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Guest satisfaction analysis of Airbnb in Calvià and Andratx in 2016 and hotel comparison.

David Magnier Maura

Grau de Turisme

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DNI de l'alumne: 43475197E

Treball tutelat per Rebeca Méndez
Departament de Economia

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1. ABSTRACT

Airbnb has become one of the most important accommodation companies in the tourism sector, creating a new way to travel and changing the accommodation sector. But what says the guest about their experience? It is positive or negative? Can we compare this kind of accommodation to the hotel sector? Airbnb has increased the pressure in areas as Magaluf?

Through this project we are going to study two of the main touristic areas in the Balearic Island; Calvía and Andraxt. We are going to analyse the reviews that the guest has left in 2016 to know how their experience was and compare 3 main aspects between hotels and Airbnb properties in order to find the answer of these questions.

2. INTRODUCTION

Mallorca is one of the top destinations in Europe for spending some days receiving more than 16,45 million tourists in 2019 (Instituto Balear de Estadística, 2020). Inside Mallorca, Calvià and Andratx are two of the main touristic areas, especially relevant for the British market, with particular areas as Magaluf.

Calvià and Andratx are located in the southwest part of the island, between the Serra de Tramuntana and Serra de Na Burgessa. This privileged spot offers an important number of natural attractions as could be the Serra de Tramuntana, declared a World Heritage Site by UNESCO, the island of Sa Dragonera, one of the most important natural parks in the island. As well offer a big selection of beach and towns that are very well appreciated by the tourist visitors. However, some village was declared as mature zone in 2014.

Airbnb is one of the most important platforms for rent a house to spend some holidays and has become a different type of accommodation that competes with the hotel sector. Airbnb has had an important and fast growth in the Balearic Island. That is why I am interested in studying how it affects Airbnb in areas as Calvià and Andratx, compare between hotels and see if they created more pressure in areas as Magaluf or on the other hand scraped the pressure on the rest of the area. As well, I want to know what the guest says after the stay in an Airbnb property, how it was their experience in order to understand the fast growth of this type of accommodation.

The purpose of this project is divided in two parts, the first one is a descriptive analysis in order to know what the guest says about their stay in an Airbnb offer by a non-commercial owner. We are going to analyse 17 different categories of all the reviews made by the guest in 2016 after they stay in Airbnb properties of Calvià and Andratx and see if this accommodation creates good value for the tourism. The second part of the study is a comparison of the location, price and reviews between hotels and Airbnb in the area of Calvià and Andratx and see what type of influence have this type of accommodation for the guest and in the area.

3. CONTEXTUALISATION

In the tourism sector, the accommodation industry is one of the most important, becoming essential to develop the journey. These industries traditionally have been linked to hotel companies, but with now a day, we can find different type of accommodation. In an environment of growth, new technologies, as the development of the social media, has created a new way of accommodation networks.

Nowadays, almost all the people who are interested in the tourism world, would know something about Airbnb because has become one of the most frequents topics in the last years. The concept of rental house for the holidays is not new but why is Airbnb different, and when it was born?

Airbnb is a C2C company that connects the property owner that would like to rent their house to guest that are looking for this kind of accommodation. The difference here is that they use a social network to connect directly the owner and the guest without intermediations. The history of Airbnb begins in California, when it was born in 2008 by Brian Chesky and Joe Gebbia. Nowadays the company has more than 7 million houses listed worldwide in over 100.000 cities and more than 220 countries. They have hosted more than 750 millions of guest during all this time. Being one of the world's largest marketplace. In particular in Mallorca were listed only 40 in 2009-10. In 2020 are more than 14.900 properties listed in Mallorca. (Airbnb, Inc, 2019)

After knowing a lit bit of Airbnb, we need to introduce the area of the study. Calvía and Andratx are two main touristic areas in Mallorca, as we have said before in the introduction. They can offer a big range of different attraction including, gastronomy, party and alcohol, cultural, nautical, luxury, spa and wellness or sun and beach, this big range of offer could fix almost any kind of tourist. However, in 2014, in the area of Calvía, specifically in: Paguere, Santa Ponsa, Magaluf and Palma Nova were declared as mature zone. As well they have a strong seasonality during the winter period.

Urban has grown up really fast in the last years, becoming and important accommodation company that competes directly with the traditional one, the hotels. That is why we want to know what the guest says about their stay in the re-views, if they had a positive experience. As well, we want to analyse and compare different aspect between Airbnb and Hotels in Calvía and Andratx and how they affect, compared to the hotels. We are going to see if the Airbnb properties increase the pressure in areas that are already massify by hotels or not, as well, we want to see what kind of hotel category have similar price than Airbnb and compare the guest satisfaction.

4. METHODOLOGY

The methodology used consist in two different and complementary aspects. The first part of the project consists in a descriptive analysis of the reviews made by the guest who had stayed during 2016 in Calvía or Andratx Airbnb property.

The information of Airbnb used in this analysis come from Inside Airbnb, a web page that collects data from the own Airbnb web page. The information was collecting the 15th of march of 2017, at that time had listed 14858 properties on the island of Mallorca (Inside Airbnb, 2016). From that amount we reject all the house that the owner had more of one property. Given us a total of 3608, because two of them were empty.

From the 3608 we select the properties that were in Calvía and Andraxt a total of 370, giving us the final number of properties for the study, 291 from Calvía and 79 in Andratx.

From the 370 properties we had analyse all the reviews made by the guest during all 2016. That gives us a total 1711 reviews. From that number of reviews, we reject all the reviews that had no information, given us the final number of reviews.

The first part of this study is a guest satisfaction analysis. This study consists in read all the comments and analyse the information that the guest life in the review. We are going to analyse 17 specific aspects of information that we divided in 5 main groups that we are going to analyse later on. We classified the information on each point as: positive, they had said something good about the particular aspect, Negative, they had said something bad about the particular aspect, or N/A if the guest had not mentioned anything in the particular aspect. With the information collected we created different graph, tables and pie charts that we are going to use to analyse.

Moving to the second part of this is study is a cooperation between Airbnb and hotels. We are going to compare these two different types of accommodation in 3 categories; Location, Price and Satisfaction Score.

In order to compare the distribution of the different kind of accommodations we have created some maps in Google Maps using the coordinates of the Airbnb properties and the hotels of Calvía and Andratx. For Airbnb, we had taken the coordinates of the 291 properties from Calvía and the 79 from Andraxt that was provided by the Inside Airbnb data base and we create. For the location of the hotels, we take the coordinates of 353 hotels located in the same area. We take this information from a date base of Hotelbeds, one of the biggest bed banks.

To compare the price, we select the prices of all the Airbnb properties the we have in the database and we made an average price. For the hotels price, we take the date from Spain info, one of the reference web page for hotel information in Spain. We had selected the hotel of the same area as the Airbnb properties, given us a total of 92 hotels. In order to have a more specific

analysis we divided the hotel average price by category, and we create a table to compare between Airbnb.

The last point of this analysis is a comparison of the guest satisfaction in different aspect. As all the information that we had used for Airbnb in this paper come from the Inside Airbnb data base. We have the score that the guest has left in the Airbnb web page of 7 different points. For the hotel score, we collect the information from a database made using scraps from Booking.com in 2016, given us a compatible sample. We have the score review of 8 different aspects of the hotels. As this database was not really clean, we collect the information of the 92 hotels that we had used in the price comparison.

5. CALVÍA AND ANDRAXT AIRBNB GUEST REVIEWS ANALYSIS

The reviews are the tool that the guest uses to share the positive and the negative thinking about their experience with the other future guest and as well to the owner That is why, we are going to evaluate the study of guest satisfaction made by the analysis of the reviews. As we had said before, we collect a total of 370 Airbnb accommodation from Calvía and Andraxt. Of those reviews, 58 were empty, because the guest or the host cancelled the booking, without leaving a comment. Taking out the empty reviews, we have a total of 1653 with the information of the guest stay, where they say how was their experience. From that data, we make a descriptive analysis.

The reports come from the analysis a total of 17 different facts in each review. We divided in 5 main groups: general Information, host analysis, property analysis, positive and negative comments and Overall analysis.

5.1. General Information

This first part of the analysis of the Calvía and Andraxt Airbnb guest is about to know some characteristics of the reviews and the people who write it. There are 3 different parts: Number of character, Language and Guest sex.

5.1.1. Characters

It's important to know if the reviews that we had analysed are short or not. If we see that the average n^o of characters is too short probably the that we could find in the reviews could be not enough to do the analysis. That is why we have to know if the description is long enough to contain information.

In order to take the number of characters we use access and excel to count the number of characters that every guest use to write their opinions in the reviews. In order to be more concrete, the average is done by the different language that we find in the reviews, as you can see in the table n^o 1

LANGUAGE	AVERAGE OF N ^o . OF CHARACTERS
CAT	376
ENG	366
ENG; FRE	458
ENG; GER	548
ENG; ITA	114
ENG; OTH	599
ENG; RUS	971
FRE	296
GER	467
ITA	330
OTH	424
RUS	417
SPA	275
SPA; ENG	412
SPA; ENG; FRE	325
SPA; FRE	622
SPA; GER	509
SPA; RUS	241
Max	2716
Min	4
Suma total	360

Table 1 Average of numbers of characters use in the reviews. Source: Own elaboration

In the first column of the Table 1 are the most common language used by the guest to write their reviews, the books that have more than one language means that the guest had used different language writing their reviews. The second column is the average of character use of the different languages. At the end of the table are the reviews with the maximum and the minimum character and the global n^o of character average.

The language with highest average is the combination of Russian and English, that result is something that we expect, because the guest who write in Russian, as well they translated their opinions in English in the same review and that is by, they have the highest average. The lowest one is the combination of English and Italian, that is because these combinations are not really usual, and the few reviews are short. To finish, we could see at the end of the table 1, that the average is 360, the review with more character has 2716, too far from the average, and the lowest just 1, that we could not consider that as valid review

Do the reviews have enough information? In order to answer the question, we can compare the average n^o of characters used in the reviews with one that we all know, a Tweet from Twitter, the Tweet have a maximum of 280 characters and is considered enough to share information. The reviews have an average of 360 characters, 80 more than a tweet. With this information, we can conclude that the reviews are long enough to collect enough information about the guest experience and be able to do the analysis.

5.1.2. Language

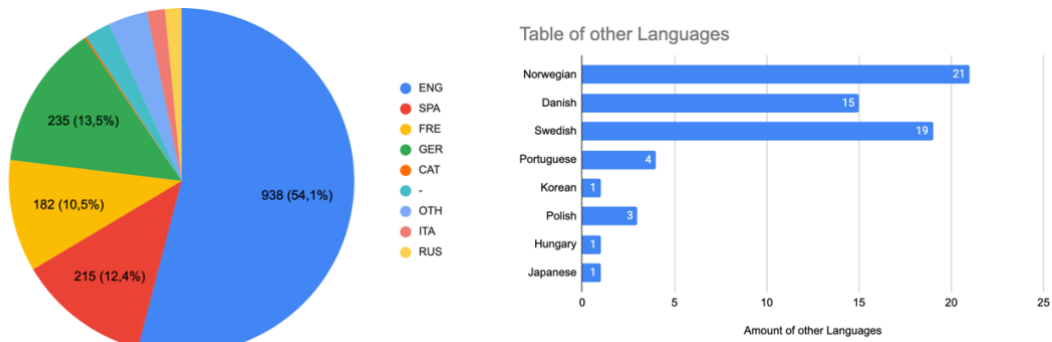


Figure 1 Language of the reviews. a) most frequent languages. b) other languages count. Source: Own elaboration.

The language use of the guest gives us important information the first thing is the great variety of different language used and the combination of them, as we see in the Figure 1, In the Pie Chart in blue colour we observe that the most frequent language use by the guest is English, with a 55.6%. That high percentage is normal due to use of English as a common way to communicate with people who speak different languages, as well Calvia is one of the principal receptor for British tourists. The second one, is the German, with a 13.5%. We expect that high percentage, because Mallorca is one of the main destinations in the German market, and more concretely Andraxt. The third language is the Spanish. Representing a 12% of the total being an important part of the review.

We see that most some of the guests use two different languages to write their reviews using the Spanish and other one, the most frequent combination. Most of them are positive message sends to the owner.

Seeing the Pie Chart and the Graph we see that are a high combination of language, concluding that most of the guests that use Airbnb are international tourist because the 88% of the reviews are written in a foreign language, only the 12% that use Airbnb is national tourism.

5.1.3. Guest Sex

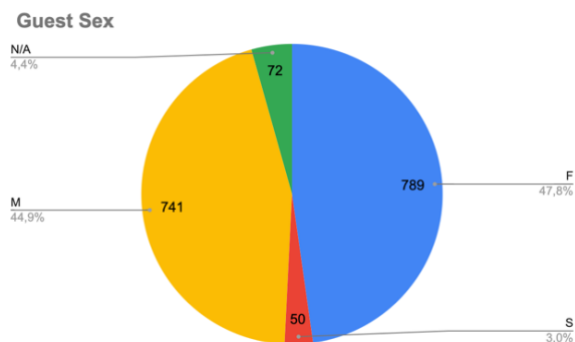


Figure 2 Guest Sex. Source: Own elaboration.

In the Figure 2 we can see that the sex of the guest who write the review have a similar distributing between sex, being the Female lit it be bigger than the man. The not answer, are the reviews that we could not know witch sex have, representing only the 4.4%. The plural reviews are less frequent with only 50 reviews.

5.1.4. Host Information

Moving on to the next part, is regarding what the guest says about the host. At this point we want to know if the Host has an important impact during the stay of the guest, and if that impact is reflected in the comment. In order to answer the question, we divided the information in 4 different points: Host Mention in the review, Food and Beverage detail, Personal attention and Host perception.

5.1.5. Host mention in the review

It is the host mentioned?

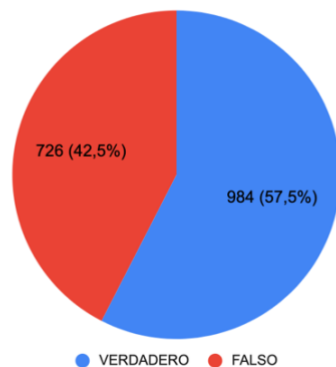


Figure 3 Number of time that the host has been mention in the reviews. Source: Own elaboration.

We mark as true (blue colour) all the comments where the guest mentions the name of the host.

As we can see in the Figure 3 in blue colour, near 1000 people representing a 57,5% of all the reviews, the guest has mentioned the name of their host in the reviews being an important number of the total.

In most of the reviews, they mention the name of the host to thank the good experience that they have received during the stay as well as the personal feedback.

5.1.6. Personal Attention.

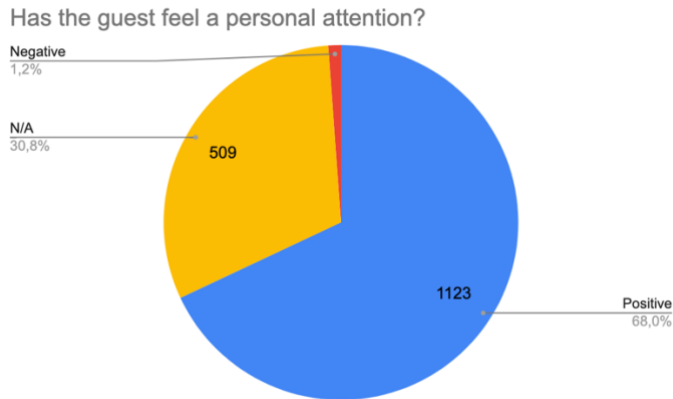


Figure 4 N° of guest that have feel personal attention. Source: Own elaboration

Has the guest felt personal attention by their host? Analysing the reviews, we mark as positive all the reviews that mention that they had received any kind of personal attention. The personal attention could be a warm welcome experience, the solution of problems or any kind of detail that he just didn't expect.

The result is in the Figure 4. The 68% of them has received a positive personal attention during the stay, and only a 1.2% are negative. This result of high levels of positive comments is because the host has the chance to get in contact with their guest during all the procedure; during the booking process, during the stay, and after their holidays in the reviewer comments.

The fact that the guest always talks with the same person (the host) during all the process, create a kind of host-guest relationship. This relationship gives the chance to make a personal stay. In some case we see that could develop into a loyal, with some guest saying that would like to repeat they stay in the same place.

5.1.7. Food and Beverage detail.

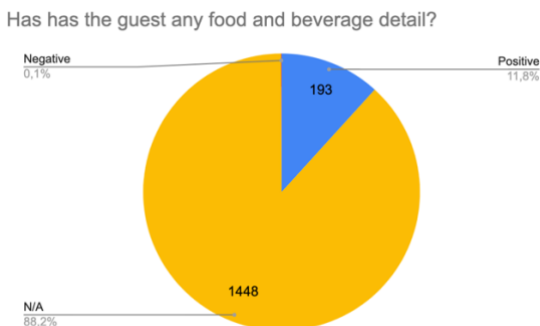


Figure 6 N° of guest that have says anything about food or beverage.

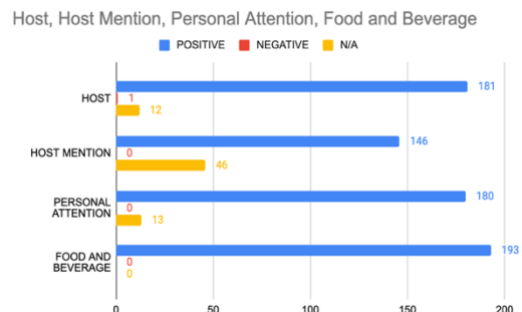


Figure 5 Relation of the positive reviews in food and beverage between the other Host aspects.

The difference between a good holiday or an unforgettable holiday are in the small details. We want to know if a food or beverage detail in the house will affect positively the personal attention and the host perception.

We see in the Figure 6 that only a 11.8% had mentioned that they receive any kind of food or beverage detail and the 88.2% did not mention anything regarding the food and beverage. That could be because not many hosts give to the guest that kind of detail, this is as well why there is not any negative reviews, is because the guest does not expect nothing

The figure 5 shows the relation between the positive reviews on Food and Beverage in the other host aspects. We take that 11.8% of positive from the pie chart 6 and see what the guest answer in the other host points. We can see that exist a positive relation between the guest who had received a good detail and satisfaction in the other host aspects, being the food or beverage and important influence.

5.1.8. Host Perception

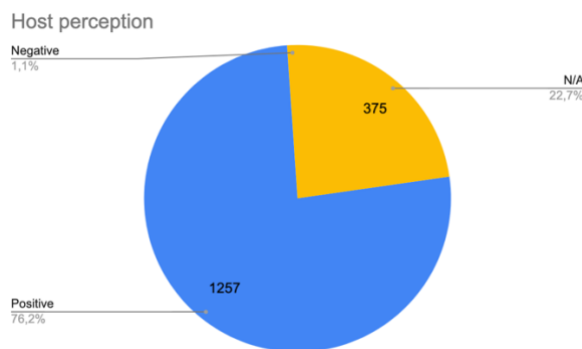


Figure 7 Host perception in the reviews. Source: Own elaboration.

We had analysed different aspect regarding some host aspects, but what is the host perception in the reviews? They mention something, are this comment, positive or negative?

These questions are responded in the Figure 7, we can see that the 77.3% of the reviews has mentioned something about the host, and almost all this mention is positive, at 76.2% and only 18 reviews representing the 1.1% are negative. The reviews are used to write how it was the experiences, and that pie chart shows us that more than three quarts of the comments are positive, and only a 1% of them had had a bad experience.

With that information we can conclude that the host has and important influences during the guest stay, and we can say that these influences are mainly positive creating a good host perception being in some review an essential part of the experience, as we will see further on.

5.1.9. Host conclusion

Global host analysis

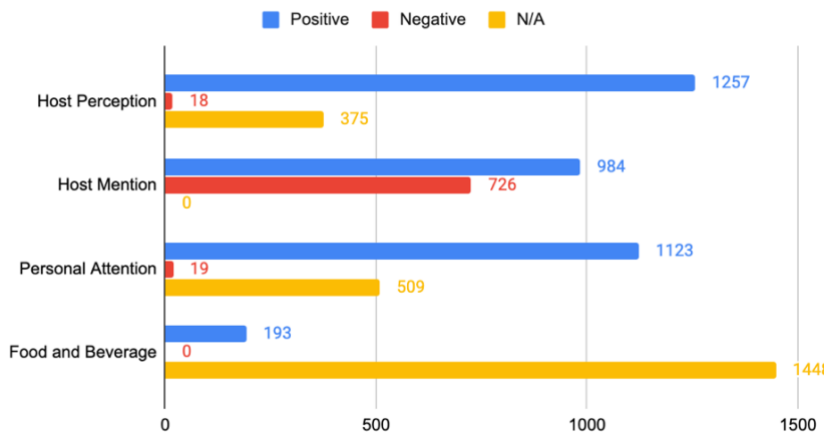


Figure 8 Representation of all the host aspect. Source: Own elaboration.

After the analysis of these four different aspects we can conclude that the influences of the host during the guest stay is really high, as we can see in the Figure 8 that there are more positive comments than negative creating a positive host perception. This perception could create a relationship that could be translated to loyal clients.

The 57.7% of the guests have mentioned the host name in the review to thank the personal attention during the stay.

The worst point is the Food and Beverage, being the point with fewer positive reviews. As we see before, the guest who had mentioned any kind of food and beverage detail has an important positive relation to the rest of the aspects.

If the host takes into account this information and implies a kind of detail, could make the difference and have more influence in the satisfaction of the guest and change the 22.7% of that guest that they do not mention any kind of host perception into a positive one.

The host is an important part of the process, creating positive and personal experience. These experiences inspire the guest to write positive reviews saying how the host was, if they had any detail or had received personal attention, as we had seen before. That positive reviews are essential to have more bookings inspired by the satisfaction of another guest.

5.2. Property analysis

Moving to the next group, the property analysis. Airbnb consists to share or rent a private house to someone who is looking for an accommodation. That means that every house becomes different from the other, as they are not standardized as other kind of accommodation. That is why we want to know and analyze what the guest says about the houses. In order to know what the guest says,

we have analysed 6 different points: Location, Size, Cleaning, Security, Wi-fi and the Property.

5.2.1. Location

When someone is looking for any kind of an accommodation, one of the principal requests is the location. We want to know, what the guest thinks about the Airbnb location in Calvía and Andratx? We mark as positive all the reviews that say something good about the house location, or negative is not good, N/A if they did not mention anything about the location.

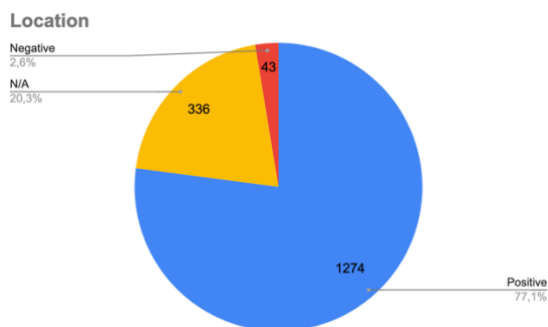


Figure 9 Location satisfaction from the review analysis. Source: Own elaboration.

The Figure 9 show as the location analysis. We can appreciate that a 79.7% of the review says something about the location, been a topic very frequent in the reviews. From that 79.7%, we see that the 77.1%, says something positive about the location. That is significantly important, as we have said before, the location is one of the main aspects for choosing an accommodation been only the 2.6% negative reviews, normally for noisy or dangers neighbourhood.

We suggest to the owners that have a negative review about the location, explain better in the description the location, what is near the house. Etc. In order to avoid any kind of confusion and be able to reduce even more the negative comments.

5.2.2. Size

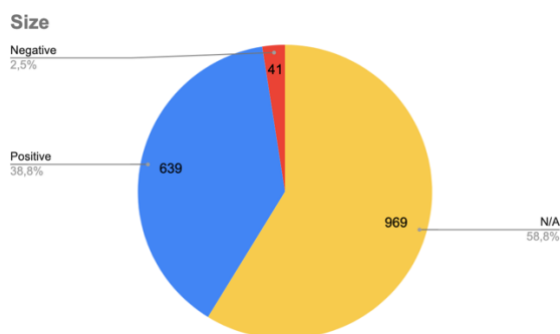


Figure 10 Size satisfaction from the review analysis. Source: Own elaboration.

The size of the house is another important point that the tourist takes into account when they have to select their accommodation. That fact is even more important when they travel with their families or in parties. But is a frequent concept in the reviews? What the guest thinks about the properties size?

In the Figure 10, we can see that the 41.3% of the reviews says something about the size, we can conclude that the size is not that frequent as location, that we have seen in the last point. From that 41.3% the 38.8% have said in the reviews that the size of the property was good or almost what they expected reading the description from Airbnb. The reviews that had a negative experience with the house size represent a small percentage with only 2.5% of the total.

The size has the same problem as the location, is quite complicated to change, in some case, exist the possibility to remodel the house, but that implies an investment that not always is possible. For that reason, we recommend the same as the location, a good explanation of the house size helped by good pictures of the property distribution that will avoid misunderstandings.

5.2.3. Cleaning

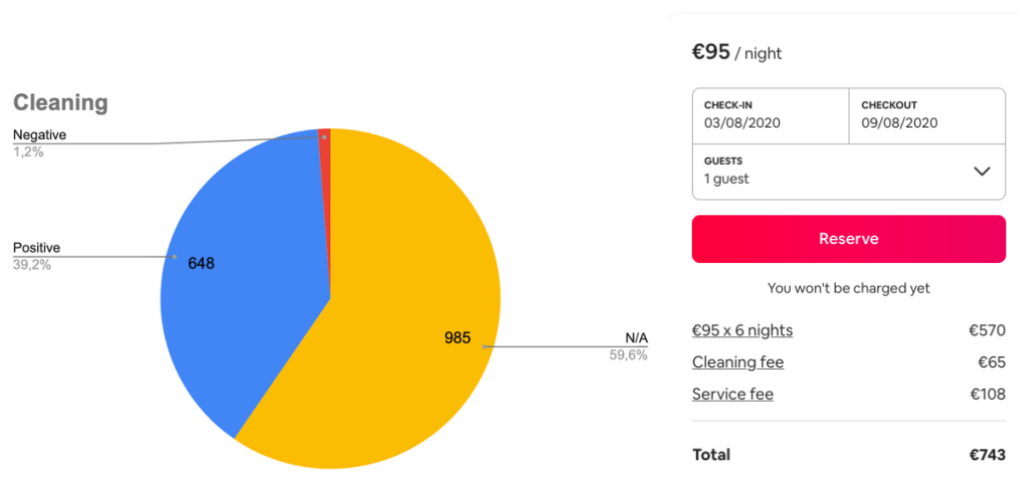


Figure 11 Cleaning review analysis. Source: Own Elaboration.

Picture 1 Booking expenses for a house in Magaluf. Source: Airbnb.es, date of the search for the 3/08/2020- 09/08/2020

When someone is looking for a place in the Airbnb web side, in the table that show all the fees, one of them is the cleaning service, as we can see in the Figure 11.

That fee means that when the guest arrives at the house, they will find a cleaned property. But the best way to know if a place use to be clean, is to read the reviews of the people who had been there before. That is why we want to know what the reviews says about the cleaning.

In the Figure 11, we see that the 40.4% of the reviews talk about the cleaning. Is a significant number of reviews that take into account the cleanliness during their experience? From that 40.4%, the 39.2% says something positive about how they find the house at their arrival. On the other side only a 1.2% has found that the house in bad conditions.

Taking into account the reviews that do not mention nothing about the cleanness of the house as not a negative one. We can say that the cleaning in Airbnb house in Calvía and Andraxt is really high.

5.2.4. Wi-fi

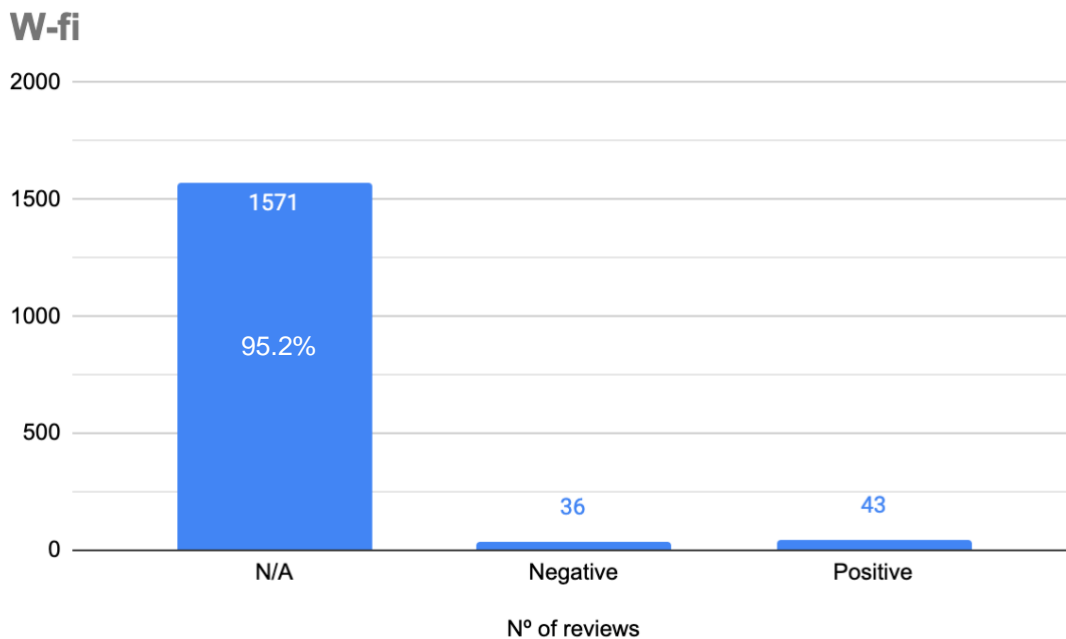


Figure 12 Nº of reviews that have mention the Wi-fi topic in the reviews. Source: Own elaboration.

We live in a world highly connected to the internet. That is why, nowadays it is hardly impossible to understand a holidays in Mallorca without internet connection. What why the guest says about the Wi-Fi connection in the Airbnb houses? We answer the question in the Figure 12, we could see how the guest nearly do not mention the Wi-Fi connection on the reviews with a 95.2%. That high percentage in N/A is normal, because the guest sees the way-Fi connection as something imply in the services.

One of the surprises comes when you see that are more positive reviews than negative. We thought that if someone says something would be that they have any kind of problems with the Wi-Fi connection, like slow connection or problems to connect. What only are 36 of them had had a problem. That means that are more people surprise about how good was the internet than people with problems.

5.2.5. Security

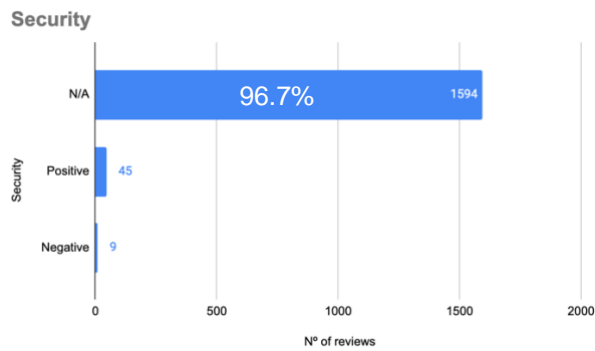


Figure 13 N° of reviews that have mention the security topic in the reviews. Source: Own elaboration.

Feeling safe in a holidays is something essential for the guest. But talk about security is not only talk about protection against thieves with security alarms, we take into account as well the protection for children's in the pool or inside the house. That the door close well and that kind of matters.

We see in the Figure 13 that the security is not a frequent topic in the reviews, with a 96.7% of N/A. This high N/A means that the guest has felt comfortable during their stays.

With the security happens the same with Wi-Fi that we see before. There are more positive reviews than negative. That means that are more people that has overcome their expectative than people who had security problems.

During the reading we have seen only one comment says something about a robbery, and another 2 that had had problems with the principal door that did not close well. The positive reviews are related about neighbourhood or protection for children.

5.2.6. Property

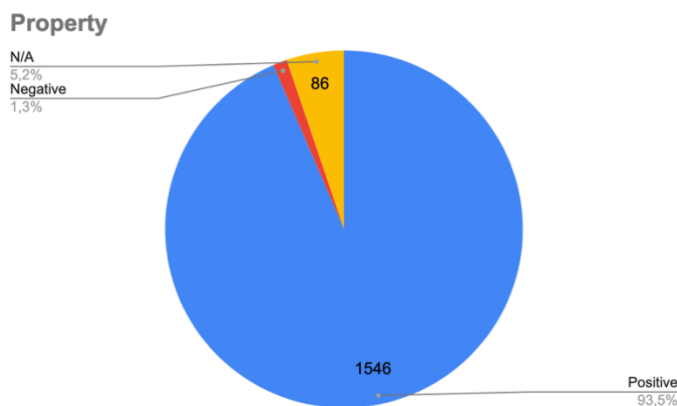


Figure 14 Property satisfaction from the review analysis. Source: Own elaboration.

We have analysed different aspect of the Airbnb Properties in Calvía and Andratx, but what the guest says in general terms about the house?

As we can see in the Figure 14 in blue colour, the 93.5% of the reviews has positive comments. The negative review represents only the 1,3% of the total, and the N/A are reviews that the guests during their holidays had any kind of problems with some aspects and positive in other been neutrals.

With that high percentage of positive reviews, we can conclude that in general terms, the guests are satisfied with the properties that they had rented. The guest who had a bad experience with the property are very low, only 1.3%. This percentage could be even lower following some advice.

5.2.7. Conclusion

Global property analysis

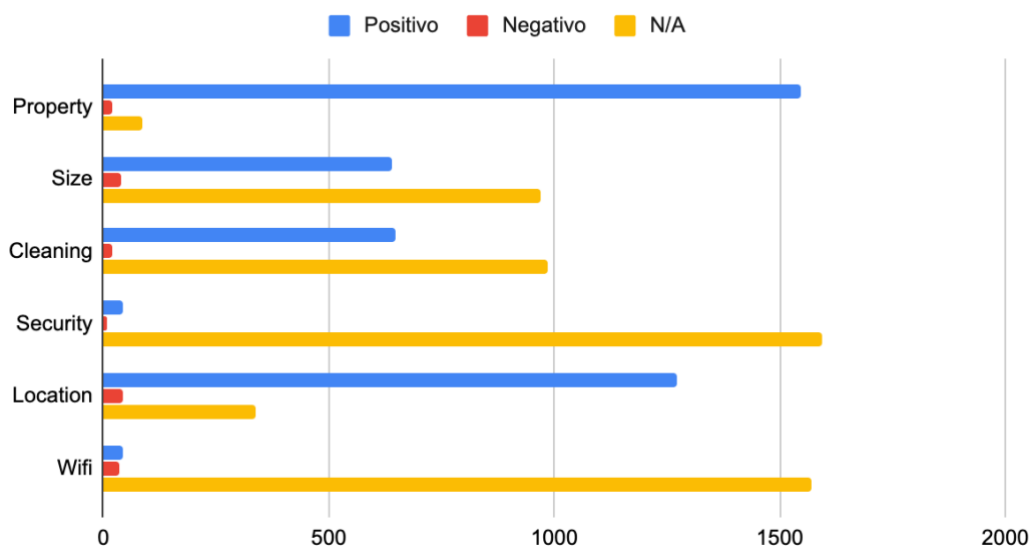


Figure 15 Global property analysis. Source: Own elaboration.

After analysed this 6 different properties aspect, we see that in all of them are more positive reviews than negative, and the N/A are high in almost all of them. With this information we can conclude that in general terms the guest is satisfied with the properties that they had rented in Calvía or Andratx.

We see in the Figure 15 the most frequent topics are: Size follows very close by Cleaning and the most frequent is the location mention in more than 1300 reviews.

The size and the location and the Wi-Fi are the topics with more negative reviews, but as we said before in all of them are more positive reviews than negative being the location that have more negative reviews (2.6%).

The not answer are very high in all the topics expect location with only a 20.3% in the other side is secured with a 96.7% and Wi-Fi with 95.2%, something that we expect.

Even with this good result, if the property owner follows some advice, as we give into the owner perception before, the guest satisfaction could be higher that is translated to positive reviews.

In location and Size, as we said before, is something difficult to change, but with a clear explanation, helped by professional pictures will avoid misunderstandings.

Talking about cleaning we recommend inspecting carefully all the property, in order to guaranty that the property is in perfect conditions for the guest.

Cleaning, Security and Wi-Fi are some aspect easy to change and will avoid negative reviews. Before doing the check-in, we recommend to check everything, close well all the doors and windows. Etc. The Wi-Fi is something really important nowadays and is the easiest aspect to change and avoid one of the most negative topics.

For that reason, if the guest says any kind of problem, we recommend to talk to the provider to have a solution. Other recommendations have been to write the name and password of the Wi-Fi in different places to guaranty that the guest knows who to connect.

During the check-in the host should help the guest in any kind of way, explain everything and where they can find the essential utilities. That would increase not only the property satisfaction, as well the host attention satisfaction.

The last and best recommendation to increase the satisfaction is to talk with the guest and read all the reviews that they write in Airbnb in order to know how the experience it was and improve the negative aspect that they mention in the reviews.

5.3. Comment Analysis

Now we are going to see and analyse 8 different sentences of reviews, in order to see exactly what the guest says. We select 4 positive and other 4 negative sentences from the reviews.

POSITIVE REVIEWS

Xisco is a very friendly and helpful host. *Guest review on Airbnb (2016). Source: Inside Airbnb (2016)*

Thank you Memes, for sharing your beautiful home. *Guest review on Airbnb (2016). Source: Inside Airbnb (2016)*

I honestly can't say anything bad about this villa. *Guest review on Airbnb (2016). Source: Inside Airbnb (2016)*

I would definitely come back again... *Guest review on Airbnb (2016). Source: Inside Airbnb (2016)*

We have here 4 different sentences that represent the positive reviews. In the two first sentence, the guest had mentioned the host. In both sentences they write something positive about them, we have seen that is very common that the guest had mentioned a friendly and helpful attitude. As we have said before, a lot of guest mention the host to thank them, as we see in the second sentence. The third sentence summarise what we have seen in the property analysis mention the good condition of the properties. The last sentence is the perfect representation of a happy guest, that had a good experience and would like to repeat again.

NEGATIVE REVIEWS

The flat is really noisy (yelling and loud parties till 4am). *Guest review on Airbnb (2016). Source: Inside Airbnb (2016)*

The problem I had was no safe & the patio doors onto the balcony didn't lock properly. *Guest review on Airbnb (2016). Source: Inside Airbnb (2016)*

The bed is a little bit uncomfortable, so we put it on the floor. *Guest review on Airbnb (2016). Source: Inside Airbnb (2016)*

Occasionally the electrics tripped out when we had more than one electrical item on at a time. Overall we had a pleasant stay in Javi's apartment and would recommend it to others as a nice place to stay in Santa Ponsa. *Guest review on Airbnb (2016). Source: Inside Airbnb (2016)*

We have been seeing in the analysis before that there is not many negative comments in the different aspect. Here we have a selection of 4 sentences that represent the most common problems that the guest has mentioned in their reviews. The location of the property in a noisy neighbourhoods is one of the most common problems, in the first sentence we can see an example of that problem. Moving to the second sentence, is related to the security problem, as we had seen before, in some reviews the guest has mention a problem with doors or windows. There are many comments says that the bed was uncomfortable, as we can see in the third sentence that they have to put it on the floor. That is something easy to change and will avoid a lot of negative reviews. The last sentence represents that reviews that had had a problem during the stay, as we see that they had an electrical problem, but after all the guests still happy with the accommodation, mention the host and recommended to other people.

5.4. Overall satisfaction

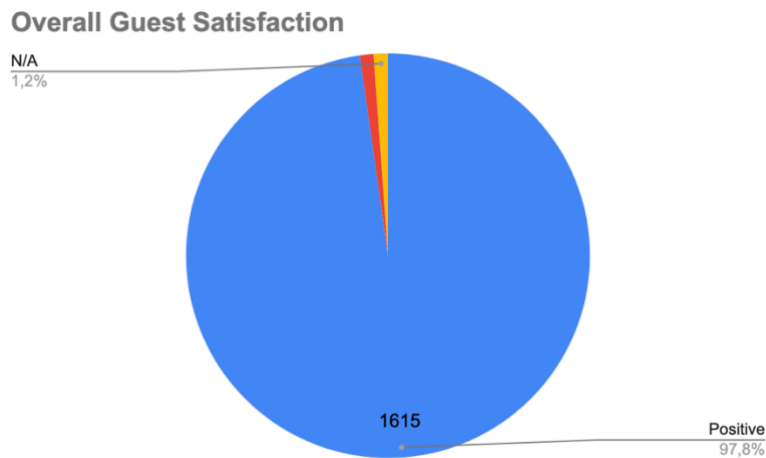


Figure 16 Overall satisfaction from the review analysis. Source: Own elaboration

The last point of the analysis of the Airbnb reviews from Calvía and Andraxt is to know what the overall guest satisfaction. The reviews that they had write are positive, negative o neutral? As we can see in the pie chart 16 in blue colour, 97.8% of the reviews are positive. In yellow the N/A, that work as neutral opinions represent a 1.2% and the negative are only 1.1% of the total. With this information we can conclude that of the guest who had stayed in an Airbnb house are satisfied and had had a good experience during their stay. Always will be a negative review, because it is nearly impossible to have 0%. Always will be some problems out of the owner control that will produce some unsatisfied experience.

5.5. Conclusion

Global Overview

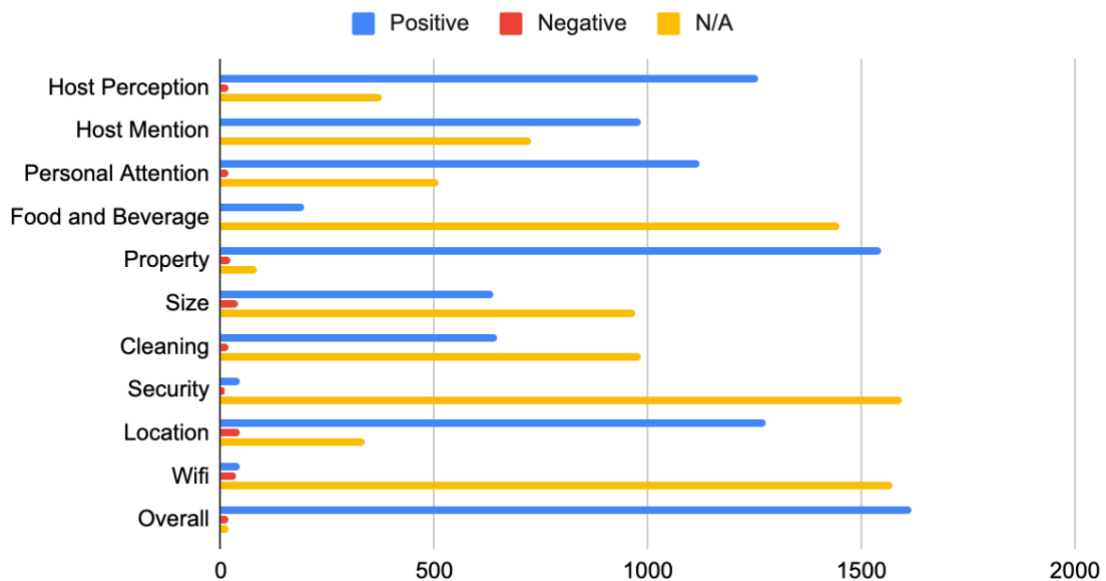


Figure 17 Global overview from the review analysis. Source: Own elaboration

After reading the 1652 reviews, and analyses if the 11 different aspects regarding, general data, Owner and Property perception and overall satisfaction we have achieved some conclusions.

Airbnb is an us full tool to rent the house not only for national tourist, as well for international tourists, as we have seen the use of many different languages in the reviews. From that combination of culture and diversity we have seen that in general terms the guest has a positive experience in the different point that we have analysed.

As we can see in the Figure 17, the host has and important positive influence during the stay, and the guest mentions that personal attention in the reviews. From the host analysis the negative point is the scare use of food and beverage as a tool to surprise the guest. We have seen before that exist an important positive relation using that detail in the overall satisfaction. The use of a welcome package with some local product will increase the positive reviews.

The property perception that we have read in the reviews are as well positive. In all the different points that we have analyse have more positive than negative aspect. The location of the apartment is the most frequent topic in the reviews and also which have more negative reviews. The security and the Wi-Fi give as the surprise, having more positive than negative reviews. They are some aspect that at the beginning, we thought that will we or N/A or negative but not positive review.

After reading and analyse 1652 reviews and as we see in the Graph, the overall guest satisfaction is positive. The people who had used that platform had had a

good experience, with some of them that would like to repeat. The negative reviews are minimal comparing the amount of reviews, only 18. And who had a neutral experience are as well minimum with only 19 reviews. After the analysis we can conclude that the guest who had used Airbnb in Calvía or Andratx during 2016 had a happy and positive experience.

6. AIRBNB VS. HOTELS

The use of a rental house for spending some holidays is not something new, but the use of the Customer to Customer channels (C2C) as Airbnb, have helped to increase the use of that type of accommodation against the traditional one. We have been seeing from the review analysis that the guest from Airbnb have a high positive perception, concluding with a high guest satisfaction. But how affects Airbnb in the areas as Calvía and Andratx?

The second section of this investigation is a comparison between Airbnb accommodations and Hotels in Andratx and Calvía areas. We are going to analyse three different aspects: Location, Price and Satisfaction score.

6.1. Location

The first point we are going to compare is the location of the Airbnb properties with the hotels. We take the coordinates from the 371 Airbnb house and 353 Hotels of Calvía and Andratx Area. From that information we had created some maps in google maps to analyse this date.



Picture 2 Airbnb and Hotels Calvía and Andratx map. Source: Own elaboration from Google Maps.



Picture 3 Airbnb in Calvià and Andratx map. Source: Own elaboration from Google Maps
 Picture 4 Hotels in Calvià and Andratx map. Source: Own elaboration from Google Maps

In the picture 2 we can see the distribution of the hotels and the Airbnb house in Calvià and Andratx. We can see that the location all most the same, been both types focused in the coastline of the different villages.

Compering the Picture 3 between Picture 4, we can see that Airbnb are more spreader than the hotels, having more properties inside the island. However, the hotels and the Airbnb house follows are focus in the same areas, increasing the tourism massification, especially in Santa Ponsa, Magaluf and Palma Nova, areas that had been declared as mature zone in 2014.

Comparing the location in Andratx, we see that is different, as well are both type focus in the Port the Andratx, but also Airbnb are in location that there are not many hotels.

6.2. Price

The second point of this comparison is about price. The people think that Airbnb use is a cheap option, it is this right? What hotel category has a similar price? At this point we want to answer these questions.

We take the date for the hotel price in 2017 from Spaininfo. From this information we select a sample of 92 hotels in Calvià and Andratx. The database gives us the official minimum and maximum price, as we can see in the two first columns of the Table 2. The prices of the hotel's rooms use to fluctuate constantly. In order to have a precise number and only one price to compare, we made an average between the maximum and the minimum hotels price, as we can see in the third column of the table.

We select the price of the Airbnb properties from the same date base that we have been using in all the analysis, Insideairbnb. As we can see in orange colour on the Table 2, we made and average price from 371 different properties

of Calvía and Andraxt. For the minimum and maximum prices, we select the lowest and the high price of the list.

In a rental house, normally use to be space for more that 2 people on the other side, the hotel rooms use to be double. For that reason and in order to be more precise we made and average price per person, as you see in the five columns, we suppose that the average nº of guest in the hotel rooms are 2, and we made the average nº of the guest that the properties in Calvía and Andratx has; 4,88.

Category	Average of Min. Price	Average of Max. Price	Average of Min. and Max. Price	P.P.P.
1* star	32,50€	51,50€	42,00€	21,00 €
2* stars	73,85€	121,05€	97,45€	48,73 €
3* stars	86,46€	130,47€	108,47€	54,23 €
4* stars	115,53€	266,24€	190,89€	95,44 €
5* stars	180,00€	230,00€	205,00€	102,50 €
5* stars luxury	400,00€	2.100,00€	1.250,00€	625,00 €
Airbnb	18,00€	4.285,00€	187,48€	38,42 €
Total amount	129,48 €	1.026,32 €	297,33 €	140,76 €

Table 2 Average Price of Airbnb and Hotels in Calvía and Andraxt in 2017. Source: Insideairbnb 15/03/2017 and Spaininfo 03/02/2017

When we are looking for any accommodation, one of the critical aspect is the price. As we can see in the table 2, the average price of Airbnb is similar to 4* and 5* stars hotels, we can say that the average price of Airbnb is quite high, and really close to the hotel, that are considered as high standard accommodations.

If we use the price per person (P.P.P.) we can see and important cut price in Airbnb, the price change from 187,48€ to 38,42€. That is because the house could be share with more people than a hotel room. The P.P.P. of Airbnb is between 1* and 2* hotels, considering this types of accommodation as cheap.

If we compare the minimum and the maximum average price, In Airbnb we can appreciate a big difference between the minimum (18€), that is half of the minimum hotel average price, and the maximum (4.285€) price that is twice the average highest hotel average price. That differentiations could explain by the big diversity of properties that are offered in the Airbnb platform. We can find a single room house or castle that can host 16 guests, creating a wide range of price.

Now we can answer the first question that we have made before and say that if the average price in Airbnb is not cheap, however, if we use the price per person, Airbnb becomes a cheap option compare to hotels.

6.3. Satisfaction Score

The last point is a comparison between the Airbnb score satisfaction and the hotel score satisfaction. We have the average score of the valuation that the

guest had lived in the 371 Airbnb properties and in 92 hotels in Booking.com after their stay.

As we have seen in the first part of this paper, we already know that the guest satisfaction of the Airbnb users is really high in almost all the different aspects that we have analysed. In the Figure nº 18, we can see the valuation of the guest in 7 different points: Value, Location, Communication, Check-in, Cleanliness, Accuracy and Overall satisfaction.

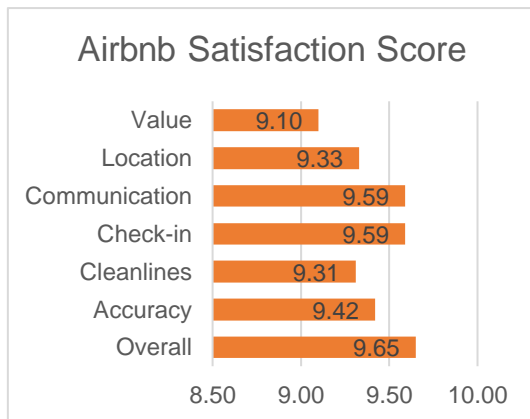


Figure 18 2016 Airbnb satisfaction score in Calvía and Andratx. Source: Insideairbnb, 15/03/2017

Analysing this table, the first thing that we can observe is that all the values are higher than 9, being the 10 the maximum score. This evaluation confirms what we have seen in the review's analysis.

The lowest point of these 7 aspects is the value, with a 9,10. This point measures the relation between quality and price. As we have seen in the point before, the average price of Airbnb is quite high, similar to 4* and 5* star hotels, that relation will explain why at the lowest point is, what as well have a

really high score.

Location, Cleanliness and Accuracy have similar values, between 9,31 and 9,42. That valuation agrees on what we have analysed in the first point.

The highest value is the Overall, with 9,65. As we had seen the guest who had used an Airbnb in Calvía or Andratx during 2016 were satisfied with their selection, having a really good experience.



Figure 19 16 2016 Hotel satisfaction score in Calvía and Andratx. Source: Spaininfo, 03/02/2017

The figure 19 shows as the score satisfaction of 8 different aspects of the hotel in Calvía and Andratx. We can see that all this except one have a rate between 7,8 and 8,61 over 10. In average have a good score.

The lowest point is the Wi-Fi with only 5,86, having a significant differentiation with the others.

Overall satisfaction, comfort and Hotel are below 8. Attract the attention that the Overall satisfaction has a score below 8,

could be because of the low value of the Wi-Fi that reduce the guest satisfaction.

The highest score points are: Value, Location and Personal. All these are above 8, been Location the highest aspect with a score of 8,61. That 3 points are what the guest appreciate most after their stay.

After analysing each accommodation type, we are going to compare between each other.

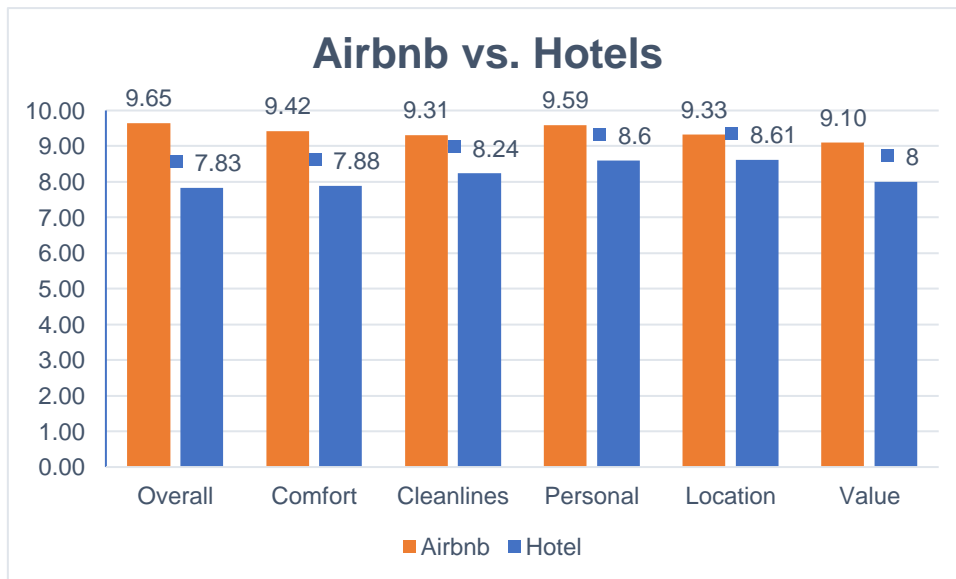


Figure 20 Comparison between Airbnb and hotel satisfaction score in 2016. Source: Spaininfo, 03/02/2017, Insideairbnb, 15/03/2017

The Figure 20 shows us the comparison of 6 different aspects of the Airbnb and hotel accommodation. As we had seen before, the Airbnb score is highest in all of the 6 different points. The hotel score is as well high, but not as Airbnb. One of the principal points that show the table is in the overall score, because for Airbnb is the highest score but for the hotels is the lowest. That could be because of the low value of the WI - fee that the hotel has.

The value of the hotel is more than 1 point less that Airbnb. As we had seen in the price cooperation, Airbnb have a higher average price, but the guest perceives better exchange between quality and price that the hotels. That could be because the big average range of price that Airbnb has.

Both of them have a high average score in Location, as we have seen before in this first point. Airbnb and hotels have similar location been more flexible for the rental house.

6.4. Conclusions

We have analysed and compare 3 of the most important aspects of Hotels and Airbnb properties.

We can conclude that the hotels and the Airbnb houses have a similar distribution, been focussed in the coastline, more specifically in Magaluf, Santa Ponsa and Palma nova, helping the massification of this areas that already are declared as mature zone. As well, the Airbnb houses have more flexibility in the distribution been more scattered around the area, as we have seen in Andratx.

The average price of Airbnb is in the middle of the table. But as we have seen in the comparison, the average price is similar to the 4* and 5* stars hotels, considering this category as expensive, we can say that Airbnb have a high average price compare to the hotel sector. But as we know the number of guests than can be in a house is bigger than the hotel rooms, we need to use the price per person. When we compare the P.P.P. everything changes, the average Airbnb P.P.P. is among the 1* tan 2* hotel category. This important reduction of the price makes Airbnb properties a really competitive type of accommodation and could be one of the main reasons of his success.

The last point of this compression is about what is the guest satisfaction perception. We see that in all the aspects, Airbnb is higher than hotels, with satisfying clients, something that march with the review analysis. This comparison calls my attention, because the hotels follow standards that are made to guarantee the guest satisfaction and the Airbnb owner do not have.

Airbnb have good location, good average range of price, cheap average price per person and high guest satisfaction. We can say that Airbnb beats the guest expectation and give a different experience that the guest really like. We conclude that Airbnb is better in all the aspects that we have compared, having similar location, the price per person is really cheap, and the guest satisfaction is higher that the hotels. That comparison could explain the fast growing of this kind of accommodation in Mallorca.

As well, this comparison shows us that Airbnb are focused in areas that already are massif but as we see, Airbnb give to the tourist a different experience that could be used to break the seasonality that Calvía and Andraxt suffer.

7. CONCLUSION

As we had seen in the review, analysis from Airbnb in Calvía and Andraxt, the guest satisfaction is really high in almost all the 17 different aspects that we had seen. In some of them, like food or beverage, cleanliness, security or WI-Fi could be better if the owners follow the recommendation that we have said before. In their reviews they talk very well about their host and the property, making a 97.8% overall positive perception. We can conclude that in general terms the guest who had used Airbnb had had a happy stay and good experience.

The comparison between the hotels and the Airbnb properties give us important information. Both of the have similar location, being focus in the cost line. But Airbnb have the advantage that could be in places that hotels cannot. However, we have seen that Airbnb increase the pressure in area that already are massify by hotels, as Magaluf. The price of Airbnb is really high, but as we have seen before, the price per person is low, making the properties cheap and with a positive value perception. As well the range is big, offering different price that could adapt to the guest needs. In the Figure 20, we have been seeing that the guest satisfaction as well is better than the hotels in all the categories. These comparison could explain the fast growth of Airbnb in Calvía and Andraxt.

In my opinion, Airbnb have a lot of advantages that give the possibility to offer some experience that for a hotel is more complicated. As well, I believe that this high perception is because a combination of a really high personal attention, good price, the possibility to feel like a resident and go to the same place, but for me, the main point is the low expectation that the guest has before the stay. In many reviews they feel surprise about what they found, giving a positive guest satisfaction. I think that Airbnb could be a good tool to break the seasonality and increase the tourism in areas that is not developed, but as we have seen they are focused in the same village as the hotels, where are a strong massification and increase the pressure that reduce the destination value. For that reason, I think that Airbnb is going to be an important part of the future of Calvía and Andraxt changing the accommodation sector and creating new value for the visitor, but in order to become a successful tool, it will need a proper law regulation, but this is another topic.

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