

Analyzing Guest Satisfaction and Dissatisfaction of Hotels in Dakar: Insights from User-Generated Reviews

Analyse de la satisfaction et de l'insatisfaction de la clientèle des hôtels à Dakar à partir des évaluations en ligne des utilisateurs

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Abstract

The tourism and hospitality industry is increasingly relying on user-generated content (UGC) to gauge customer satisfaction and dissatisfaction. However, very few studies have leveraged this valuable source of data to analyze guest experiences at hotels in the context of Sub-Saharan African markets. This study aims to address this gap by identifying the key determinants of satisfaction and dissatisfaction among hotel visitors in Dakar, Senegal. To explore hotel customer experiences, we examined user reviews posted on Booking.com (1,103 positive reviews and 813 negative reviews) by guests who stayed at one of 14 prominent hotels located in the Dakar, using convenience sampling, a non-probabilistic sampling method. Building on Kano's three-factor theory of customer satisfaction, we identified key service attributes that drive both satisfaction and dissatisfaction based on guest feedback. The findings of this study contribute to the advancement of research in this domain while also offering valuable insights that can guide hotel managers in improving service management and enhancing the overall customer experience.

Keywords: customer satisfaction; Kano'sThree-factor theory; hospitality; tourism; online reviews

Résumé

Le secteur du tourisme et de l'hôtellerie s'appuie de plus en plus sur le contenu généré par les utilisateurs pour évaluer la satisfaction et l'insatisfaction des clients. Cependant, peu d'études académiques ont exploité cette source de données précieuse pour analyser les expériences des clients dans le contexte des marchés hôteliers d'Afrique subsaharienne. La présente étude vise à combler cette lacune en identifiant les principaux déterminants de la satisfaction et de l'insatisfaction des visiteurs d'hôtels à Dakar, au Sénégal. Afin d'explorer les expériences des clients d'hôtels, nous avons utilisé un échantillon de convenance pour examiner les avis d'utilisateurs (1,103 avis positifs et 813 avis négatifs) publiés sur Booking.com par des visiteurs ayant séjourné dans l'un de 14 hôtels de renom de Dakar. En nous appuyant sur la théorie de Kano de la satisfaction et l'insatisfaction des clients d'hôtels. Les résultats de cette recherche contribuent à l'avancement des connaissances dans ce domaine et offrent des informations précieuses pouvant guider les gestionnaires d'hôtels dans l'amélioration de la gestion des services et de l'expérience globale des clients.

Mots clés: satisfaction ; théorie de Kano ; hôtellerie ; tourisme ; avis en ligne

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Introduction

Tourism plays a crucial role in the global economy. A key driver of economic growth and development, this sector accounts for a significant share of GDP in many countries. Within the Senegalese economy, tourism ranks as the second most productive sector. In 2020, the health crisis brought about by the COVID-19 pandemic significantly impacted hospitality and catering businesses in Senegal, leading to a substantial decline in revenue, particularly in the catering sector (-71.9%) and hospitality (-51.9%). The negative trend persisted in the third quarter of 2020, resulting in an overall decrease of 64.8%. The first three quarters of 2020 witnessed a 55.2% drop in revenue compared to the corresponding period in 2019 (ANSD, 2020). However, a strong recovery was observed in 2021, with a significant increase in the revenue of hospitality and catering services, reaching 281% in the third quarter. This recovery was mainly attributed to the resumption of catering (+375.2%) and hospitality (+181.8%) activities, which had been severely affected by restrictive measures in 2020 linked to the pandemic. In the first three quarters of 2021, revenue increased by 129.6% compared to 2020 (ANSD, 2021). In 2022, a slight decline of 11.5% in revenue was recorded in the third quarter, attributed to the simultaneous deterioration in catering (-12.2%) and hospitality (-10.2%) sectors. Nevertheless, for the first nine months of 2022, revenue increased by 25.6% compared to the same period in 2021. In 2023, positive growth continued, with a 69.8% increase in revenue in the third quarter compared to 2022. This increase was attributed to the improvement in catering (+84.4%) and hospitality (+48.5%) revenues. For the first nine months of 2023, revenue increased by 44.3% compared to the same period in 2022 (ANSD, 2022). Tourists visiting Senegal predominantly originate from Europe. Between 2007 and 2012, their share in the total tourist numbers had fluctuated between 65.0% and 68.8%. In 2012, similar to other years, European tourist arrivals were largely dominated by those from France (70.3%) and, to a lesser extent, by visitors from Italy (8.8%) or Spain (6.5%). Following Europe, tourists from African countries constitute the second most common group of visitors in Senegal (Fall, 2016). The outlook for 2024 indicates a continuation of the upward trend in the hospitality and catering services sector, supported by the ongoing support from the Senegalese government to make tourism more attractive (ANSD, 2023). With its sunny Atlantic beach, ecotourism offerings, and legendary hospitality (the infamous Teranga), the country has positioned itself as an alternative destination, a resort for Western and Northern European travelers, especially during the winter. Moreover, Senegalese authorities have implemented targeted strategies to expand into new markets such as the United States and Canada. Senegal aspires to become a benchmark tourist destination and aims to



make the tourism sector a driver of social and territorial development by enhancing the quality and diversity of its offerings. The country possesses a distinctive blend of favorable climatic conditions, rich cultural heritage, noteworthy architectural legacies, and captivating natural attractions. This unique amalgamation has contributed to the inclusion of several Senegalese sites in the UNESCO World Heritage list (Senegalese Ministry of Tourism, 2023). Tourism is an important sector, and it gives opportunity of development to many developing countries (Dirsehan, 2015). Especially for African countries, tourism is an important industry. Thus, in this study, Dakar (in Senegal) was chosen as a destination to analyze travelers' reviews about hotels.

Despite the growing reliance on user-generated content (UGC) for assessing customer experiences in the tourism and hospitality industry, there is a notable gap in research concerning the application of this source of data to analyze guest satisfaction and dissatisfaction in Sub-Saharan African markets, specifically in Dakar, Senegal. Current studies have predominantly focused on Western contexts, leaving a significant void in understanding how various service attributes impact hotel guest experiences in this region. What are key service attributes that determine guest satisfaction and dissatisfaction in Senegal? Given the substantial economic role of tourism in Senegal and the recent shifts in the hospitality sector influenced by the COVID-19 pandemic and subsequent recovery, it is crucial to examine the determinants of guest satisfaction and dissatisfaction through a localized lens. This study aims to fill this gap by leveraging UGC from Booking.com reviews of 14 prominent hotels in Dakar, drawing on Kano's theory to identify and analyze key attributes that drive both satisfactory and unsatisfactory guest experiences.

To address the identified research gap, content analysis will be conducted using Leximancer, a computer-assisted qualitative data analysis software that employs a comprehensive process to reveal concepts, thematic associations, interrelationships, and frequency insights from usergenerated content. This study is structured as follows. First, the Theoretical Framework will provide an overview of Kano's three-factor theory and its relevance to analyzing customer satisfaction and dissatisfaction. Next, the Methodology section will outline the approach used to collect and analyze user-generated content from Booking.com reviews of hotels in Dakar. The Results section will present the findings from this analysis, highlighting key service attributes that influence guest satisfaction or dissatisfaction. Following this, the Discussion of Results will interpret these findings in the context of existing literature and theoretical contributions, offering insights into their managerial implications for the hospitality sector in



Senegal. Finally, we will discuss the study's, limitations, and suggest directions for future research.

1. Theoretical Framework

1.1.Customer satisfaction and its attributes

The academic discourse on the impact of service attributes on customer satisfaction revolves around symmetric and asymmetric perspectives. Proponents of the symmetric view argue that all service attributes, regardless of nature, uniformly influence overall satisfaction, emphasizing a linear relationship between attribute improvements or deteriorations and corresponding satisfaction levels. Scholars such as Grönroos (1982) (Service Quality Model), Oliver (1980) (Expectation-Disconfirmation Model), and Parasuraman, Zeithaml & Berry (1991) (SERVQUAL Model) align with this view, asserting an equal and consistent impact of different service attributes on customer satisfaction.

In contrast, advocates of the asymmetric viewpoint contend that certain service attributes may have a disproportionately significant impact, either positively or negatively, on overall customer satisfaction. Proponents of this view argue for a nuanced understanding that considers the varying degrees of importance attached to different service attributes.

Alternative conceptual frameworks, including Prospect Theory, Two-Factor Theory, and Three-Factor Theory, offer additional perspectives on studying customer satisfaction in the service industry. Prospect Theory, developed by Kahneman and Tversky (1979), highlights asymmetric perceptions of losses and gains in decision-making. Two-Factor Theory, proposed by Herzberg (1968), emphasizes the independent nature of satisfaction and dissatisfaction, influenced by motivators and hygiene factors, respectively. Kano's Three-Factor Theory (1984) categorizes service attributes into satisfiers, dissatisfiers, and hybrids, providing a nuanced approach based on their impact on customer satisfaction and dissatisfaction.

Overall, the debate between symmetric and asymmetric perspectives, coupled with diverse conceptual frameworks, contributes to a comprehensive understanding of the complex dynamics governing customer satisfaction in the service industry.

1.2. The Factor Structure of Customer satisfaction and dissatisfaction in the hospitality industry

In tourism, satisfaction is generally understood as the cumulative satisfaction with the attributes that customers deem important (Meneses et al, 2023). Gundersen et al. (1996) define Customer Satisfaction as a guest's post-consumption judgment of a product or service that can, in turn, be



measured by assessing guests' evaluation of performance on specific attributes. According to this understanding, often referred to as the multi-attribute model, several studies have sought to identify the multiple attributes that could influence customer satisfaction in the hospitality sector. It is generally argued that these different attributes have an asymmetric relationship with satisfaction, as per the two-factor theory developed by Herzberg et al. (1968). According to this theory, (job) satisfaction and dissatisfaction are influenced by two sets of factors: dissatisfiers or hygiene factors (such as salary, working conditions, and company policies) that prevent dissatisfaction, and satisfiers or motivators (such as recognition, achievement, and responsibility) that promote satisfaction. This theory considers satisfaction and dissatisfaction as independent constructs, which means that improving hygiene factors may prevent dissatisfaction but may not increase satisfaction. Kano (1984) extended this idea to the realm of service quality by introducing the three-factor theory, which categorizes service attributes based on their impact on customer satisfaction in three distinct types: basic (dissatisfiers), excitement (satisfiers) and performance (hybrids) factors. Satisfiers (Excitement factors) are factors that, when present, contribute to customer satisfaction. They enhance the overall experience and may go beyond basic expectations. Their absence may not necessarily cause dissatisfaction, but their presence significantly improves customer satisfaction. Dissatisfiers (Basic factors) are factors that, when absent or inadequate, lead to dissatisfaction. Their presence is expected and considered basic. Improving dissatisfiers may not necessarily increase satisfaction, but their absence results in dissatisfaction. Hybrids (Performance factors) exhibit characteristics of both satisfiers and dissatisfiers. Their presence can contribute to satisfaction, but their absence may lead to dissatisfaction. Essentially, they have a dual nature in influencing both satisfaction and dissatisfaction.

1.3. The growing influence of user-generated content in shaping perceptions

User-generated content (UGC) serves as the basis for information sharing and collaboration on the Internet. Nowadays, there is a growing influence of user-generated content in shaping perceptions. The hospitality industry has experienced a notable rise in the prominence of consumer-generated reviews in recent years. According to Martín & Román (2017), customer reviews across airlines, hotels, restaurants, and attractions have revolutionized how individuals express positive and negative electronic word-of-mouth. Aakash & Gupta Aggarwal (2022) contend that many customers today prefer to browse over the internet to meet their travel and hotel stay needs. Customers choose hotels on the basis of comments posted online by fellow



travelers. In the same vein, Gunasekar & Sudhakar (2021) argue that user-generated content is a major source of information particularly in tourism industry where consumers seek unbiased and unregulated information. While making their hotel booking decisions, consumers refer to the previous guests' experiences expressed in the hotel reviews across social media. As a result, the influence of user-generated content is increasingly becoming a focal point for research in the tourism and hospitality sector. User-generated online content can be an alternative data source for investigation which complements as well as cross-validates the traditional questionnaires instruments. Regarded as an invaluable data source for customer satisfaction research, online reviews are characterized by their perceived objectivity and immunity to the sampling biases commonly associated with traditional survey questionnaires (Li et al, 2020). Many researchers have used user-generated judgements of hotel attributes as indicators of guest satisfaction or dissatisfaction (Arasli et al, 2021; Atabay & Çizel, 2020; Athanasopoulou et al., 2023; Bi et al., 2020; Cassar et al., 2023, 2023; Kim, Kim & Park, 2021; Martín & Román, 2017; Meneses et al., 2023; Olorunsola et al., 2023; Padma & Ahn, 2020; Rita et al., 2022; Singh & Alhamad, 2021).

An increasing number of researchers have applied Herzberg's and Kano's models to various categories of services, including hospitality services. Singh & Alhamad (2021) used online hotel ratings to show that satisfiers and dissatisfiers are two distinct and mutually exclusive factors in accordance with the two-factor theory. Their findings indicate that breakfast, cleanliness, comfort, and facilities are satisfiers, while free Wi-Fi, location, staff, and value for money are dissatisfiers.

Building on the three-factor theory, Li et al. (2020) explored the asymmetric effects of hotel attributes on customer satisfaction using consumer-generated online reviews. They discovered that most hotel attributes act as basic factors, the absence of which leads to customer dissatisfaction. More precisely, their results underline the role of cleanliness, location, room, service and value in reducing customer dissatisfaction.

Kim, Kim, & Heo (2016) conducted a content analysis of satisfaction- and dissatisfactionindicating online reviews of hotels in both full-service and limited-service hotel segments. Their findings indicate that satisfiers and dissatisfiers in full-service hotels were distinct, with the exception of two common service-related factors, namely "staff and their attitude" and "service." On the other hand, "staff and their attitude" and four room facilities-related factors, "room cleanliness/dirtiness," "bed," "bathroom," and "room size," were revealed as common satisfiers and dissatisfiers in limited-service hotels.



2. Methodology

2.1. Data collection procedure

In this study, customer reviews indicating satisfaction and dissatisfaction with hotels in Dakar were collected. First, to identify the satisfaction- and dissatisfaction-indicating reviews, we relied on Booking.com's structured format whereby reviewers are able to articulate their experiences in separate fields for positive and negative feedback, which contributes to the platform's readability and facilitates a clear and balanced presentation of guest feedback.

For this study, we analyzed positive comments to identify factors contributing to customer satisfaction. Conversely, negative comments were examined to investigate factors leading to customer dissatisfaction. This procedure is consistent with Kim et al. (2016) who analyzed satisfiers and dissatisfiers in online hotel reviews using data from TripAdvisor.

Using a software program based on the python language, we retrieved all accessible reviews written in English language from 14 hotels in Dakar, up to March 2024, thus gathering a convenience sample of 2,210 reviews from Booking.com website. Upon deleting reviews that had no written comments, a total of 1,103 positive and 813 negative reviews was utilized for further analysis, as numerous reviews did not consistently exhibit both types of feedback. In fact, many reviewers provided positive comments while leaving the negative comment field blank, or vice versa.

2.2. Data analysis

As far as content analysis, we used Leximancer, a computer-assisted qualitative data analysis software (CAQDAS). Leximancer, a software tool for content analysis, employs a comprehensive process to generate a Concept Map, revealing not only concepts but also thematic associations, interrelationships, and frequency insights (Kivunja, 2013). Leximancer studies the frequency of words and their co-occurrence with each other and develops concept maps that highlight key concepts (Conceição et al, 2017). As Chiu & Tseng (2018) posit, "Leximancer employs a three-phase analytical process. Initially, it identifies concepts by calculating the frequency and co-occurrence of words, generating a ranked list. Subsequently, the program creates a thesaurus of closely-related words based on these concepts, enriching the semantic and relational content. Finally, Leximancer organizes the concepts into thematic levels based on their co-occurrence frequency, producing a visual map that showcases the relationships and classifications between concepts. The spatial arrangement and proximity of



themes and concepts in the map indicate the strength of semantic and relational connections within the textual document."

3. Results

3.1.Sample characteristics

The sample was comprised solely of reviews written in English. Those reviews were contributed by guests hailing from a total of 94 distinct countries, who stayed at one of 14 hotels located in Dakar. Hotels were chosen based on the number of reviews written in English and available on Booking.com. The number of reviews collected for each hotel is presented in Table 1. The largest national representations were 18% from the United States, 14% from the United Kingdom, 7% from Nigeria, 5% from Gambia, 5% from France, 5% from Senegal, 3% from South Africa, and 3% from Canada. The remaining 40% of reviews were provided by guests originating from a variety of other countries, each accounting for 2% or less of the overall sample.

International Hotel Dakar	Number of reviews	Percentage	Cumulative percentage
Radisson Blu Dakar Sea Plaza	253	23%	23%
Jardin Savana	157	14%	37%
Terrou-Bi	108	10%	47%
Yaas Hotel	97	9%	56%
La Madrague	75	7%	63%
International Hotel Dakar	59	5%	68%
Fleur De Lys Plateau	59	5%	73%
Illiyin Boutique	58	5%	79%
Le Djoloff	57	5%	84%
J Pad Dakar	55	5%	89%
Café De Rome	52	5%	93%
Le Lodge Des Almadies	33	3%	96%
Onomo Hotel	26	2%	99%
Marina Appart Hotel	14	1%	100%
TOTAL	1,103	100%	

Table N°1: Distribution of Reviews by Hotel

Source: The author



3.2. Description of reviews

Online reviews represent the most used channel by which customers express their feelings and talk about their satisfactory or unsatisfactory service encounters in a post-experience stage. In this study, we analyzed both positive and negative reviews together, then separately.

3.2.1. Positive and negative reviews

First, a concept map was generated using Leximancer to showcase the most prominent themes and concepts (see figure 1) found in reviews (a total of 1,103 positive and 813 negative reviews) that contained actual written comments (other than "there are no comments available for this review"). This map displays concepts (the smaller gray nodes) clustered into themes (the larger colored circles). Four main themes emerged, namely "staff" (1,195 hits), "room" (667 hits), "breakfast" (552 hits), and "needs" (35 hits, see figure 2).





Source: The author, using Leximancer software



Figure N°2: Hit graph (frequency) of the four main themes



Source: The author, using Leximancer software

3.2.2. Positive reviews

The positive reviews posted on Booking.com were analyzed by content analysis, which distinguished six major themes. The themes most closely tied to satisfactory experiences are "staff" (695 hits), followed by "pool" (457 hits), "location" (343 hits), "breakfast" (163 hits), everything (36 hits), and "cleanliness" (23 hits).

3.2.3. Negative reviews

Negative reviews were identified by content analysis, which produced five negative themes, namely, "room" (490 hits), "breakfast" (256 hits), "staff" (213 hits), "need" (151 hits), and "smell" (21 hits).

4. Discussion of results

4.1.General review evaluation

The analysis of user-generated reviews from Booking.com for hotels in Dakar, Senegal identified four primary themes, with three emerging as particularly salient as illustrated in the concept map (Figure 1) and the accompanying hit graph (Figure 2). The "Staff" theme was the most frequently mentioned, with closely associated concepts including hotel, location, pool, positive descriptors such as nice, clean, friendly, and helpful, as well as restaurant and stay. The "Room" theme was the second most prevalent, followed by "Breakfast". The "Needs" theme was less frequently referenced, ranking fourth overall across the reviews. Table 2 provides a summary of verbatim comments corresponding to these four main thematic areas, drawn from both positive and negative reviews.



Table N°2: Selection of comments on the four main emerging themes across positive and

negative reviews

Staff	Room	Breakfast	Needs
Positive Comments about	Positive reviews on	Positive breakfast reviews	Positive comments
the staff included: "The staff at this lovely hotel are friendly, polite and professional. From the cleaning staff, the bar and restaurant, and reception staff were all professional and helpful." "Helpful staff at the front desk. Money exchange was easy. Friendly staff: restaurant and breakfast buffet." "Well-cooked and served with a smile. I have to comment on all the staff as they are an absolute credit to () HOTELS. Very friendly, efficient and extremely helpful".	"room" "Cute and cozy room that was very enjoyable to stay in." "Room size nice and bed comfortable." "The room was really comfortable. Good bedding and good view of the sea."	"Breakfast was also good with a lot of fruits, good coffee and you can order eggs according to your taste." "Breakfast was good. Different options every day, very nice food, always excited for breakfast." "Breakfast is good, lots of healthy options."	about "needs" "It was the perfect business hotel. Comfortable and clean. Staff was very attentive to my needs." "Their kindness and respect! They understood our needs perfectly and found a very quick solution for us." "Location is great for what I needed to be there for. It was quiet and the staff are great."
Negative comments about staff " Inattentive staff, no quality of customer service there was no breakfast or any option to offer any alternative." "Terrible, slow and inefficient service. Called for towels, never received them. Rooms weren't cleaned. Coffee wasn't replaced. Took hours to get food to the point of almost passing out. The staff seemed unbothered and unwilling to help." "The front desk staff was rude!"	Negative reviews on "room" "The room was very uncomfortable due to lack of adequate air conditioning." "The room is very small possibly 12 * 10 feet it is more a hostel pretending to be a classy hotel the room has no closet, no place for bags, no safe " "The service was inconsistent: from cleaning, room service delivery time, availability of towels and other in room amenities."	Negative breakfast reviews "I did not like the breakfast. It is very limited, and not enough variety." "The breakfast was very basic, not much variety." "The breakfast and food in general is very expensive for what it is."	Negative comments about "needs" "Staff was not really helpful. They might need more training. The negativity was too much. I received hard answers, no, no, no, then yes to the same no." "You feel the hotel must be really luxury when it was new. It getting old now, you can feel the nostalgy. It needs a renovation, including the charming of the old times." (sic) "Since we got there the Wi-Fi was not working. The bathroom needs maintenance."

Source: The author

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4.2. Positive reviews

Beside "staff" and "breakfast" (see table 2), four additional themes emerged from the separate analysis of positive comments, namely pool, location, everything, and cleanliness.

4.2.1. Pool

The first one was "pool". Concepts frequently associated with pool were: pool, nice, view, restaurant, amazing, beach, beautiful, area, sea, lovely, swimming, and bar. A guest stated: "beautiful view, beautiful swimming pool, well situated (close to *Plateau*)". Another happy customer wrote: "The setting on the sea is nice, the pool bar is very relaxing and the tapas menu is great". Another reviewer listed reasons for her 9.0 rating as: "the seaside and the swimming pool and the restaurant/bar area and of course the staff". The size of the pool was appreciated by a reviewer who wrote: "Most I liked the location with excellent sea view and the huge pool for swimming."

4.2.2. Location

Another theme that appeared with positive comments was "location". Concepts frequently associated with location included: "perfect" (Co-count 14; Likelihood 54%), "places" (7; 54%), "easy" (11; 50%), "city" (11; 48%), "ocean" (11; 44%), "restaurants" (11; 41%) and "rooms" (20; 40%). Positive comments related to the location included: "Loved the location. Great for chilly evening walks. The view of the ocean and city from my balcony was divine." or "the place is quite clean and the location is great." Another reviewer commented: "The location was prime. Perfect for walking to many of the sites. It was also close to really nice restaurant and shopping. The staff was extremely helpful and the room was comfortable."

4.2.3. Everything

Favorable comments also included the keyword "everything". Out of the 36 reviews that contained the theme "everything" in their positive comments, all of them left ratings of 9 or 10 on a scale ranging from 1 to 10, and half of them did not leave a comment in the negative-comment field. Those customers fully enjoyed their overall experience at the hotel. The most frequent keywords employed by those guests, after the word "everything" were "staff" (12 counts), followed by "hotel" (10 counts), "amazing" (9 counts), "room" (7 counts), "great" (7 counts), "stay" (5 counts), "service" (5 counts), "breakfast" (5 counts). So, delighted customers that enjoyed every aspect of their stay expressed satisfaction about staff, hotel, room, service



and breakfast, among others. Positive Comments including the keyword "everything" with the highest ratings included the following:

"Everything! This is not my first stay! I am a returning guest, who loves everything about the vibe, aesthetic and professionalism of this hotel! The view of the water is serene and the pool and breakfast patio is amazing!"

"Everything was very good, especially the employees were very friendly and helpful and there were no mosquitos in the room or hotel thank to all nets."

"Every single thing was good, room, facilities, breakfast, staff, location - complete value for money."

4.2.4. Cleanliness

The last theme that was frequently occurring in positive comments was "cleanliness". Reviews that included that concept were quite verbose, such as the following:

"Location, cleanliness and breakfast were nice. Facilities are fine nothing exceptional but functional and clean."

"What stands out for me is the cleanliness and the helpfulness of the staff they're all so helpful and friendly. Haven't used this hotel since 2018 and was pleased that the standard of cleanliness remained the same."

4.3.Negative reviews

In addition to "room", "breakfast", "staff", and "need", one new theme was revealed from the separate analysis of negative comments, namely "Smell" (21 hits). This theme captured issues related to unpleasant odors which appeared to be a significant source of dissatisfaction among guests. One guest commented: "The room did not smell fresh". Another one noticed a "terrible smell in the corridors". Another customer wrote "the windows in the rooms do not open and the air conditioning becomes too much. Even in the foyer, the smell changes because of the air conditioning".

4.4.Classification of factors

4.4.1. Satisfiers

Keywords such as "Pool", "location", overall experience (i.e. "everything"), and "cleanliness" were frequently mentioned in positive comments, but did not appear frequently in negative



comments. This suggests that "Pool", "location", and "cleanliness" are Satisfiers (or Excitement Factors), meaning their presence leads to customer satisfaction, but their absence does not necessarily result in dissatisfaction. In other words, the presence of these factors contributes positively to the overall guest experience, but their absence is not a major source of complaint. These results are consistent with studies such as Arici et al. (2023) who showed that the theme of "pool" is one of the most important themes that customers mention to describe their satisfaction in their online reviews of green hotels. Kim, Kim and Heo (2016) found "location" to be a satisfier in full-service and limited-service hotels. Singh & Alhamad (2021) underscored that cleanliness is a satisfier. However, our findings differ from Albayrak and Caber (2015) who found that "Swimming pool" and "Overall cleanliness" are basic attributes. Moreover, Singh & Alhamad (2021) indicated that location is a dissatisfier while Athanasopoulou et al. (2023) suggested that location/access is a hybrid factor.

4.4.2. Dissatisfiers

Dissatisfiers (or Basic Factors) are factors that, when absent or improperly delivered, lead to customer dissatisfaction. Themes like "Room", "need", and "smell" fall into this category, as they were commonly mentioned in negative comments. Our results are congruent with prior studies such as Albayrak and Caber (2015) who also found that "Rooms" is a performance attribute (i.e. a dissatisfier) and Athanasopoulou et al. (2023) who indicated that room quality is a dissatisfier. In the same vein, Kim, Kim and Heo (2016) revealed that "smell" is a dissatisfier in limited-service hotels.

4.4.3. Hybrid factors

Factors like "staff" and "breakfast" are hybrids (or Performance Factors), as they were frequently mentioned in both positive and negative comments. These factors can be both satisfiers and dissatisfiers, depending on how well they are provided. For example, variety in breakfast options and employee helpfulness are satisfiers, while lack of diversity in breakfast and staff rudeness are dissatisfiers.

These results corroborate patterns observed in previous research such as Athanasopoulou et al. (2023) who found that personnel quality is a hybrid factor. Furthermore, Kim, Kim and Heo (2016) showed that "staff and their attitude" is a hybrid factor in limited-service hotels. However, Singh & Alhamad (2021) demonstrated that staff is a dissatisfier and breakfast a satisfier. Albayrak and Caber (2015) revealed that "Personnel" and "Food & beverage quality" are basic attributes (i.e. a dissatisfiers).



Conclusion

This research provides valuable insights into the key factors that influence customer satisfaction and dissatisfaction in the hotel industry, based on the three-factor theory. It offers a better understanding of the experiences and sentiments of hotel guests in Dakar by applying content analysis to online reviews. The identification of satisfiers and dissatisfiers provides a useful conceptual framework for future hotel satisfaction research. Ultimately, this study demonstrates the value of mining guest reviews to uncover critical hotel performance factors, which can inform both managerial practice and academic theory.

The findings from this study provide valuable insights for hotel managers in Dakar. Based on the analysis of online reviews, hotel operators should focus on enhancing satisfiers such as pool, location, overall experience, and cleanliness to increase customer satisfaction. These excitement factors are known to positively contribute to the overall guest experience, and their presence can lead to higher levels of customer satisfaction and even delight. At the same time, they should pay close attention to known dissatisfiers like room conditions, amenities, and hygiene, and work to improve them to minimize customer complaints. Basic factors (Dissatisfiers), when not properly addressed, can result in significant customer dissatisfaction and negative feedback. For hybrid factors like staff and breakfast, hotel managers should strive to consistently deliver high-quality service and amenities to ensure they are perceived as satisfiers rather than dissatisfiers. These factors can be both satisfiers and dissatisfiers, depending on how well they are provided and it is crucial for hotels to maintain a high level of performance in these areas. By carefully managing both satisfiers and dissatisfiers, hotels can improve the overall guest experience and increase the likelihood of repeat business and positive word-of-mouth.

There are a few limitations to this study that future research should address. First, this analysis only examined English-language online reviews, which may not fully capture the experiences and perspectives of non-English speaking guests. Second, it is important to note that the findings are based on 14 hotels in Dakar. Future research could explore these factors in different geographical contexts and hotel segments to validate the generalizability of the findings. Additionally, a more comprehensive analysis of the relationship between satisfiers, dissatisfiers, and their impact on customer loyalty and business performance would be a worthwhile avenue for further investigation.



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