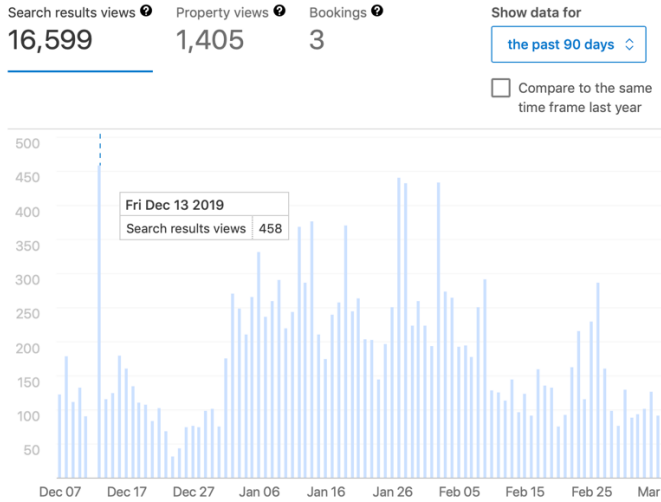

Figure 12. Ranking dashboard with daily search results views. SOURCE: Booking.com Extranet

The information taken from the tool, Booking.com extranet, is organized in figure 13 (Excel) in order to generate valuable DB. There are data about location, number of rooms, capacity, price (per property, per person), room nights, revenue, rating, number of comments, among others. With using of the figure 13, the TFM passes towards next step which is data processing and visualization.

	Apartment	NA	APMNT	Region	Beds	CAP	P/P	Price 201	Diferencia	Night	Diferencia	Revenue	Dif rev	Rate	Diferencia	Num	VIS	ENT	RES	NR
2	Adeje Paradise	83	pp133	PP	3	6	17,9	107,43	1,01%	103	-13,59%	11065	-1407,6	7,5	0,4	2	6790	14,86	0,1	1
3	Agaves	204	la116	LA	1	4	14,3	57,26	5,69%	167	-35,93%	9562	-3086,4	9,4	-0,2	8	53649	5,11	0,11	3
4	Apartamerica	454	la140	LA	1	4	20,2	80,77	1,23%	257	3,89%	20756	1073,92	9,7	-0,1	16	40437	3,65	0,88	13
5	Barandas	124	cs166	CS	0	2	23,9	47,8	13,66%	166	-21,08%	7935	-817,77	9,2	-0,1	13	36080	1,98	0,28	2
6	Beril	10	pd1	AA	1	4	19,1	76,32	-3,67%	250	-15,20%	19078	-3491,8	7,7	0,2	14	10206	26,69	0,33	9
7	Borinquen	524	la100	LA	1	4	15,1	60,25	5,10%	114	-6,14%	6868	-92,76	7,5	-1,7	4	79452	3,25	0,35	9
8	Castle Harbour	714	lc54	LC	2	5	16,5	82,6	-5,84%	57	12,28%	4708	269,92	10	-1	1	15935	4,17	0,45	3
9	Club Atlantis	41	se19	AA	1	4	18,8	75,12	-0,35%	148	-14,86%	11118	-1685,6	8,4	-0,9	8	77411	3,27	0,16	4
10	Colina	39	lc162	LC	1	4	16,3	65,08	-3,96%	142	-22,54%	9242	-2367	10	-0,9	4	22700	5,15	0,6	7
11	Esmeralda	23	cs124	CS	1	4	12,3	49,18	8,74%	173	-32,37%	8509	-2251,8	6,8	-1	11	37253	7,75	0,24	7
12	Floritas	3.2	la53	LA	2	5	15,8	79,22	-0,62%	208	-60,10%	16478	-9943,4	7,8	0	9	12678	4,97	0,16	1
13	Mirador Paraiso	109	pp121	PP	1	4	10,5	41,84		19		795	-795	8,3		3	7254	4,44	0,31	1
14	Mirador Paraiso	302	pp70	PP	1	4	11,8	47,08	1,83%	65	27,69%	3060	919,02	9,2	0	3	6004	7,61	0,44	2
15	Mocan	60	pm101	PM	1	4	11,9	47,64	8,17%	215	-26,05%	10243	-2049,7	9,4	-0,1	12	13743	6,85	0,32	3
16	Oasis Dakota	B8	fa139	AA	3	7	14,1	98,83	-3,20%	99	-51,52%	9784	-5191,8	8	-0,1	5	10323	5,37	0,54	3
17	Oasis Fañabe	15	mir150	AA	3	6	15,3	92,02	48,39%	42	-26,19%	3865	368,05	9,2	0,4	3	10166	4,16	0,47	2
18	Paraiso Royal	16	la28	LA	2	4	26,0	103,96	-4,92%	81	-12,35%	8421	-1402,7	7,5	1,7	5	21530	2,49	0,37	2
19	Paraiso Royal	203	la95	LA	0	2	28,0	55,9	-6,10%	173	-42,77%	9670	-4473,5	8,6	-1,2	7	22952	4,85	0,54	6
20	Parque Cattley	304	la74	LA	2	6	11,5	69,29	1,43%	65	92,31%	4504	4281	8,3	-0,7	3	41015	1,11	0,44	2
21	Parque Cattley	402	la81	LA	1	4	14,3	57,25	-1,55%	20	120,00%	1145	1334,84	7,5	0	1	39460	0,99	0,51	2
22	Parque Cattley	301	la73	LA	2	6	12,2	72,91	5,29%	148	-10,81%	10790	-656,36	7,9	-0,4	12	32175	4,73	0,53	8
23	Parque Cattley	112	la132	LA	0	2	23,4	46,87	0,81%	237	-16,88%	11107	-1798,8	7,5	-0,7	9	25656	4,64	0,59	7
24	Parque Cattley	125	la135	LA	0	2	18,0	36,03		30		1801	-1801	7,5		1	48810	0,86	0,95	4
25	Parque las Americas	47	la94	LA	1	5	14,8	73,87	6,16%	153	-7,84%	11301	-243,78	8,4	-0,9	11	24741	4,06	0,7	7
26	Parque Santiago	207	la138	LA	1	4	20,3	81,17	-7,63%	235	-14,89%	19074	-4078	7,5	0,3	12	30934	5,9	0,33	6
27	Playa de La Arena	11	pa113	CS	1	4	13,6	54,37	-2,98%	86	-33,72%	4676	-1669,3	9,6	-0,4	6	17031	7,39	0,16	2
28	Primavera	A9	pm195	PM	2	5	11,9	59,34	24,96%	44	6,82%	2611	874,05	7,5	2	2	9400	8,14	0,13	1
29	Primavera	A20	pm193	PM	2	5	14,0	69,75	2,08%	95	-51,58%	6626	-3350,8	7,9	1,3	6	9702	5,4	0,38	2
30	Sonia	14	cs148	CS	3	6	17,5	105,19	30,42%	27	18,52%	2840	1550,08	10	0	2	15775	4,96	0,26	2
31	Torres Yomely	6C	la56	LA	1	4	15,5	62,07	5,25%	192	-16,15%	11917	-1398,9	8,3	-0,5	9	27463	3,57	0,51	5
32	Victoria Las Americas		vic	LA	0	2	25,9	51,88	5,88%	161	4,35%	8352	876,24	8,7	-0,6	8	15131	5,22	1,07	8
33	Villa Sueño Azul	3	cs93	CS	4	9	23,8	214,01	-0,78%	88	2,27%	18833	277,6	8	1	5	14849	7,08	0,19	2
34	Villas Palm Mar	22	pm182	PM	2	4	20,4	81,55	-1,46%	120	-33,33%	9786	-3357,2	8,3	-0,4	3	12417	4,27	0,38	2
35	Vina del Mar	1009	la155	LA	1	4	19,1	76,45	0,94%	156	-15,38%	11926	-1739,6	9,2	-0,9	6	29921	3,15	0,11	1

Figure 13. Sample of information collection result as a big data for research. SOURCE: Own elaboration from booking.com extranet

## STEP 3. DATA PROCESSING AND VISUALIZATION

In first two steps data was selected and then collected by transforming into BD for the processing of information. Main variables that will be visualized are reputation online on the examples of properties ratings and numbers of reviews left after receiving experience.

The rate scales of accommodations in the platform of Booking.com determine from 1 to 10 where consumers can give opinions on following characteristics as cleanliness, comfort, location, facilities, staff and value for money. After the evaluation every component, the system gives an average score for accommodation and then for property in general. The rate more than 9 is recognized as wonderful, from 7 to 9 is good, from 5 to 7 is okay, from 3 to 5 is poor and from 1 to 3 is very poor. The figure 14 shows how travelers have reviewed their staying in the 1-bedroom apartments in Arona municipality managed by Agency X. As the figure 14 shows 53% of total properties has good (7-9) rating, 29% has wonderful one (9 and more) and 17% of properties has score less than 7.
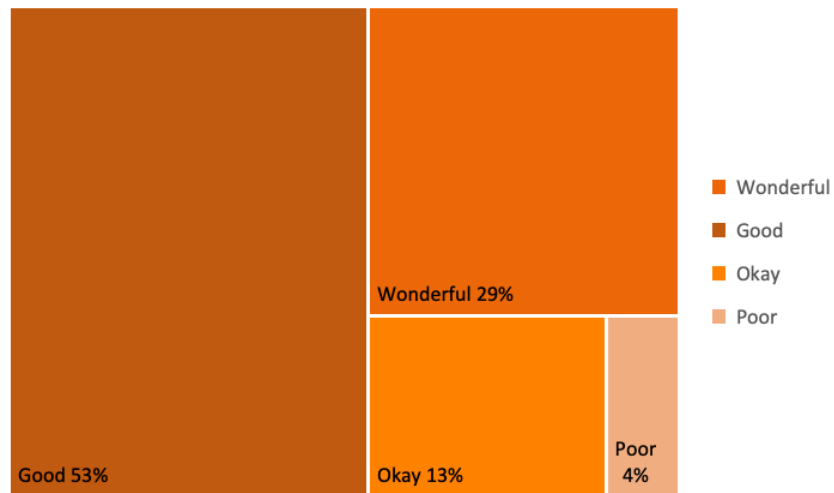
Figure 14. Guest review scores of Agency X's apartments in booking.com SOURCE: Own elaboration from booking.com extranet

The next variable reviewed in the TFM is number of reviews left by customers. This indicator was taken to check if there is a positive relationship with level of prices. To make this analysis (as the previous ones) more meaningful and valuable, it is specified to be homogeneous sample by taking the properties just with good score (see figure 14) in the platform. Because of its homogeneity and majority (53% what means 24 one-bedroom accommodations in Arona with good rating) these properties fit appropriate requirements to be homogeneity and significant by quantity. In figure 15 it is presented that in 2019 21% of selected accommodations have more than 15 reviews (3rd place), the first place in ranking takes 10-15 published reviews with 42%, 25% of properties have 5-9 and 21% with less than 5 ones.
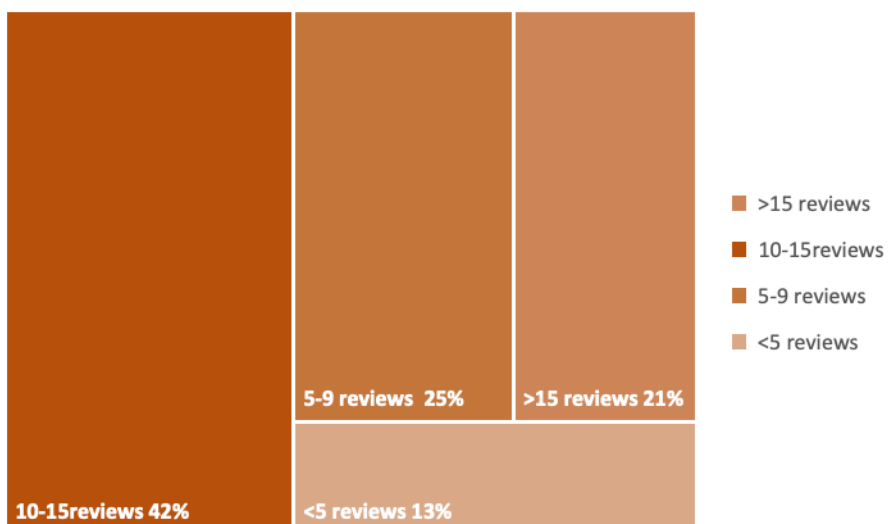
Figure 15. Number of published reviews by consumers of 1-bedroom apartments in Arona municipality with good rating. SOURCE: Own elaboration from booking.com extranet

Both figure 14 and 15 show the quality and quantity of online reputation in selected sample of Agency X's accommodations that give opportunity to reach the final part of the methodology application, analysis of the data.

STEP 4. INFROMATION ANALYSIS

In order to analyze the importance and necessity of online reputation for companies benefits, it has to be reviewed in relation of chosen and putted price policy. This variable, price, is crucial for business strategies, since any slight movement can lead to significant impact (positive or negative) on company's results. This part of TFM will be concentrated in the relationship between reputation online and prices of selected samples of accommodations, its visibility and conversion rate in the example of Agency X properties situated in Tenerife.

As it was seen in the table 2, in 2019 according to AirDNA the average price in Arona municipality was equal to 73 euro, while based on data about the prices of rental properties in Agency X, nightly price in the same municipality and period of time is 78,06€. One of reasons can be the location of apartments in exceptional tourist areas while accommodations from open data statistics include all properties in any part of municipality. Based on this data, it can be claimed that apartments in touristic centers of Arona costs 6,5% more than in micro destination and its outside in the same municipality.

Table 3 shows the correlation between guest review scores and average prices for 1-bedroom apartments of Agency X in Arona municipality. Making analysis it is observed that there is a positive relationship which proves that properties with higher rating in booking.com have higher prices for nightly staying in vacation rental properties. For example, accommodations with wonderful review (more than 9) have 19,65% (17€) higher price than those with poor reviews in the platform. Another analysis taken from the table 3 is that by improving ranking from okay to good, the company can put higher price by 7,8€ (per night in selected property) or 9,5%.

After analyzing reputation online based on data about guest review scores, it will be reviewed also from the part of its quantity. The number of reviews left for properties with good reputation online (scores of from 7 to 9) in booking.com also has positive relation with its prices (see table 4) where accommodations have higher prices by having more reviews. In 2019 these accommodations which have more than 15 reviews has the price higher by 7% than properties with less than 5 ones. In other words, the company can increase its benefits not just by having wonderful or good opinions on managed properties, but as well by encouraging clients to leave reviews with lived experiences after their staying.

Table 3. Relation between rating of vacation properties and average prices per nightly staying.

Rate	Mid point	Price	Average price
Wonderful	> 9,7	87,4€	**86,3 €**
	> 9,4	86€	
	≥ 9	85,5€	
Good	> 8,2	84,5€	**82,2 €**
	> 7,7	82,6€	
	≥ 7	79,5€	
Okay	> 6,2	76€	**74,4 €**
	> 5,7	74,2€	
	≥ 5	73€	
Poor	< 5	69,34€	**69,34 €**

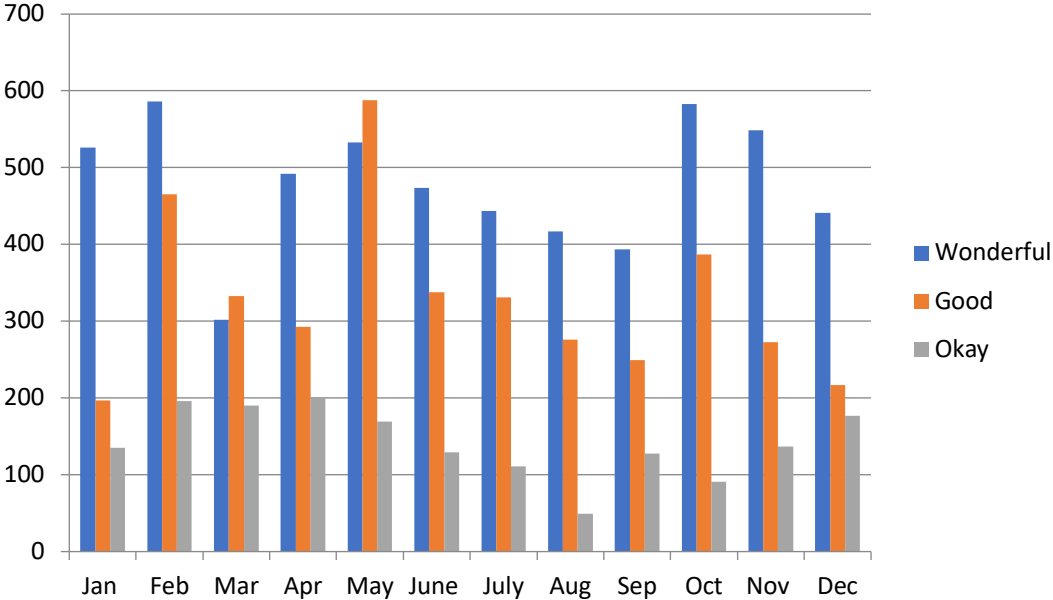SOURCE: Own elaboration from booking.com extranet

Table 4. Relationship between number of reviews for properties with good scores and its average prices per nightly staying.

Nr reviews	Average price
>15	85 €
10-15	82,7 €
5-9	82,1 €
<5	79 €

SOURCE: Own elaboration

Both of these variables of reputation online form part of properties visibility in the platform. Visibility online is an overall presence of product in the consumer environment. It depends on review scores, its quantity, price quality (reflection of price on booking.com compared with the lowest prices in other channels), ADR and cancellations. Visibility has influence on conversion rate, this indicator shows the number of gross (booked) reservations converted from properties search and page views. Every search result view is a potential client which can enter to the property page and make a reservation in future. Figure 16 (numbers taken from the figure 13) shows the flow of entrance to properties pages in
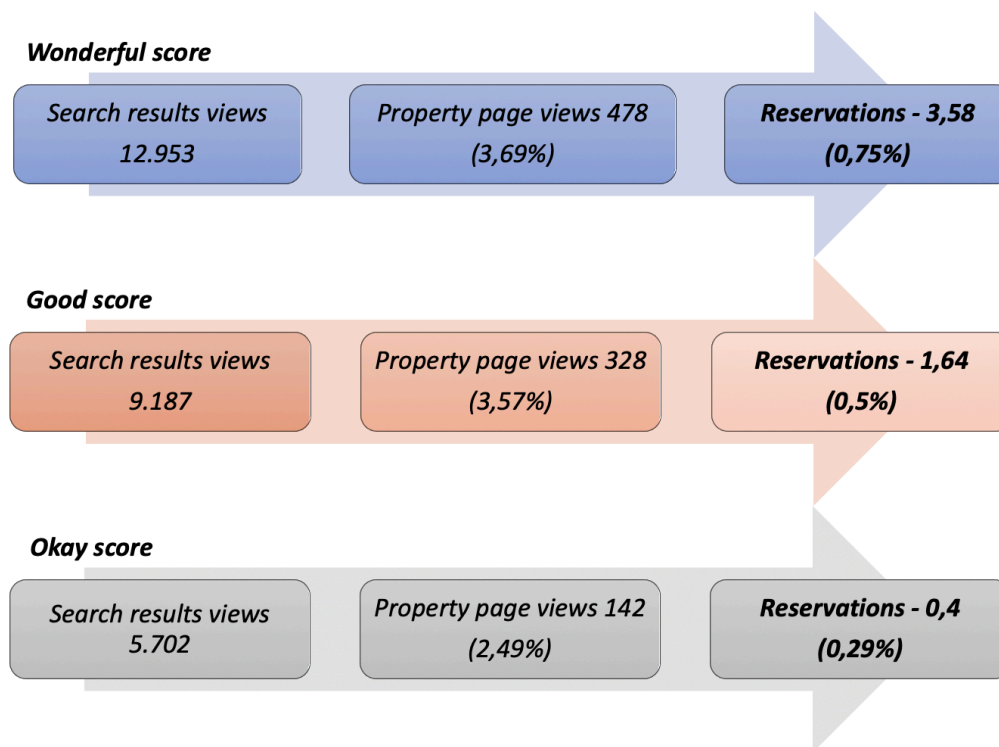
booking.com according to its rating in the list. The average number per month of page reviews of apartments with wonderful score is 478 entrances out of total research view results, properties with good one is 328 views and these with okay score – 142.

Figure 16. Relation between monthly page views and property rating in 2019. SOURCE: Own elaboration from booking.com extranet

After analyzing the page views of properties on booking.com listing, figure 17 is presented about conversion rate for different property scores (average monthly results in 2019). It is seen in the figure 17 that every of these indicators has favorable tendency depending on rating of property in the platform. It is observed that accommodations with wonderful scores are 29% more visible than those with good one. The difference between wonderful and okay scores is 56%. The percentage of property page views (entrances from search results) is relatively higher according to better guest reviews. In the case of 1-bedroom apartments in Arona municipality, Agency X has this indicator varying from 2,49% for okay score to 3,69% for wonderful one. The last indicator of conversion rate shows percentage of page reviews converted into reservations, where conversion rate of wonderful score is 0,75% and in the example of Agency X it means 3,58 reservations per month, those with good score has 1,64 reservations (0,5% - conversion rate) and okay ones has in average 0,4 reservations/month.

Wonderful score

| Search results views 12.953 | Property page views 478 (3,69%) | Reservations - 3,58 (0,75%) |

Good score

| Search results views 9.187 | Property page views 328 (3,57%) | Reservations - 1,64 (0,5%) |

Okay score

| Search results views 5.702 | Property page views 142 (2,49%) | Reservations - 0,4 (0,29%) |

Figure 17. Conversion monthly rate for apartments with different scores in the platform. SOURCE: Own elaboration from booking.com extranet.

During investigation made in this TFM it was confirmed that online reputation of vacation rentals has important influence not just on its prices, however, as well on number of reservations (occupancy rate) and consequently on benefits and results of companies.

6. <u>Conclusions</u>

This TFM plays a crucial role for development of tourism sector. In the world of constant developing digital technologies, an evidence of work importance is insignificant number of previous made scientific researches on relationship between online reputation and tourist establishments; and its full absence about influence of reputation online on prices of vacation rental properties at the moment when accommodations form huge part of tourism industry. This TFM, the first investigation about the topic with case study in Canaries, has proved that online reputation is a fundamental variable for managing prices of vacation rental properties and then for increasing its benefits. It was reached by both theorical and practical conclusions.

The theorical conclusions were made on the base of the scientific literature review and case study methodology which confirm the importance of online reputation for businesses and tourism industry as a whole. It is a significant factor that influences the added values and customer loyalty for all types of services including tourist accommodations with achieving better companies' results. In the TFM, a methodology was developed for the analysis of relationship between reputation online and prices of vacation rental properties. Moreover, because of its easy usage and to be designed on the basis of logical steps methodology is suitable to its application in other areas of tourism sector by adopting relevant modifications and adaptations in each case.

Reached practical conclusions, which are more important for this TFM because of unique DB with using latest data from case company, are based on the results of application of the methodology. The TFM claims that there is a positive relationship between online reputation and prices of vacation rental properties. On the platform Booking.com accommodations with 'wonderful' score have the price 19,65% higher than the one with 'poor' reviews. Moreover, it was evidenced that the price of P2P accommodations increases according to the number of positive opinions that these have in the OTA. With the analysis made in the TFM, it can also be stated that online reputation has a direct impact on occupancy and revenue rates of vacation rental properties. Higher scored accommodations on Booking.com have three times higher conversion rate and observing it those with a 'wonderful' rating receive almost nine times more reservations per month than those with an 'okay' one. Regarding influence on revenue, the conclusion was taken based on analysis about ADRs and occupation rate. Moreover, during writing the TFM it was observed that in contemporary world there is still a low number of owners or managers of vacation rental properties that pay attention for management and improvement of online reputation.

7. <u>Limitations and recommendations</u>

- Existence of gaps in scientific literature for defining the relationship between reputation online and prices; and it becomes especially evident analyzing vacation rental properties.

- Low number of updated and valuable scientific articles about new business concepts.

- Quite often the data offered by official sources is contradictory and more if it is necessary to match it with information published in touristic platforms. Therefore, it is recommended that institutions operate in a more coordinated manner and in this way, there is a higher chance to offer relevant and homogeneous data.

- Check if the obtained results in this TFM are applicable for vacation rental properties in other regions or with another type of tourism.

- Make detailed research with using similar OTAs like AirBnb, Expedia, TripAdvisor among others to compare the behavior of studied relationship and get a broader perspective of the topic.

- Realize researches with a bigger sample of vacation rental properties to verify whether the results received in this TFM can be generalized.

- Make a list of possible theories with steps which can help to improve online reputation and increase rating in global network by using appropriate marketing tools.

8. <u>Bibliography</u>

1. AirBnb *Newsroom,* reviewed on https://news.airbnb.com/fast-facts/.

2. Alavi, A. and Buttlar, W. (2018) *Data analystics for smart cities*.

3. Belk, R. (2014) 'You are what you can access: sharing and collaborative consumption online', *Journal of Business Research*, 67(8), pp. 1595–1600.

4. Booking.com, *Analytics,* reviewed on https://news.booking.com/bookingcoms-analytics-and-opportunity-centre/.

5. Botsman, R. and Rogers, R. (2011) *What's mine is yours: The rise of collaborative consumptions*. New York, NY: Harper Business.

6. Buhalis, D. and Law, R. (2008) 'Progress in information technology and tourism management: 20 years on and 10 years after the Internet-The state of eTourism research', *Tourism Management*, 29(4), pp. 609–623. doi: 10.1016/j.tourman.2008.01.005.

7. Christou, E. (2005) 'Promotional pricing in the electronic commerce for holiday packages: a model of purchse behaviour', in Frew, A. . (ed.) *Information and comunication technologies in tourism*. Vienna: Springer Verlag.

8. Chung, N. ., Um, T. and Koo, C. (2018) 'Factors affecting the value and satisfaction of online travel agency visitors: Focusing on the moderating effects of long-term orientation', *Korean Journal of Hospitalityand Tourism*, 27(2), pp. 1–19.

9. Deepthi, J. (2013) *Peer-to-Peer networks: Architectures, Applications and Challenges*, *Nist*. Odisha, India.

10. Del Frenso, M. (2012) *El consumidor social: reputación online ysocial media*. Barcelona: UOD.

11. De Maeyer, P. (2012) 'Impact of online consumer reviews on sales and price strategies: a review and directions for future research', *Journal of Product and Brand Management*, 21(2), pp. 132–139.

12. Dellarocas, C. and Zhang, X. M. (2007) 'Exploring the Value of Online Product Reviews in Forecasting Sales: The Case of Motion Pictures', *Journal of Interactive Marketing*, 21(4), pp. 23–45.

13. Diana-Jens, P. and Rodríguez Ruibal, A. (2015) 'La reputación online y su impacto en la política de precios de los hoteles', *Cuadernos de Turismo*, (36), pp. 129–155. doi: 10.6018/turismo.36.230911.

14. Dredge, D. and Gyimothy, S. (2015) 'The collaborative economy and tourism: critical perspectives, questionable claoms and silenced voices', *Tourism Recreation Research*, 40(3),p. 286–302.

15. Ericson, J. (2010) *What a Web data service economy implies for business Information Managent*. Available at: http://www.informationmanagement.com/ issues/20_1/netexpectations-10016922-1.html.

16. Erskine, R. (2018) *97% of business owners sayonline reputation management is important - here's how to keep it up*, *Forbes*. Available at: https://www.forbes.com/sites/ryanerskine/2018/07/30/study-97-of-business-owners-say-online-reputation-management-is-important-heres-how-to-keep-up/#1379f8a16c02.

17. Farronato, C. & Fradkin, A. (2018). 'The welfare effects of peer entry in the accommodation market: the case of Airbnb', *NBER Working Papers,* National Bureau of Ecoinomic Research, Inc.

18. Ferreira Dias, S. and Alves Afonso, V. (2020) 'Innovative Business Models in Tourism and Hospitality: Going Mobile?', in *Strategic Business Models to Support Demand, Supply, and Destination Management in the Tourism and Hospitality industry*. IGI Global, pp. 164–183.

19. Forum, W. T. (2019) 'Where the leaders meet', *Tourism Business*, (8).

20. Ghauri, P. and Gronhaug, K. (2010) 'Reserch methods in business studies', in. Third Edition.

21. Graham, M. and Moore, J. (2007) 'Consumers' Willingness to Pay for Corporate Reputation: The Context of Airline Companies', *Corporate Reputation Review*, 10(3), pp. 189–200.

22. Group, S. co. y the K. (2014) *OnlineConsumer-generated reviews have significant impact on offline purchase behaviour*.

23. Guttentag, D. (2015) 'AirBnb: Discruptive innovation and the rise of an informal tourism accomodationsector', *Current Isues in Tourism2*, 8(12), pp. 1192–1217.

24. Hernández Estárico, E., Fuentes Medina, M. and Morini Marrero, S. (2012) 'Una aproximación a la reputación en línea de los establecimientos hoteleros españoles', *Papers de turisme*, 52, pp. 63–88.

25. Holloway, Christopher & Taylor, N. (2006) *The Business of Tourism*. 3rd editio. Edinburg, England: Pearson.

26. Hooijer, P. (2016) *The relationship between Airbnb and the hotel revenue: evidence from the Netherlands*. Netherlands: University of Amsterdam.

27. Hwang, I. ., Kim, S. . and Byun, J. . (2019) 'El efecto del beneficio y sacrificiode la OTA sobre elvalor percibido: centrado en las implicaciones para OTA y los operadores de hoteles', *Gerencia del Hotel*, 28(6), pp. 211–229.

28. Instituto Canario de Estadística (ISTAC), reviewed on http://www.gobiernodecanarias.org/istac/.

29. Ivars-Baidal, A. *et al.* (2019) 'Smart destination and the evolution of ICTs: a new scenario for destination management?', *Current Issues in Tourism*, 22(13), pp. 1581–1600.

30. Jet, J. (2018) *What's new with Airbnb in 2018?*, *Forbes*.

31. Jinhyun Hong, D. and McArthur, P. (2017) 'How Does Internet Usage Influence Young Travelers' Choices?', *Journal of Planning Education and Research*, 39(2), pp. 155–165.

32. Kaplan, A. and Haenlein, M. (2010) 'Users of the world, unite! The challenges and opportunities of Social Media', *Business Horizons2*, 53(1), pp. 59–68.

33. Kinstler, L. (2018) 'The world´s biggest travel site has turned the industry upside down', *The Guardian*.

34. Kohni, C. and Suri, R. (2011) 'The price is right? Guidelines for pricing to enhance profitability', *Business Horizons*, (54), pp. 563–573.

35. Kourtesopoulou, A. *et al.* (2019) 'The impact of online travel agencies web service quality on customer satisfaction and purchase intentions', in *Smart Tourism as a Driver for Culture and Sustainability*, pp. 343–356.

36. Lamsfus, C. and Alzua-Sorzabal, A. (2013) 'Theorical framework for a tourism internet of things: Smart Destinations', *Journal of tourism and Human Mobility*, 0.2, pp. 15–21.

37. Lee, C. ., Kim, H. M. and An, D. H. (2008) 'The effect of perceived value for Japanese tourists on their satisfaction and revisit intention to Korean tourism', *Journal oof Tourism and Leisure Research*, 20(4), pp. 69–85.

38. Litvin, S., Goldsmith, R. and Pan, B. (2006) *Electronic world-of-mouth in hospitality and tourism managent*. College of Charleston, School of Business and Economics.

39. María-Dolores, M., Bernal García, J. & Mellinas, J., 2012. 'Hotels in the Murcia region facing social networks and online reputation', *Revista de análisis turístico,* 13(1), pp. 1-10.

40. Noone, B. . and McGuire, K. . (2013) 'Pricing in a social world: the influence of non-price information on hotel choice', *Journal of revenue and pricing management*, 12(5), pp. 385–401.

41. Nyurenberger, L. *et al.* (2019), '2GO' format innovative technologies in tourism: augmented reality of travelling', in *Economic and Social Development*, pp. 318–326.

42. O'Connor, P. (2003) 'Room rates on the Internet - is the web really cheaper?', *Journal of Services Research*, 1(1), pp. 57–72.

43. Olson, K. (2013) *National study quantifies reality of the 'sharing economy' movement*, *http://www.campbell-mithun.com/678_national-study-quantifies-realityof-   the-sharing-economy-movement*.

44. Phillips, R. (2005) *Pricing and Reveneu Optimization*. California: Stanford University Press.

45. Resnick, P. *et al.* (2006) *THE VALUE OF REPUTATION ON EBAY: A CONTROLLED EXPERIMENT*.

46. Rivera Martin, E. R. (2019) *Sistema de Business Inteligence de apoyo al proceso de toma de decisiones en la gestion de la movilidad turística y su relación con los alojamientos P2P en la isla de Tenerife*. Universidad de La Laguna.

47. Rodrigues Diaz, M. and Espino Rodriguez, T. F. (2017) 'Determining the reliability and validity of online reputation databases for lodging: booking.com, TripAdvisor and HolidayCheck', *Journal of vacacion marketing*, 1(14).

48. Sammy, C., Li, H., Robinson, P., & Oriade, A. (2017). Destination marketing: The use of technology since the millennium. Journal of Destination Marketing & Management, 6(2), 95–102. Retrieved from https://doi.org/10.1016/j.jdmm.2017.04.008

49. Saunders, M., Lewis, P. and Thornhill, A. (2019) *Research methods for business students*. Eights. London: Pearson.

50. Sherwood, H. (2019) *How Airbnb took over the world*, *Guardian news & media limites or its affiliated companies*. Available at: https://www.theguardian.com/technology/2019/may/05/airbnb-homelessness-renting-housing-accommodation-social-policy-cities-travel-leisure.

51. Sigala, M., Christou, E. and Gretzel, U. (2012) *Social media in travel, toursim and hospitality. Theory, practice and cases*. Burlington, England: Ashgate.

52. Smithson, S., Devece, C. A. and Lapiedra, R. (2011) 'Online visibility as a source of competitive advantage for small- and medium-sized tourism accommodation enterprises', *The service industries journal*, 31(10), pp. 1573–1587.

53. Tafesse, Y.Z., (2012). 'The role of online reputation management in strategic business decisions in Ericsson', *Jonkoping International Business School*.

54. Tavakoli, R. and Wijesinghe, S. (2019) 'The evolution of the web and netnography in tourism: a systematic review', *Tourism Management Perspectives*, 29(1), pp. 48–55.

55. TripAdvisor, *Media Center,* reviewed on https://tripadvisor.mediaroom.com.

56. Tussyadiah, P. and Pesonen, J. (2018) 'Drivers and barriers of peer-to-peer accommodation stay', *Current Issues in Tourism*, 21(6), pp. 703–720.

57. World Tourism Organization, 2017. *What the leaders say? reviewd on https://www.globaltourismforum.org/wp-content/uploads/2019/11/What_the_leaders_say.pdf*

58. Yacouel, N. and Fleischer, A. (2010) *The role of cybermediaries in the hotel market*. The Hebrew University of Jerusalem.

59. Ytreberg, N. . (2016) *Competitive effects of AirBnb on the Norwegian Hotel Market*. Norway: The University of Bergen.

60. Zekanovic-Korona, L. and Grzunov, J. (2014) 'Evaluation of shared digital economy adoption: case of AirBnb', *MIPRO*, pp. 1574–1589.

61. Zervas, G., Proserpio, D. and Byers, J. (2015) 'A first look at online reputation on Airbnb, where every stay is above average'.