

# Marketing Analytics Case Study: Hotel Catalonia Barcelona Plaza

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1. Executive summary 1.1. Company background information Hotel Catalonia Barcelona Plaza is ideally located in Plaza España. The hotel provides optimum comfort to its customers with newly renovated magnificent rooms and stunning views. In order to meet the various demands of its customers, it has complete facilities for fitting, business, and leisure purposes. Notably, it has an outdoor swimming pool on its terrace and gymnasium for those who wish to stay in shape. Additionally, the hotel has 11 meeting rooms for business meetings and corporate events on its premise. In terms of food and feast, customers are able to enjoy the impeccable food and services offered by its two restaurants: a café and a garden marquee for parties and celebrations.

## 1.2. Assumptions and tasks

This report is based on the hotel's data from 2015 to 2017, aiming to explore its business potential and improvements without the influence of the COVID-19 pandemic. In order to achieve this, a comprehensive analysis is conducted to understand the consumers of this hotel and investigate the profiles of existing target audience (TA). Thereafter, the performance of the hotel is evaluated from different aspects, including strategic positioning compared with main competitors. A review analysis utilizing sentiment data and topic modelling is also discussed in this report. Finally, feasible recommendations are proposed from both, strategic and tactical levels to help Catalonia Barcelona Plaza bolster its established status and develop into new markets.

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couples, and getaway families, amongst which business people and couples have made the largest contributions. Taking into account of the communication messages delivered specifically to business people on the official website, the target consumers of the client hotel can be defined as follows: corporate road warriors as the core audience, family getaway-oriented travelers as halo audience 1, and romantic trip-oriented couples as halo audience 2.

The client hotel and its main rivals each have their own niche in the hotel industry, thus creating a delicate equilibrium. However, in order to increase its market share, the client hotel may target a profitable and prospective market segment, namely solo tourists, without significantly disrupting the equilibrium.

Reviews have revealed a slight rise in customer dissatisfaction with the client hotel over the past three years. The customers are mainly dissatisfied with the facilities and environment in the rooms, bathrooms, bar, breakfast, and staff services; however, many are pleased with the client hotel’s location and view.

### 1.4. Recommendations

- (1) Develop varying strategies for four different consumer segments.
- (2) Improve the quality of offerings and provide personalized services.

## 2. Consumer understanding

Figure 1 shows that the client hotel often receives reservations from 2 adults, followed by 1 adult, and 3–4 adults or above. In terms of nationality, tourists from France, Germany, and Britain account for the top three reservations out of all nations (Figure 2).

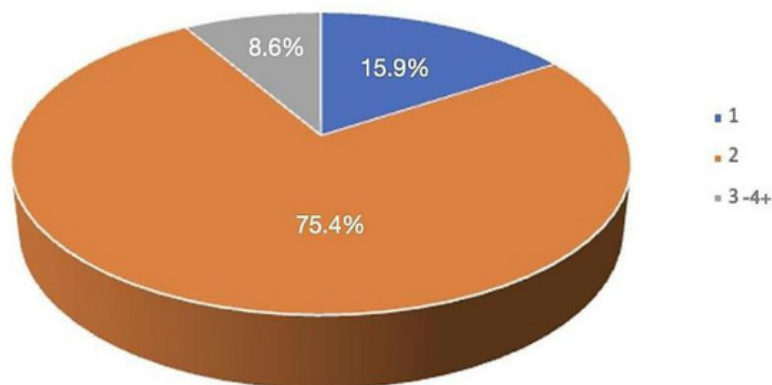


Figure 1. Proportion of reservations by the number of adults

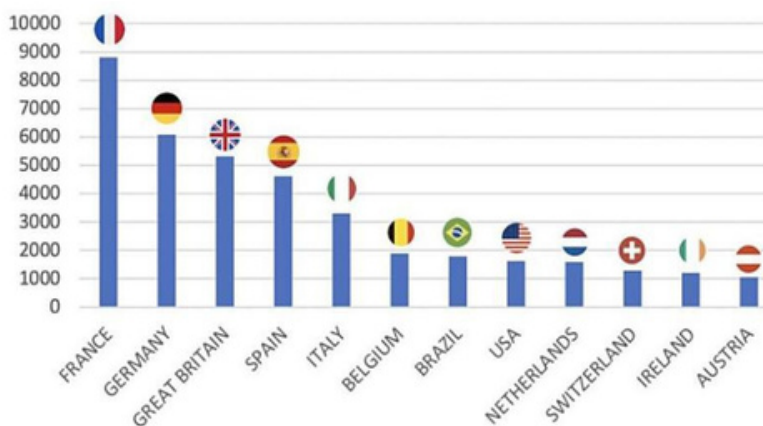


Figure 2. Number of reservations by country of origin

By classifying the guests by the number of adults who made reservations and checked in, there are three categories as shown in Figure 3: category one (1 adult); category two (2 adults), and category three (2–4+ adults). These three categories can be further subdivided based on the number of children and babies each booking relates to. For instance, category one (1 adult) can be divided into “1 adult with 0 children or babies” or “1 adult with 1–2 children.” To be precise, they are two groups: “business people” and “one parent with children or babies.” In terms of their contributions to the client hotel, the aforementioned “business people” contributed 15.4% of the total reservations from 2015 to 2017, whereas the reservations made by “one parent with children or babies above” were 0.5% of the total.


Customer Segmentation 			
1 adult	0 children or babies	business people	15.4% ★
	1–2+ children or babies	one parent with children or babies	0.5%
2 adults	0 children or babies	couples	67.4% ★
		business people with colleagues	
	1–2+ children or babies	getaway families	↑ 8.0%
3~4+ adults	0 children or babies	business people with multiple colleagues	8.4%
	1–2+ children or babies	getaway families	↑ 0.20%

Figure 3. Customer segmentation

### Insights

Therefore, the consumer segments that the client hotel have served in the past three years mainly consist of business people, couples, and getaway families, amongst which business people and couples have made the largest contributions. Taking into account of the communication messages seen on the official website of the hotel, their focus is on business aspects to attract business people, as shown in Figure 4. Hence, the existing target audiences of the client hotel can be defined as follows: corporate road warriors or business people as the core audience, followed by family getaway-oriented travelers and romantic trip-oriented couples as the two types of halo audiences (Figure 5).

### WHY GO?

This imposing hotel Catalonia Barcelona Plaza is situated in Plaza España, next to the Fira de Barcelona facilities and Montjuic. It has 347 rooms and the guests can enjoy excellent connections with every means of public transport. It has its own parking facilities and offers ideal accommodation for business trips or short breaks. The panoramic terrace and most of the rooms have unbeatable views. The gardened marquee which is located in the central courtyard creates an ideal atmosphere for cocktails and dinner parties. We also offer you our 11 meeting rooms, where you can organise business meetings, conventions and family celebrations and free wifi. The hotel has 2 restaurants: Filigrana, specializing in market cuisine and grilled; and the Japanese restaurant Kurai. It also has a cafeteria, the Gourmet Corner, with a daily menu; 11 meeting rooms, free Wi-Fi, a car park in the building and excellent connections with all public transport. Hotel Barcelona-003967

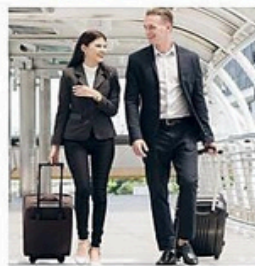
Figure 4. Communication messages on the official website that focus on attracting business people



Figure 5. Existing target audiences of the client hotel

Accordingly, the representative of each target audience can be defined (Figure 6). Kévin, from France, represents corporate road warriors, the Schmidt family from Germany represents family getaway-oriented travelers, and Lily and Jack, from Britain, represent romantic trip-oriented couples.

### Corporate road warriors



Kévin

Geographic Characteristics	French	
Psychographic Characteristics	<ul style="list-style-type: none"> <li>• Personality: positive, proactive, adaptive and willing to embrace challenges</li> <li>• Personality: positive, proactive, adaptable and willing to embrace challenges</li> <li>• Lifestyle &amp; Value: quality concerned; less price-sensitive; prefer to "chill" after working hours; focus on self-improvement</li> </ul>	
Demographic Characteristics	<ul style="list-style-type: none"> <li>• Age: 30 years old</li> <li>• Occupation: international trade</li> <li>• Income: generally well-paid</li> <li>• Education: MBA</li> <li>• Family and household: single</li> </ul>	

### Family getaway-oriented travellers



The Schmidt's

Geographic Characteristics	German	
Psychographic Characteristics	<ul style="list-style-type: none"> <li>• Personality: family and children come first</li> <li>• Lifestyle and value: keen on comfortable experience and value family togetherness</li> </ul>	
Demographic Characteristics	<ul style="list-style-type: none"> <li>• Age: 35 years old</li> <li>• Occupation: white collar</li> <li>• Income: generally well-paid</li> <li>• Family and household: 2 children (10 months and 3 years old)</li> </ul>	

### Romantic trip-oriented couples



Lily and Jack

Geographic Characteristics	British	
Psychographic Characteristics	<ul style="list-style-type: none"> <li>• Personality: caring and sweet to each other</li> <li>• Lifestyle and value: dress well and keen on fashion; not keen on travelling but rather spending time together in the hotel, expecting to celebrate their one-year anniversary</li> </ul>	
Demographic Characteristics	<ul style="list-style-type: none"> <li>• Age: 25 years old</li> <li>• Occupation: 3-year working experience</li> <li>• Income: not well-off but spend generously on this romantic trip</li> <li>• Education: bachelors</li> <li>• Family and household: a year into this romantic relationship</li> </ul>	

Figure 6. Profiles of representative target audiences

3. Performance evaluation

In this section, the performance of the client hotel is evaluated, focusing on two key factors: strategic positioning assisted by competitive profile matrix, and its customer reviews investigated by sentiment analysis and topic modelling.

Insights

- (1) The client hotel and its primary competitors each have their own niche position in the hotel industry, thus creating a delicate equilibrium. However, in order to grow its market share, the client hotel may develop a profitable and promising market segment, namely solo travelers, without disturbing the equilibrium to a large extent.
- (2) There has been a slight increase in customer dissatisfaction with the client hotel, as reflected in reviews over the past three years. The customers are dissatisfied with the facilities and environment in the rooms, bathrooms, and bar, staff services, as well as the breakfast provided; however, many are pleased with the staff, location, and view of the client hotel.

[1] As a renowned destination for visitors with leisure purposes and the world’s top city for workcations , Barcelona is packed with hotels, in which fierce competitions exist between them. As shown in Figure 7 [2], among all the cities around the globe, Barcelona ranks 13th in the ranking of “Cities with the Most Hotels.” Consequently, in order to distinguish themselves from these hotels, a solid positioning strategy would be crucial to delivering precise messages to the right consumer segments and ultimately providing a return on investment [3].



Figure 7. Ranking of cities with the most hotels

Having gathered information from the client hotel’s official website, a complete picture of its positioning is illustrated in Figure 8. It claims to be an ideal accommodation for business trips and short breaks, and it emphasizes a high price-facility ratio to target primarily corporate road warriors.



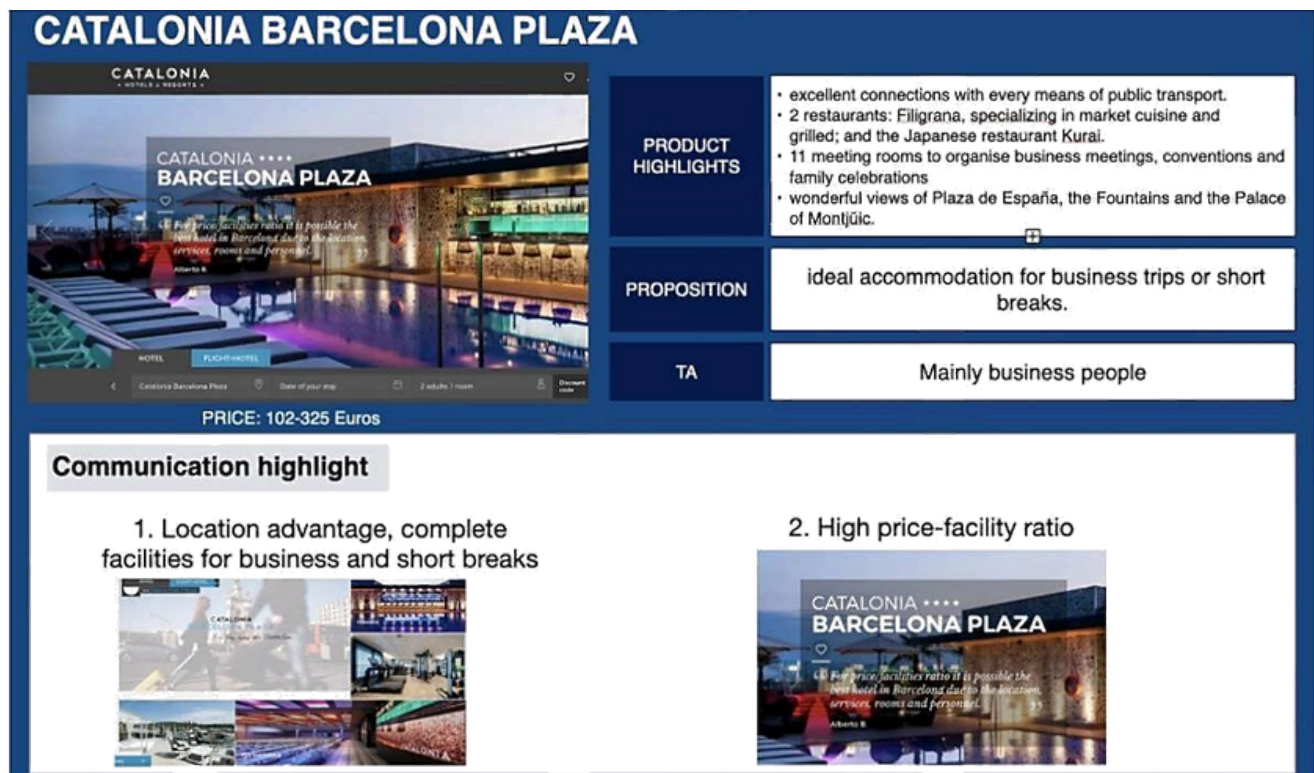


Figure 8. Details of the client hotel (offerings, TA, communication highlights)

Based on the location of the client hotel on Google Maps, the hotel cluster surrounding Catalonia Square, which is the heart and center of Barcelona, could be identified. Eight hotels in this cluster are marked by blue locators in Figure 9.

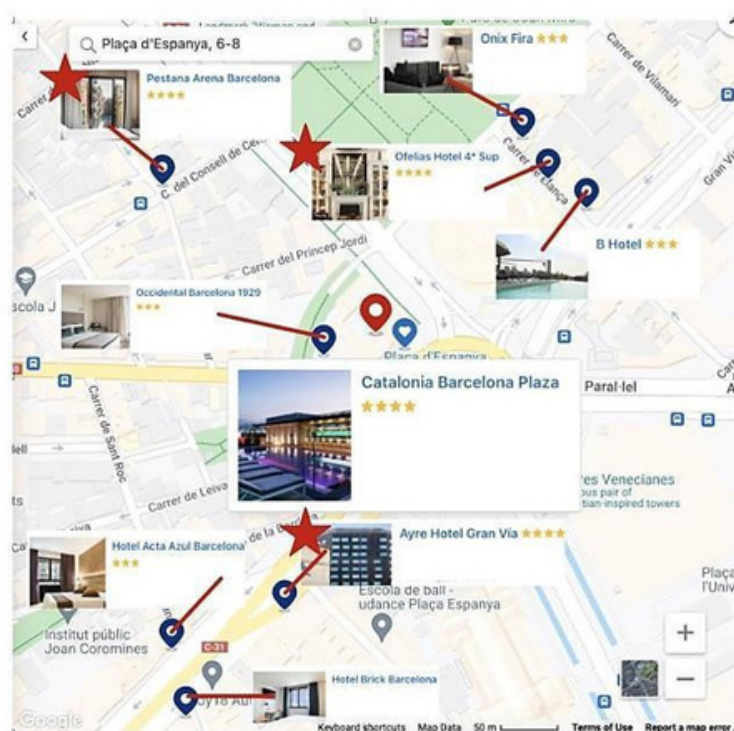


Figure 9. Hotel cluster around Catalonia Square on Google Maps

In order to determine the client hotel's main competitors, the competitive profile matrix is employed. This matrix, as shown in Figure 10, is used to further determine the main competitors of the client hotel, thus narrowing down the company's main rivals and comparing them based on the industry's key competitive criteria [4]. This may help the client hotel better understand its external environment and its competitors [5]. The intuition of this matrix is to first define the possible criteria, and then assign each dimension a weighting and rate the hotels according to their actual competitiveness. By filtering and gathering average review ratings and the total number of received reviews from the given data (Figure 11), the 8 hotels can be compared to the client hotel in the matrix. Taking Ayre Hotel Gran Via as an example, the hotel may receive 1 in the first dimension ("star rating compared with us") since it has the same star rating as the client hotel. In terms of review rating, it is comparable to the client hotel; hence, it is given 1 as well in the dimension "review rating compared with us." Likewise, the dimensions of "proximity to us" and "popularity compared with us" can be scored. From the results, it is clear that Ayre Hotel Gran Via, Pestana Arena Barcelona, and Ofelias Hotel 4 indicated by red stars in Figure 9.

Criteria	Weight	Ayre Hotel Gran Via ★★★★★	Occidental Barcelona 1929 ★★★	Pestana Arena Barcelona ★★★★★	Ofelias Hotel 4* Sup ★★★★★	Onix Fira ★★★	B Hotel ★★★	Hotel Acta Azul Barcelona ★★★	Hotel Brick Barcelona
Star Rating Compared with us	0.40	1	0	1	1	0	0	0	0
Review Rating Compared with us	0.25	1	1	1	1	0	1	0	1
Proximity to us	0.20	0	1	0	0	0	0	0	0
Popularity Compared with us	0.15	1	0	0	0	0	0	0	0
Total Score	1.00	0.80	0.45	0.65	0.65	0.00	0.25	0.00	0.25

Figure 10. Competitive profile matrix

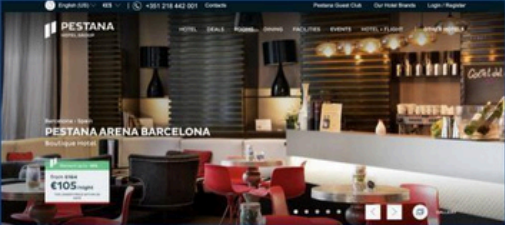
hotel name	average review rating	total number of reviews received (popularity)
Ayre Hotel Gran V a	8.8	6883
Occidental Barcelona 1929	9.3	1015
Prestana Arena Barcelona	8.5	1252
Ofelias Hotel 4 Sup	8.6	729
Onix Fira	7.8	1951
B Hotel	8.7	1773
Hotel Acta Azul Barcelona	8.1	2110
Hotel Brick barcelona	9	1348
Catalonia Barcelona Plaza	8.6	2969

Figure 11. Average review rating and total number of reviews received

Similarly, the profiles of the aforementioned main competitors are analyzed below.

- (1) Pestana Arena Barcelona: a boutique hotel in the center of Barcelona that caters to travelers who are concern about the price-value ratio.

## PESTANA ARENA BARCELONA



PRICE: 70-133 Euros

**PRODUCT HIGHLIGHTS**

- gym, sauna and Turkish bath
- meals at the Lorenzo restaurant and bar
- terrace during the summer
- huge LCD TV

**PROPOSITION**


A BOUTIQUE HOTEL IN THE CENTER OF BARCELONA

**TA**


Travellers who concern price-value ratio

**Communication highlight**

1. Awards and certifications




TRIPADVISOR  
Travellers' Choice 2021

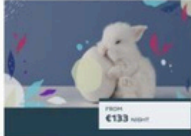


BARCELONA HOTELS ASSOCIATION  
Official Member


2. Promotions to get discounts



SPRING PROMOTION  
Up to 25% off!  
Book yourself a special stay this Spring!



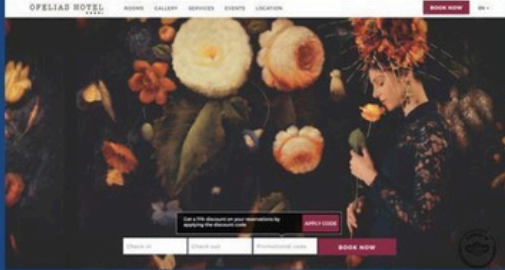
EASTER OFFER  
Because family holidays are sweeter!  
Take advantage of the Easter Offer and celebrate life with joy!



SUMMER OFFER  
Book your summer stay with 25% off!  
While you focus on your holiday, we'll take care of your comfort.

- (2) Ofelias Hotel: a hotel that provides a harmonious stay in an environment dominated by beauty and sensuality, serving solo travelers who expect to enjoy individual hours.

## OFELIAS HOTEL



PRICE: 173-371 Euros

**PRODUCT HIGHLIGHTS**

- Solarium-swimming pool
- Chill out area
- Massage service in room
- Smoke free hotel
- Solar panels: a large part of the hotel's energy is renewable
- Outsourced restauration service
- Rooms for holding any personal or corporate event

**PROPOSITION**


a harmonious stay in an environment dominated by sensuality and beauty.

**TA**

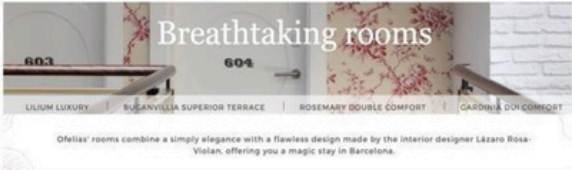
Solo travellers who want to enjoy "ME" time

**Communication highlight**

1. Enjoy individual moments



2. Dominated by breathtaking sensuality and beauty





# AYRE HOTEL GRAN VÍA BARCELONA

AYRE HOTELS

HOTELS & DESTINATIONS

OFFERS

MEETINGS & EVENTS

HOTEL

ROOMS

SERVICES

## AYRE HOTEL GRAN VÍA BARCELONA

PRICE: 165-356 Euros

PRODUCT HIGHLIGHTS

- Location advantage: very close to the Barcelona's Exhibition Centre, Fira de Barcelona
- 3 meeting rooms that can accommodate both corporate events and private parties.
- taste authentic signature cuisine in a relaxed and peaceful environment, with an exquisite and personalized treatment.

PROPOSITION


The ideal accommodation for business people, families and young couples.

TA

Mainly business people, and then families and young couples


### Communication highlight

- Sites and activities designed for business people



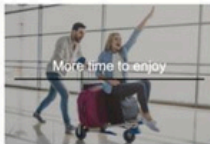
**BUSINESS CENTER**

We know how important it is to be able to make progress with your work when you are away from home. Ayre Hotel Gran Vía has everything you need.




**BAR**

After a long day, enjoy a pleasant after-work drink in our cafeteria cum bar. Relax and savor delicious and refreshing cocktails: Bloody Mary, Manhattan, Mojito, Caipirinha, Daiquiri, Pilsa Colada, Margarita... Disconnect from the urban frenzy and feel the incomparable nature of Barcelona!
- Welcome different groups of people with various demands



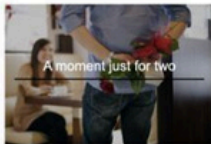
More time to enjoy

LONG WEEKEND



Up to 20% off!

ADVANCE BOOKING



A moment just for two

ROMANTIC GETAWAY

The diagram is a 2x2 matrix with the following axes and labels:

- Y-axis (Vertical):**
  - Top: Leisure purposes
  - Bottom: Business orientation
- X-axis (Horizontal):**
  - Left: High price-value ratio
  - Right: Luxury & Premium
- Quadrant Labels:**
  - Top-Left: Togetherness
  - Top-Right: Individual
  - Bottom-Left: Togetherness
  - Bottom-Right: Individual
- Hotel Positioning:**
  - PESTANA ARENA BARCELONA** (Top-Left, Togetherness): Red box, connected by a red line.
  - OFELIAS HOTEL** (Top-Right, Individual): Red box, connected by a red line.
  - CATALONIA BARCELONA PLAZA** (Bottom-Left, Togetherness): Blue box, connected by a blue line.
  - AYRE HOTEL GRAN VIA BARCELONA** (Bottom-Right, Individual): Blue box, connected by a blue line.

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The second part of performance evaluation employs sentiment analysis and topic modelling. Based on the given sentiment data of the client hotel, the yearly aggregate strength of reviews can be calculated by summing up the aggregate strength of positive and negative reviews per year (Figure 13).

year	review type	sum of positive sentiment strength	sum of negative sentiment strength	aggregate strength of posi/nega review
2015	positive review	466	-200	266
	negative review	220	-269	-49
2016	positive review	1359	-602	757
	negative review	747	-877	-130
2017	positive review	482	-226	256
	negative review	254	-288	-34
year		average sentiment strength of the year	aggregate sentiment strength of the year	number of reviews
2015		1.192	217	182
2016		1.142	627	549
2017		1.110	222	200

Figure 13. Sentiment strength analysis

The client hotel's performance can be evaluated by the changes in average sentiment strength over the past three years. Figure 14 shows a decline in the hotel's average sentiment strength from 2015 to 2017, indicating that the customers' affection for the client hotel as reflected in reviews is waning.

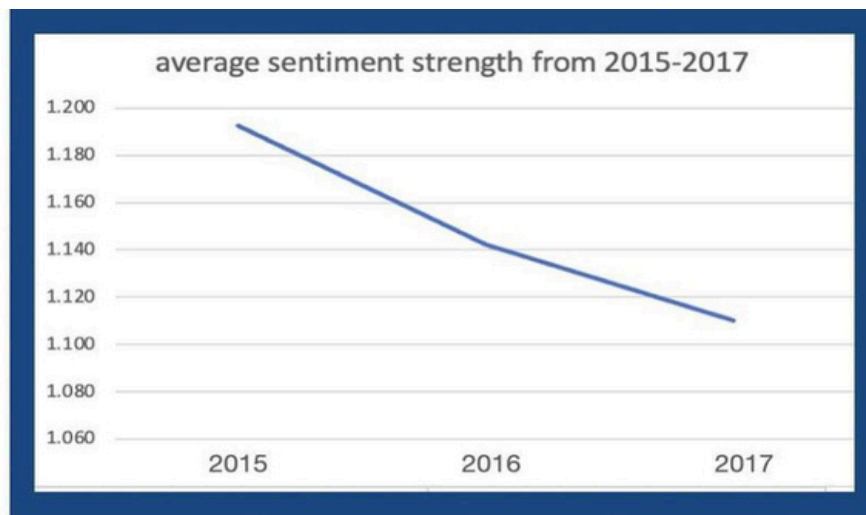


Figure 14. Average sentiment strength from 2015 to 2017

In this case, the client hotel should be more cautious about their offerings and deal with the dissatisfaction of customers as indicated in their reviews. By visualizing both, positive and negative reviews from topic modelling, word clouds are generated to show the prominent topics among customers. In terms of negative reviews, the most discussed topics among customers are room, bathroom, bar, breakfast, staff, reception, *etc.*, whereas in terms of positive reviews, guests tend to praise the staff, location, and view of the client hotel (Figure 15 and Figure 16).



Figure 15. Visualization of positive reviews on the client hotel via topic modelling



Figure 16. Visualization of negative reviews on the client hotel via topic modelling

4. Recommendations 4.1. Develop varying strategies for different segments Firstly, based on customer understanding, it is clear that the target audiences of the client hotel are mainly business people, followed by couples and families. According to strategic positioning analysis, there are blue oceans for the client hotel to explore, namely solo travelers. This market segment is anticipated to have significant business prospects. According to a survey by Klook in 2019 [7], 76% of the 21,000 people polled globally disclosed that they have traveled alone or are contemplating it. Furthermore, the data obtained from Google Trends have revealed that the number of people traveling alone has grown by 761.15% and many people are continuously seeking for solo travel opportunities. Therefore, the client hotel can consider developing this promising market for business expansion. Accordingly, different strategies for different target audiences are formulated.

On the tactical level, the client hotel can launch an integrated marketing campaign. This is a form of communication strategy that combines multiple channels to assure the consistency of messages delivered to the target audiences [8]. For instance, the message that the client hotel can impart is as follows: “We are

a hotel that welcomes all groups of people, and anyone may make themselves at home here, regardless of who they are.” This message can possibly resonate with potential consumers from the four expected target audiences, thus making them feel welcomed. Moreover, as shown in the visualization of positive reviews, the hotel’s location and view are among the most highly discussed topics. More specifically, they are the competitive advantages that should be emphasized in communications. This integrated marketing communications (IMC) campaign can highlight that fact that the hotel is a center-located hotel with spectacular views that is ideal for business trips, romantic dates, family holidays, or personal getaways.

After deciding on the planned message, it is necessary to DO and CONFIRM, as asserted by Cai and Hobson [9] in their integrated branding approach. This is a strategy that companies can employ to stand out in competition and develop long-term sustainable competitiveness (Figure 17).

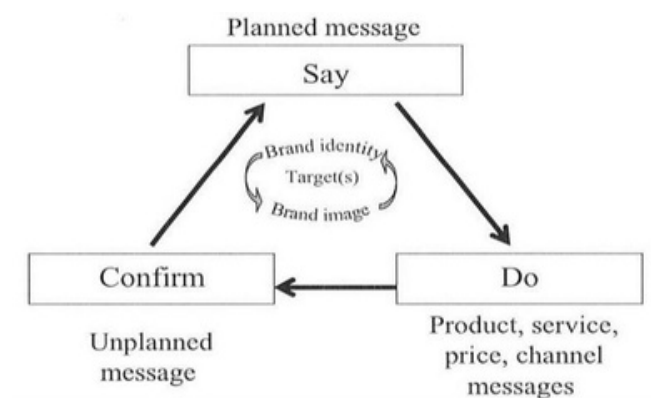


Figure 17. Concept of brand message integrity

Sequentially, in the DO and CONFIRM stages, the client hotel should follow the practical steps in Figure 18. Companies are expected to fulfill the promises in their planned message during the DO stage. In the CONFIRM stage, they should be able to manage the unplanned messages, including the word-of-mouth of guests and the reports about the hotel by the media, in order to enhance the planned brand image and ensure message integrity.

Notably, solo travelers are the segment that receives a generally higher level of education, with more than 80% of them having a university education or above (Figure 19). They have high regard for self-improvement and their interests in addition to meeting like-minded individuals (Figure 20). Therefore, to attract these group of people, special offerings related to self-development and quality social activities might be effective.

Although the aforementioned strategic positioning refreshment and tactical practices may help the client hotel expand into new markets and enlarge its market share, there are potential challenges to contemplate on. For example, if the positioning refreshment exercise is poorly executed, it might result in confusing positioning, and there would be a jumble of conflicting messages and perceptions in the target markets [10]. On the flip side, good practice may yield substantial returns and largely leverage company capabilities. Pink Lemonade, for example, has transitioned from a creative agency to an IMC service provider, which turns out to be a huge success in scaling up, given the growing number of client brands and advertising awards [11].



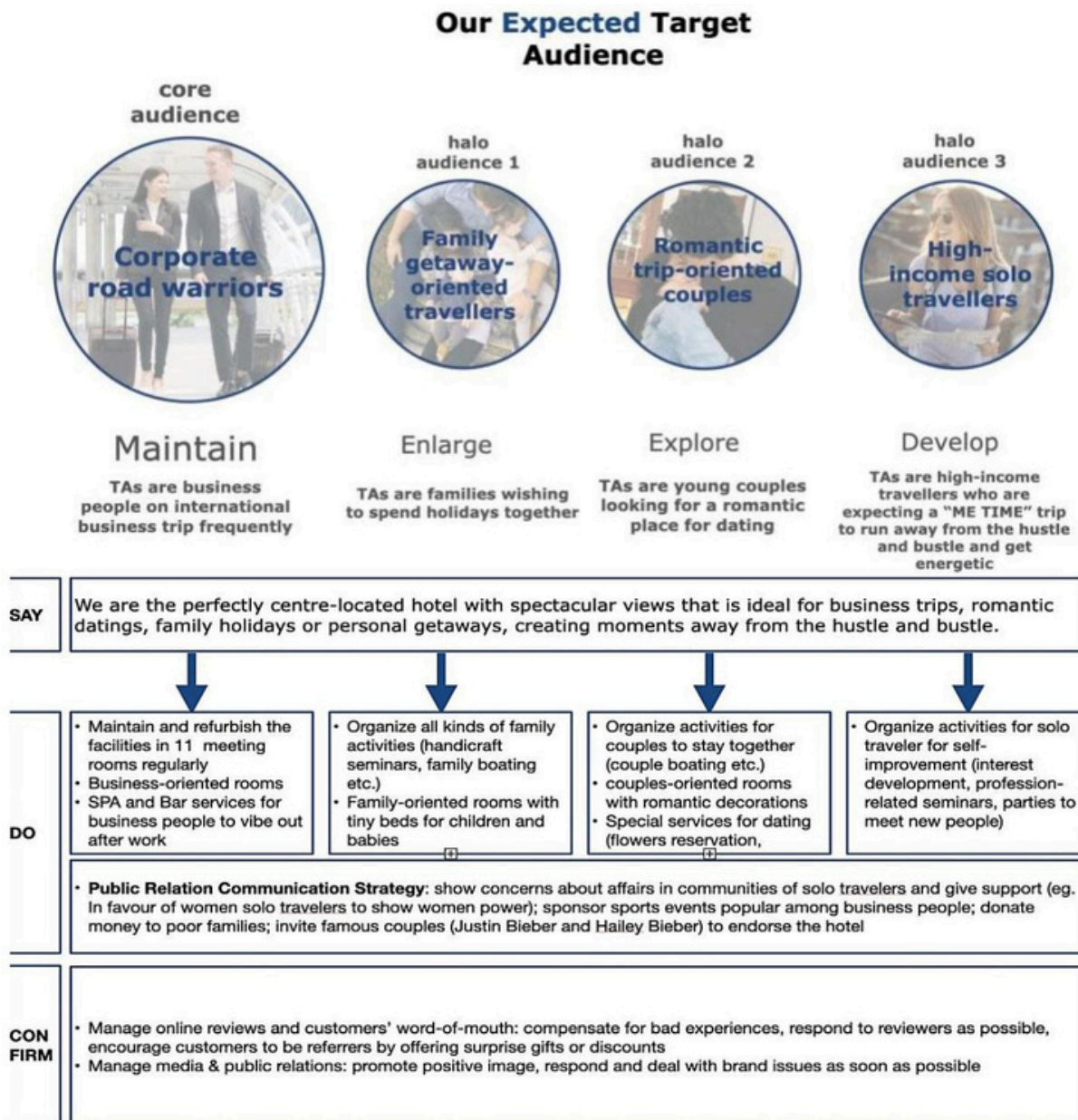


Figure 18. Strategic direction and practical steps to follow

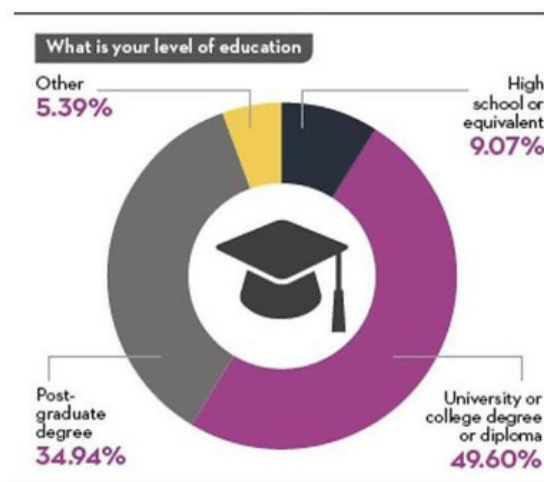


Figure 19. Education background of solo travelers



Figure 20. Reasons why travelers choose to travel alone

#### 4.2. Improve the quality of offerings and provide personalized services

As can be seen in the word cloud for negative reviews, issues pertaining to rooms, bathrooms, breakfast, bar, staff, and reception are often raised by customers. Having delved into these, the causes of such negative reviews have been found to be associated with tangible offerings (physical environment) and intangible offerings (staff services) (Figure 21).

Hence, the client hotel should address the two issues accordingly. For tangible offerings, many reviewers have reported that the environment in the rooms and bathrooms is unpleasant due to the lack of housekeeping. Besides that, the facilities provided are not satisfactory; for example, some mirrors in the bathrooms are broken, and there are instances where taps are missing. Moreover, limited options, “uncozy” environment, and average food quality are all perceived as unfavorable aspects of breakfast. A considerable number of guests have also complained that the bar’s menu is overpriced. In a nutshell, the client hotel must improve its environment and refurbish its facilities as a whole as well as make minor modifications to its breakfast and bar offerings.

In terms of intangible services, the quality of the staff requires further improvement. Based on the dimensions for evaluating service quality (Figure 22) by Parasuraman *et al.* [12], the services provide by the client hotel’s staff lack responsiveness, empathy, reliability, and assurance.

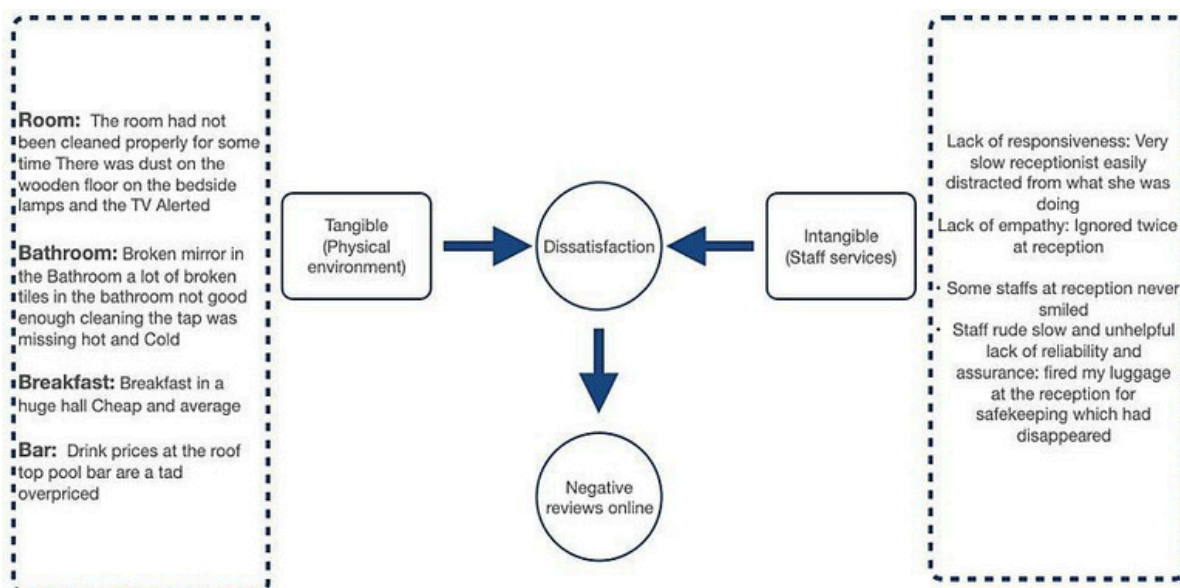


Figure 21. Causes of customer dissatisfaction with the client hotel



If the client hotel had known the customer’s expectation in advance, this review could have been avoided. Figure 25 depicts a service blueprint that the hotel can refer to for improvement. It is a useful tool for businesses to coordinate complex services by bridging the gap between different employees and identifying potential problems along the process [13]. In short, the client hotel must not only improve the overall quality of its offerings, but also design personalized services in order to win its guests’ devotion.

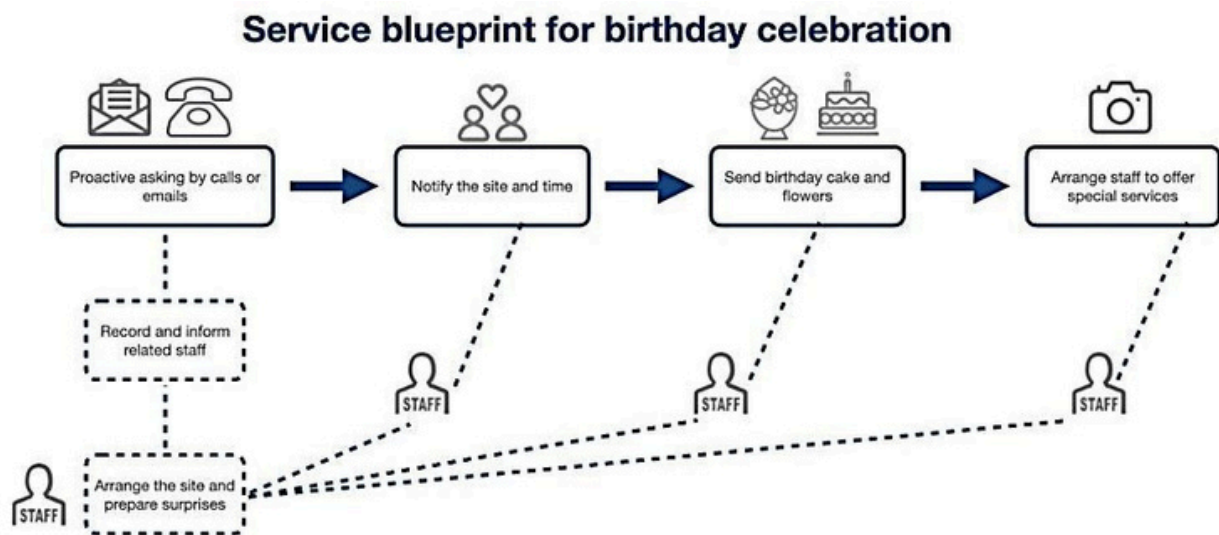


Figure 25. Service blueprint

## 5. Conclusion

Firstly, the client hotel mainly caters to business people, followed by couples and getaway families. Another niche market – solo travelers – can be further developed by the client hotel to expand its market share. Secondly, the client hotel has encountered a slight rise in customer dissatisfaction. Given the analysis of consumer understanding and performance evaluation, the recommendations of developing varying strategies towards different segments and offering improvements in directions of greater quality and personalization should be taken into consideration but conditional on the budget constraints so as to ensure future success.

## Disclosure statement

The author declares no conflict of interest.