



Article

Decoding Consumer Minds in the Age of Online Accommodation Reviews: A Client Profiling Approach

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Abstract: In the era of online accommodation reviews, understanding the consumer mind is essential for the hospitality industry. This study seeks to profile consumers based on their reservation decisions made after reviewing online feedback and to explore the complex relationship between consumer perceptions and their decision-making processes. To lay a solid foundation for this research, a thorough bibliometric analysis was conducted to map the existing literature and identify key trends in the field. Data were collected using a non-probability convenience sampling method through an online survey targeting Romanian residents. Performing a hierarchical cluster analysis, followed by a K-means cluster analysis, distinct consumer segments with varying levels of trust and responsiveness were identified. The four primary clusters are Young Risk-Averse Planners, Trust-Oriented Quality Seekers, Skeptical Detail Seekers and Independent Value Seekers. Each segment displayed unique preferences regarding the types of reviews they value and their influence on booking decisions. These findings highlight the need for hotel managers and marketers to develop tailored strategies that cater to the diverse needs of consumers, enhancing service delivery and promoting sustainable tourism practices. This research provides valuable insights into the dynamics of online reviews and stresses the importance of understanding consumer perceptions in navigating the complexities of today's hospitality industry.

Keywords: hospitality management; online reviews; client profiling; booking intentions; stakeholder interests



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1. Introduction

The hospitality and tourism industry has undergone significant transformation due to the increasing impact of online reviews on consumer decision-making. In the era of the internet, individuals are influenced by the experiences shared by others and are equally inclined to share their own, which can, in turn, impact others [1]. Sharing travel experiences online has become increasingly popular [2,3]. Tourists are highly motivated to seek recommendations and insights from these shared experiences to minimize risk and uncertainty [4], as tourism activities, unlike physical products, cannot be directly observed or evaluated prior to consumption [5].

In today's digital landscape, where consumers have unparalleled access to information about accommodation options, it is important to understand their perceptions toward these reviews, particularly during the information search phase of booking accommodations. Consumer behavior is complex and influenced by various internal and external factors [6]. Valuable insights often come directly from customers, allowing researchers to develop tailored solutions. This article investigates client profiling based on perceptions of online accommodation reviews, aiming to identify distinct consumer segments and their engagement with these evaluations.

As tourism companies strive for success, integrating sustainability into their operational strategies is increasingly vital. Sustainability involves environmental stewardship

and community welfare but also the necessity of achieving adequate profit margins to remain competitive and foster growth. Research indicates that customer reviews hold substantial business value for hotels. For instance, Xie et al. [7] emphasized the importance of customer feedback in enhancing hotel performance, while Ye et al. [8] linked customer reviews to increased hotel sales and profitability. Additionally, Torres et al. [9] found that ratings and reviews on online platforms positively influence the volume of hotel bookings. By profiling clients based on their perceptions toward online reviews, this article focuses on helping businesses to align their offerings with the preferences of diverse consumer groups, enhancing customer satisfaction and long-term profitability, which is essential for economic sustainability.

Furthermore, the main **objectives** of this research are to explore the significance of online accommodation reviews in shaping consumer decision-making, to identify and profile consumer segments with varying levels of trust and responsiveness and provide actionable insights for hotel managers and marketers. Understanding how consumers seek information and how reviews influence their choices is vital to grasping the dynamics of this process.

To gain these insights, this study uses cluster analysis, a multivariate technique that groups cases based on their response patterns. Cluster analysis simplifies a large number of individual cases into a manageable number of distinct, homogeneous clusters [10]. This method is widely used in tourism to identify similar consumer groups by examining factors such as demographics and psychographics [11]. For instance, Jurowski and Reich [12] used cluster analysis to categorize hotel customers into three groups—‘diners’, ‘dancers’, and ‘drinkers’—based on entertainment preferences. Similarly, Untaru et al. [13] applied cluster analysis to water conservation behaviors and environmental concern, identifying three segments: environmentally concerned and active, environmentally concerned but inactive, and environmentally unconcerned and inactive. Cha et al. [14] identified three clusters among Japanese tourists: ‘sport seekers’, ‘novelty seekers’, and ‘family/relaxation seekers’. Other studies, such as those by Ryan and Huyton [15], Mueller and Lanz Kaufmann [16], and Arimond and Elfessi [17], further demonstrate the value of cluster analysis in profiling consumer segments.

The structure of the article is as follows: it begins by introducing key concepts related to online accommodation reviews and their significance in the hospitality industry. A section is dedicated to the characteristics of online reviews and their impact on consumer behavior during the information search phase. The research methodology is then outlined, including the sampling approach, data collection methods, and analytical techniques used to profile clients based on their perceptions. The results section presents the demographic characteristics of the sample and identifies the consumer segments. The article concludes with a discussion of the implications of the findings for hotel managers and marketers, along with recommendations for future research directions.

2. Theoretical Background

2.1. Bibliometric Literature Review on the Use of Online Reviews in the Decision-Making Process for Accommodation Booking

To ensure a comprehensive understanding of the literature, it is essential to synthesize a wide range of studies, particularly in light of the emerging focus on the importance of online reviews in the decision-making process for accommodation booking. To identify gaps in the current research, a bibliometric literature review was conducted. This approach offers a systematic and detailed overview of the research landscape by quantitatively analyzing publication trends, co-citation patterns, and key thematic areas.

The bibliometric search was conducted using the Web of Science Core Collection (WoS) database as of 7 November 2024. An advanced search algorithm was developed, incorporating specific keyword variations related to online reviews. The objective of using these targeted terms was to establish a consistent research focus across diverse studies.

While these terms are interconnected, they may be applied distinctly within the academic literature. The search string utilized in WoS was as follows:

TS = (“online reviews” OR “customer reviews” OR “user-generated content”) AND (“accommodation booking” OR “hotel booking”) AND (“decision making” OR “consumer behavior” OR “purchase intention”).

To encompass a broad spectrum of studies and considering the emerging nature of research on the topic, no restrictions were placed on publication years (2011–2024), languages, or document types. The majority of the analyzed documents were articles ($n = 16$, 76.19%), followed by review articles ($n = 4$, 19.05%), early access articles ($n = 2$, 9.52%), and conference proceedings ($n = 1$, 4.76%). The predominant subject categories in the Web of Science were “Hospitality, Leisure, Sport & Tourism” ($n = 9$, 42.86%), followed by “Management” ($n = 8$, 38.09%), and “Business” ($n = 7$, 33.33%).

Publication and citation trends concerning the importance of online reviews in the decision-making process for accommodation booking are illustrated in Figure 1. This figure indicates an upward trend in both publications and citations in recent years, reflecting an increasing academic interest in this area of research. Between 2011 and 2014, there were very few publications, with a notable peak observed in 2019, signalling a surge of interest at that time. The relatively stable number of publications in more recent years suggests potential gaps in the literature, highlighting opportunities for new studies to explore under-researched aspects of online reviews within the hospitality industry. Additionally, while citations began at a low level, they have steadily increased, peaking at around 200 in 2022, demonstrating the growing influence of these studies.

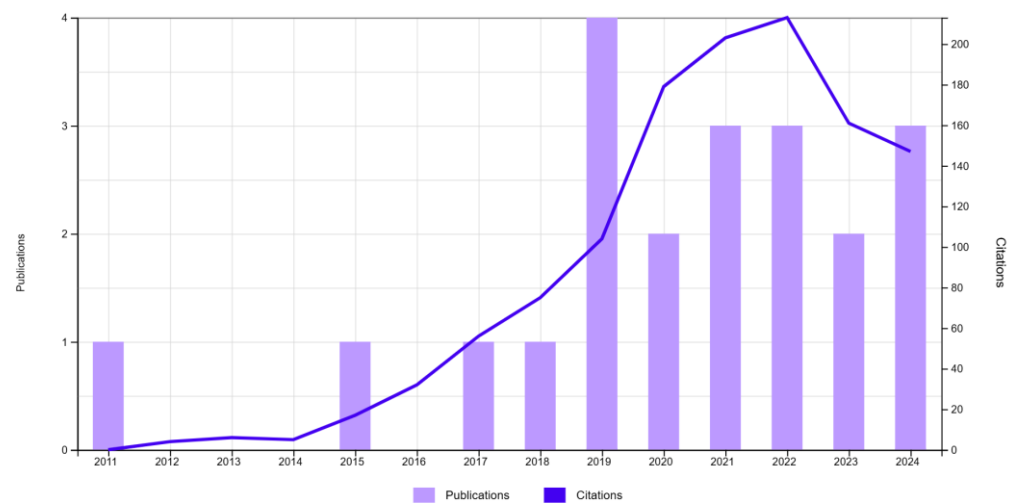


Figure 1. Trends of publications and citations about online reviews in decision-making process for accommodation booking.

The top authors in the number of published documents were Shukla Anuja and Mishra Anubhav. They published together two articles “Role of Review Length, Review Valence and Review Credibility on Consumer’s Online Hotel Booking Intention” [18] and “Effects of Visual Information and Argument Concreteness on Purchase Intention of Consumers Towards Online Hotel Booking” [19]. Other authors contributed one article each, indicating a distributed yet specialized engagement with the research topic.

The analysis of the citation trends of the top five cited articles reveals valuable insights into the evolution of research on electronic word-of-mouth (eWOM), online reviews, and hotel booking intentions (Table 1).

Table 1. Top 5 cited article overview. Source: Authors' processing, using Web of Sciences indexed articles.

Article	Author Keywords	Article Citation					Average Per Year	Total
		2021	2022	2023	2024	2025		
Ladhari and Michaud (2015) [20].	Electronic word of mouth; Facebook; Online reviews; Attitude and trust toward hotel; Booking intentions	55	55	53	32	20	34.9	349
Xie et al. (2011) [21]	eWOM; Personal identifying information; Pre decisional disposition; Booking intention	45	25	22	9	10	17.36	243
Cheng et al. (2019) [4]	Sharing economy; Online reviews; Trust; Content analysis; Convolutional neural network	39	57	52	40	33	39.33	236
Chan et al. (2017) [22]	Review valence; Booking intention; Homophily theory; Demographic and preference similarity	16	27	23	12	14	13.38	107
Leong et al. (2019) [23]	Artificial neural networks; booking intention; demographic; elaboration-likelihood model; eWoM	17	19	20	21	20	16.83	101

The article by Ladhari and Michaud [20] demonstrates the highest total citations (349) and annual average (34.9), reflecting its significant and enduring impact on the field. This suggests its broad applicability in understanding key concepts such as eWOM, trust, and booking intentions. In contrast, the article by Xie et al. (2011), while foundational, shows a declining citation trend with an annual average of 17.36, indicating its diminishing relevance over time as newer research emerges.

Recent works, such as Cheng et al. [4], show increasing interest, particularly in the context of the sharing economy, with a high annual average of 39.33 citations. This growth highlights the importance of topics like trust and content analysis in platforms such as Airbnb. The focus on advanced methodologies, including convolutional neural networks, positions this article as a critical reference for understanding technological advancements in the field.

In contrast, articles with narrower focuses, such as Chan et al. [22] and Leong et al. [23], exhibit lower citation totals (107 and 101, respectively) and annual averages (13.38 and 16.83). These articles, which explore topics such as reader–reviewer similarity and the integration of artificial neural networks with eWOM, may cater to more niche areas within hospitality research, limiting their broader impact.

Across the dataset, a general decline in projected citations for 2024 and 2025 is observed for most articles, suggesting a natural aging effect as newer research gains prominence. An exception is the work of Leong et al. [23], which maintains relatively stable citation numbers, reflecting ongoing interest in combining eWOM with advanced models such as the elaboration likelihood model and artificial intelligence.

The analysis also reveals a clear shift in research focus over time. Earlier studies, such as the study by Xie et al. [21], emphasize fundamental concepts like source credibility and pre-decisional disposition, while more recent works, like those by Cheng et al. [4] and Leong et al. [23], incorporate technology-driven methodologies, including neural networks and content analysis. This evolution underscores the increasing importance of technological advancements in hospitality research.

A consistency analysis was performed using VOSviewer on keywords that appeared more than three times, resulting in the identification of eight key terms. VOSviewer, a free Java-based software developed by Van Eck and Waltman [24], is specifically tailored for bibliometric analysis and excels in visualizing co-occurrence networks as well as mapping trends in scientific research [24]. In this analysis, each node represents a keyword derived from the reviewed articles, with the size of the node reflecting its frequency of occurrence.

As illustrated in Figure 2, larger nodes correspond to more frequently used keywords, indicating areas of heightened focus within the literature. By mapping the most common and co-occurring keywords, VOSviewer offered a clear visualization of the thematic structure and the interconnections between key concepts related to the importance of online reviews in the decision-making process for accommodation booking.

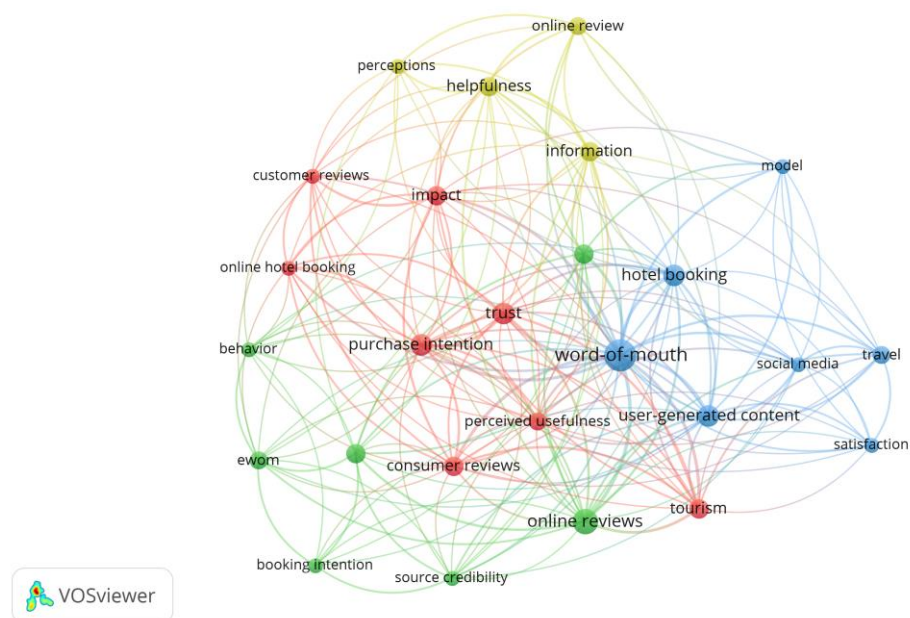


Figure 2. Map of the occurrences and links for terms related to the importance of online reviews in decision-making process for accommodation booking. Source: Authors' processing in VOS viewer, using Web of Sciences indexed articles.

The VOSviewer network visualization reveals key relationships between online reviews and accommodation booking decisions. Central to this analysis are online reviews and word-of-mouth, which significantly influence consumer behavior and booking intentions. The strong links to trust, purchase intention, and perceived usefulness highlight the importance of review credibility in shaping consumer confidence. Emerging themes such as helpfulness and impact underline the necessity of researching the qualities that enhance the effectiveness of reviews.

Given the findings of the bibliometric analysis, it is important to explore the complex dynamics of consumer behavior regarding online accommodation reviews through a client profiling approach. This approach addresses the need for comprehensive models that incorporate various influencing factors to better understand their combined impact on consumer booking perceptions, as highlighted by Lata and Rana [25] and Chan et al. [22].

Additionally, while existing research [26] acknowledges the significance of certain reviews, it lacks a thorough examination of the factors that render specific reviews more influential than others. By identifying these factors, the article seeks to provide insights that can enhance how businesses manage online feedback and influence consumer behavior effectively. Furthermore, the article emphasizes the importance of understanding how different consumer segments interpret online reviews. It recognizes that demographic factors and travel purposes can lead to varying responses to reviews, which can inform the development of more targeted marketing strategies [27]. This focus on consumer profiling will facilitate a deeper understanding of the diverse needs and preferences of consumers in the hospitality industry, ultimately contributing to more effective marketing and service delivery in the age of online accommodation reviews.

2.2. The Concept of “Online Reviews” in Tourism Accommodation Sector

The concept of “online reviews” has gained significant attention in light of rapid technological advancements and the increasing reliance on digital platforms for consumer feedback. The diverse definitions and perspectives indicate that online reviews are crucial in the context of booking accommodations and serve as valuable resources for potential customers seeking reliable information. Mudambi and Schuff [28] define online reviews as user-generated evaluations posted on websites, significantly influencing consumer perceptions and purchasing decisions. Fang et al. [29] describes these reviews as numeric ratings and descriptive comments reflecting customer satisfaction or dissatisfaction, often including personal recommendations. Lecinski [30] emphasizes their role in guiding consumers’ purchasing choices, while Băltescu [31] highlights their importance in sharing travelers’ experiences. Chen and Xie [32] note the subjective nature of online reviews. Daugherty and Hoffman [33] point out that they provide insights into service quality and guest experiences, aiding informed decision-making. Blackshaw and Nazzaro [34] characterize online reviews as a mix of facts and opinions, and Hu et al. [35] argue they function similarly to word-of-mouth communication, serving as vital information sources for consumers and producers.

2.3. Characteristics of Online Reviews

Research has identified several key characteristics of online reviews that significantly impact consumer behavior [36,37]. First, the usefulness of reviews is crucial, as consumers believe that these evaluations aid in their purchasing decisions. Online booking platforms allow users to assess the helpfulness of reviews, which can influence choices in a landscape saturated with information.

Another important factor is the expertise of the reviewer. Anonymous reviews make it difficult for consumers to evaluate credibility; however, established reviewers or influencers tend to be seen as more trustworthy. These online booking platforms often provide demographic details and indicators of reviewer status, enhancing their perceived authority.

The recency of reviews is also significant; more current evaluations are generally considered more useful, as older reviews may lose relevance over time. Additionally, the volume of reviews highlights the diversity of opinions, with a greater quantity of feedback often increasing product visibility and consumer trust, though younger male consumers may prioritize the tone of reviews over the number.

The valence of reviews varies, with negative reviews often pinpointing quality issues and positive ones highlighting service excellence. Consumers typically pay closer attention to negative feedback, which can spread quickly and influence perceptions. Finally, the complexity of reviews refers to their detail and thoroughness; consumers prefer comprehensive insights into accommodations, as detailed information is vital for informed decision-making. Notably, in the early stages of the purchasing process, consumers often focus on the quantity of reviews rather than their content, which becomes more important at the final decision-making stage.

2.4. Factors Influencing the Evaluation of Online Reviews

The literature highlights the significant impact of online reviews on consumers’ booking intentions and final decisions regarding accommodations, identifying several key factors that influence these evaluations.

1. Type of reviews (Valence): Reviews can be categorized as positive or negative. Positive reviews have a notable impact on the performance of hotel properties, as establishments with favorable online evaluations typically experience higher occupancy and sales rates compared to those with negative or mixed reviews [22,38,39]. However, the effectiveness of positive reviews may vary based on their content; detailed reviews that highlight critical attributes, such as location and amenities, tend to have a more substantial positive effect than brief or vague comments [40]. Conversely, negative reviews are shown to have

a stronger influence on consumer decisions, often discouraging bookings and suggesting a greater likelihood of a mismatch between cost and the expected experience [41].

2. Brand recognition: The impact of online reviews on booking intentions is less significant for well-known or popular brands. In contrast, reviews have a more pronounced effect on lesser-known brands, where consumers are more likely to rely on available feedback [42].

3. Price: Online reviews play a crucial role in determining hotel room pricing [43]. Research indicates that consumers are often willing to pay more for accommodation that has at least one online review, regardless of its positivity or negativity [44]. Positive reviews, however, enable hotels to charge higher prices for their rooms [45,46].

4. Star ratings: Properties with higher star ratings are more significantly affected by online reviews, as consumers typically associate higher prices with superior service levels. This perception can raise concerns that the service quality may not justify the higher cost [41].

5. Management responses: Even ineffective responses from hotel managers to customer complaints can yield more favorable outcomes than ignoring such issues [40]. Properly addressing concerns can alleviate customer dissatisfaction and demonstrate a commitment to meeting guest needs. The timeliness of these responses is critical; proactive engagement can enhance the perception of review usefulness and encourage customer loyalty, while delayed or inadequate responses may exacerbate negative sentiments [38].

6. Trust: Trust emerges as a significant factor influencing accommodation decisions. In the context of hospitality services, perceived risks can deter customers from booking if they lack confidence in the accommodation's credibility. The quality and reliability of review sources are crucial, particularly in negative situations, with third-party sites often seen as more trustworthy by consumers [47].

3. Research Methodology

The methodological diagram below (Figure 3) provides a visual representation of the research process, outlining the key steps undertaken to achieve the study's objectives.

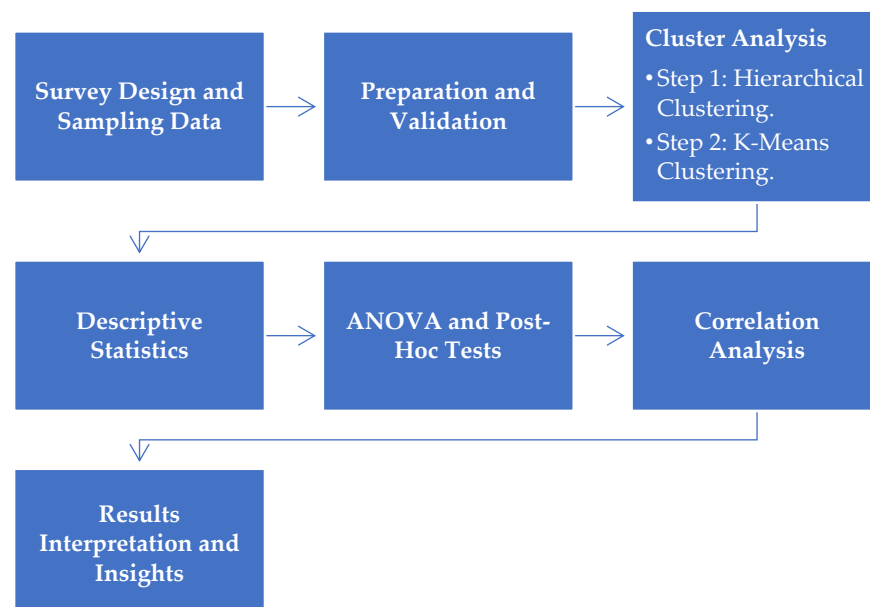


Figure 3. Methodological diagram. Source: authors' processing.

Due to the challenges associated with implementing a purely random sampling procedure in the hotel industry [48], this study employed a non-probability convenience sampling method to recruit participants who were representative of consumers engaging with online reviews for accommodation booking. The survey targeted Romanian resi-

dents aged 18 years and older, ensuring a diverse range of respondents across age groups, educational levels, and occupational categories.

The validity and reliability of the measures were ensured through a rigorous process involving pre-testing. Prior to the main survey, a pre-pilot study was conducted to develop the questionnaire. A pre-test of the survey instrument was then carried out with 10 academics/students. Feedback from this pre-test led to minor revisions in the wording of several statements, which improved the instrument's face and content validity.

The development of the questionnaire considered both the characteristics of online reviews (usefulness: 2 questions, expertise of reviewer: 2 questions, recency: 2 questions, volume of review: 3 questions, valance: 3 questions, complexity: 8 questions) and the factors influencing their evaluation (type of review: 4 questions, brand recognition: 1 question, price: 5 questions, star rating: 2 questions, management responses: 3 questions, trust: 4 questions), as detailed in the literature review subsection (Appendix A). Data collection was conducted using an online survey platform, which allowed for a broad geographic reach and the efficient gathering of responses. The questionnaire was distributed between 25.07 and 31.08.2024 via email, social media platforms, or WhatsApp messages by researchers. Potential participants were invited to give their informed consent electronically before completing the survey. Participation was anonymous; therefore, a signature was not required on the consent form. Only individuals who have interacted with online review sites at least once within the past year were invited to complete the questionnaire, in line with the recommendations of Untaru and al. [13], which emphasize the importance of recent consumption experiences in understanding decision-making processes. This eligibility criterion ensured that the data captured reflected recent consumer behavior and were well-aligned with the study's focus on current trends in online reviews.

In total, 245 responses were received. While the sample was not drawn randomly, the diversity of respondents in terms of age, gender, education, and occupation ensures a reasonable representation of the Romanian population engaging with online reviews.

The survey responses were systematically transformed into variables for analysis to ensure consistency and alignment with the study's objectives. Each survey item was coded into a numerical scale representing its respective dimension (see Appendix A). This systematic translation ensured that all variables captured meaningful and actionable insights into consumer perceptions. Also, to evaluate internal consistency, Cronbach's alpha was calculated for all multi-item constructs.

To obtain customer profiles, a cluster analysis was employed. The statistical software SPSS 20 was utilized for this analysis to ensure accurate data handling and interpretation. Cluster analysis is a multivariate technique used to analyze cases based on their scores across various measured variables. Essentially, this method identifies cases with similar response patterns, allowing them to be grouped for analysis. Unlike "dependent" techniques, cluster analysis focuses on the underlying structure of the variables rather than evaluating the relationship between independent and dependent variables [10]. The interpretation of cluster analysis results relies heavily on the researcher's expertise and judgment, particularly regarding the internal homogeneity and external heterogeneity of the clusters. As noted by Jurowski and Reich [12], this technique can be viewed as both an art and a science.

The main advantage of using cluster analysis lies in its ability to efficiently reduce and summarize data. In the tourism industry, clients often have slightly differing needs and preferences, making it impractical to treat each one as an individual. Traditionally, it has been common to assume uniform needs based on geographic or demographic variables. Cluster analysis, however, provides a more refined segmentation approach, allowing groups to be defined based on their specific needs and identifying similar target groups effectively.

This study employed a two-step approach to segment consumers based on their behavior towards online accommodation reviews: hierarchical cluster analysis followed by K-means cluster analysis. The results of the analysis were used to create consumer profiles

and develop tailored marketing strategies, as well as improve services based on the specific preferences of each identified segment.

Hierarchical cluster analysis was conducted using “Ward’s method” to create compact clusters by minimizing the total variance within them. Then, the “Euclidean” distance measure was applied, which is the standard for cluster analysis. The “Dendrogram” option was enabled to visualize the hierarchical structure and determine the optimal number of clusters, based on the largest vertical gap between dendrogram levels. The optimal number of clusters was identified by the most significant vertical gap.

K-means cluster analysis was then used to validate the cluster structure. Using the previously determined number of clusters, the same variables were selected, and the centroids of each cluster, representing their average values, were calculated. Additionally, the “ANOVA Table” option was used to identify variables that significantly differentiate the clusters. This technique was chosen because it allows the identification of statistically significant differences in mean scores across multiple groups for continuous variables.

Before performing the analysis, the assumptions of normality and homogeneity of variances were evaluated. The Shapiro–Wilk test was conducted to assess the normality of variables within each cluster. Also, to test the homogeneity of variances, Levene’s test for the equality of variances was conducted. For variables where Levene’s test indicated significant heterogeneity of variances, Welch’s ANOVA was used to compare group means. This method is robust to violations of the homogeneity of variances assumption and ensures the validity of the results. ANOVA was followed by post hoc tests (Tukey’s HSD) to identify specific pairwise differences between clusters. These steps ensured a rigorous analysis of the differences in consumers.

To evaluate the internal homogeneity and representativeness of the cluster characteristics, we calculated standard deviations for all variables within each cluster. This provides a measure of dispersion, complementing the means in the final cluster centers table. The inclusion of standard deviations enhances the robustness of the clustering analysis by capturing variability within each group.

4. Results

4.1. Sample Characteristics

The sample comprised a diverse demographic. Gender analysis revealed that there were 141 female respondents (57.6%) and 104 male respondents (42.4%). In terms of age, the distribution included 53 respondents (21.6%) aged 16–24 years, 52 respondents (21.2%) aged 25–34 years, 53 respondents (21.6%) aged 35–44 years, 55 respondents (22.4%) aged 45–54 years, 23 respondents (9.4%) aged 55–64 years, and 9 respondents (3.7%) aged 65 years and older.

The education level of the respondents varied, with no participants having completed primary education, 3 respondents (1.2%) having completed lower secondary education, 78 respondents (31.8%) having completed high school, 14 respondents (5.7%) having completed post-secondary education, and 150 respondents (61.2%) holding a university degree.

Regarding occupation, 43 respondents (17.6%) were students, 164 respondents (66.9%) were employed, 21 respondents (8.6%) were self-employed, 13 respondents (5.3%) were retirees, and 4 respondents (1.6%) were unemployed. This demographic information underscores the diversity of the sample and provides valuable insights into the characteristics of the respondents involved in the study.

4.2. Profiling of Respondents

A hierarchical cluster analysis was conducted to determine the number of clusters. The resulting dendrogram (Figure 4) indicated that the sample could be divided into four distinct clusters.

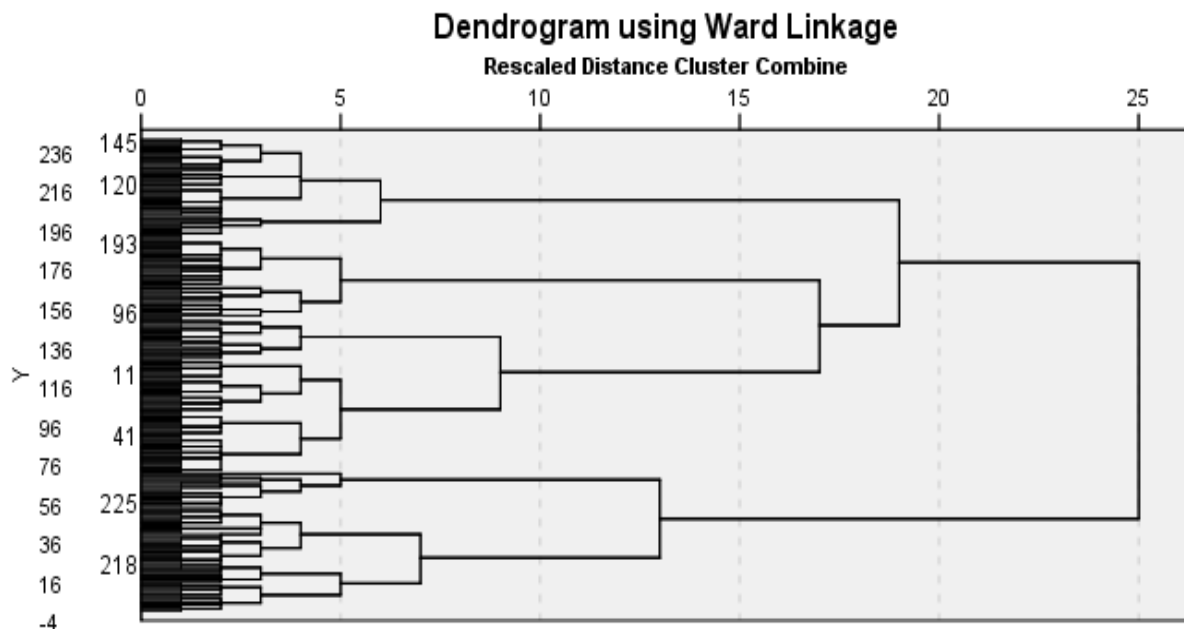


Figure 4. Dendrogram using Ward linkage. Source: authors' processing in SPSS.

The distribution of cases across the clusters is as follows (Table 2): Cluster 1 contains 57 cases (23.55%), Cluster 2 includes 80 cases (33.06%), Cluster 3 comprises 54 cases (22.31%), and Cluster 4 consists of 51 cases (21.07%). In total, 242 valid cases were included in the analysis, while 3 cases were missing and not considered in the clustering process.

Table 2. Number of cases in each cluster.

Cluster	Number of Cases in Each Cluster
1	57,000
2	80,000
3	54,000
4	51,000
Valid	242,000
Missing	3000

Source: Authors' processing in SPSS.

After identifying the optimal number of clusters, a K-means cluster analysis was performed to further distinguish the clusters (Table 3).

Table 3. Final cluster centers. Source: authors' processing in SPSS.

	Cluster			
	1	2	3	4
Online review sources	2.40	2.90	1.19	2.71
Trust level in online reviews	3.67	3.78	4.09	3.47
Frequency of accommodation choices based on online reviews	3.74	4.20	4.63	3.61
Acceptable rating score	5.26	6.08	5.87	5.20
Gender	1.67	1.75	1.19	1.61
Age range	1.28	3.69	3.28	2.80
Highest level of education	3.61	4.78	4.43	4.14
Occupation	1.42	2.29	2.13	2.29
Influence of negative reviews	4.32	4.25	4.80	2.35

Table 3. Cont.

	Cluster			
	1	2	3	4
Influence of positive reviews	4.19	4.34	4.24	2.92
Influence of recent reviews	4.19	4.26	3.70	2.80
Attention to cleanliness	4.77	4.76	4.72	4.24
Attention to staff	3.86	4.03	3.96	3.59
Attention to amenities	4.30	4.20	3.17	3.88
Attention to location	4.44	4.43	3.30	3.98
Attention to price/quality ratio	4.61	4.46	3.96	4.18
Attention to comfort	4.65	4.38	3.59	3.98
Accommodation vs. online reviews perception	3.79	3.95	4.15	3.80
Travel frequency in the past 12 months	2.98	3.11	3.46	3.12

Source: authors' processing in SPSS.

The final cluster centres provide insights into the characteristics of the four consumer segments identified in the analysis:

- Cluster 1: Young Risk-Averse Planners

This cluster consists mainly of younger individuals (age range: 16–24 years) with high school education (3.61). They have a slight female majority (gender: 1.67) and are predominantly students (occupation: 1.42). These consumers exhibit moderate trust in online reviews (3.67) and frequently use them to inform their accommodation choices (3.74). They prefer positive reviews (2.40) but also pay attention to recent feedback. Their acceptable rating threshold is “Good” (5.26), and they are highly influenced by negative reviews (4.32), which they use to avoid poor experiences. Key factors like cleanliness (4.77), comfort (4.65), and price/quality ratio (4.61) play a significant role in their decision-making. While they travel moderately (3–5 times per year, 2.98), they strongly depend on reviews to ensure quality and avoid risks.

- Cluster 2: Trust-Oriented Quality Seekers

This group comprises middle-aged consumers (age range: 45–54 years, 3.69), highly educated (4.78), and predominantly employed (2.29). They exhibit a high level of trust in online reviews (3.78) and frequently rely on them when booking accommodation (4.20). They prefer positive reviews (2.90) and have a high acceptable rating threshold of “Very Good” (6.08). Both negative (4.25) and positive reviews (4.34) strongly influence their decisions, and they value the timeliness of recent reviews (4.26). Key factors such as cleanliness (4.76), staff behavior (4.03), location (4.43), and price/quality ratio (4.46) are critical for these consumers. They typically travel 3–5 times annually (3.11) and seek high-quality accommodations with reliable reviews.

- Cluster 3: Skeptical Detail Seekers

This cluster includes middle-aged individuals (age range: 35–44 years, 3.28), mostly male (gender: 1.19), with higher education (4.43). They exhibit the highest trust in online reviews (4.09) and rely heavily on them for accommodation decisions (4.63). They prioritize recent reviews (1.19) and are particularly sensitive to negative feedback (4.80), using it to avoid potential risks. For this group, cleanliness (4.72) and staff behavior (3.96) are important, but they are less concerned with amenities (3.17) and location (3.30). Their acceptable rating score is “Very Good” (5.87), and they travel moderately (3–5 times per year, 3.46). They are highly analytical and seek comprehensive, up-to-date reviews before making decisions.

- Cluster 4: Independent Value Seekers

This segment consists of younger adults (age range: 25–34 years, 2.80) with post-secondary education (4.14) and a balanced gender distribution (1.61). They show lower trust in online reviews (3.47) and use them less frequently when selecting accommodations

(3.61). They have a moderate acceptable rating threshold (“Good” 5.20) and are less influenced by both negative (2.35) and positive reviews (2.92). These consumers place moderate importance on cleanliness (4.24), comfort (3.98), and price/quality ratio (4.18) but are less focused on other factors like staff (3.59) and amenities (3.88). They travel moderately (3–5 times per year, 3.12) and make decisions more independently, relying less on reviews compared to other clusters.

In addition to the means provided in the final cluster centers table, standard deviations were calculated to assess the internal homogeneity and variability within the clusters (Table 4). This analysis addresses the reviewer’s concern about dispersion measures and provides a deeper understanding of the internal consistency and diversity across clusters. Variables such as gender (Cluster 3: SD = 0.40) and age range (Cluster 1: SD = 0.69) exhibit low standard deviations, indicating strong internal consistency and confirming the robustness of the clustering process. These results suggest that demographic traits are well-differentiated among clusters, providing a solid basis for segment-specific analysis.

Table 4. Standard deviations that assess the internal homogeneity of the clusters.

Variable	Cluster 1 SD	Cluster 2 SD	Cluster 3 SD	Cluster 4 SD
Online review sources	0.66	0.89	0.52	0.86
Influence of negative reviews	1.08	1.06	1.02	1.20
Influence of positive reviews	0.86	0.83	0.92	1.05
Travel frequency in the past 12 months	0.98	1.00	0.91	0.90
Gender	0.50	0.49	0.40	0.51
Age range	0.69	0.92	0.91	0.85
Attention to amenities	0.98	0.67	0.71	0.90
Attention to location	0.96	0.87	0.78	0.92
Attention to price/quality ratio	0.87	0.78	0.65	0.81
Accommodation vs. online reviews perception	0.71	0.70	0.71	0.57
Attention to staff	0.94	0.76	0.66	0.84
Attention to comfort	0.88	0.80	0.73	0.84

Source: authors’ processing in SPSS.

Moderate variability is observed in variables like attention to price/quality ratio (SDs ranging from 0.65 to 0.87) and attention to comfort (SDs ranging from 0.73 to 0.88). This level of dispersion reflects consistent preferences within clusters while allowing for some diversity, making these factors pivotal for developing flexible yet targeted strategies.

Greater dispersion is seen in influence of negative reviews (Cluster 4: SD = 1.20) and influence of positive reviews (Cluster 4: SD = 1.05), particularly within Cluster 4. This variability indicates diverse decision-making patterns among consumers in this cluster, presenting opportunities for highly tailored marketing and communication strategies to address a wide range of consumer behaviors.

Lastly, variability in online review sources (SDs ranging from 0.52 to 0.89) and travel frequency (SDs ranging from 0.90 to 1.00) highlights differences in how consumers rely on digital information and plan their travel. These findings emphasize the need for nuanced marketing campaigns that appeal to both frequent travelers and those with occasional travel habits.

One-way analysis of variance (ANOVA) was used to test the mean differences among the four groups (see Table 5). Before performing the analysis, the assumptions of normality and homogeneity of variances were evaluated. The results indicated significant deviations from normality for all variables across clusters ($p < 0.05$). However, due to the large sample sizes in clusters (Cluster 1: $n = 57$; Cluster 2: $n = 80$; Cluster 3: $n = 54$; Cluster 4: $n = 51$), the Central Limit Theorem justifies the use of ANOVA as the sampling distribution of the means’ approximated normality [49,50]. Also, the assumption of homogeneity of variances was evaluated using Levene’s test. For most variables, the test indicated no significant differences in variances across clusters ($p > 0.05$). However, for a few variables, including

online review sources ($p = 0.000$), attention to amenities ($p = 0.002$) and gender ($p = 0.000$), the variances were significantly different. For these variables, Welch's ANOVA was used to ensure the robustness of the analysis. The Welch ANOVA results confirmed statistically significant differences across clusters for all analyzed variables with unequal variances, including differences in online review sources ($p = 0.000$), attention to amenities ($p = 0.003$), gender between clusters ($p = 0.000$), suggesting that this factor varies meaningfully across consumer segments.

Table 5. Results of the one-way analysis of variance.

	ANOVA		Error		F	Sig.
	Cluster	df	Mean Square	df		
Online review sources	30,112	3	0.754	238	39,951	0.000
Trust level in online reviews	3759	3	0.401	238	9384	0.000
Frequency of accommodation choices based on online reviews	12,816	3	0.578	238	22,163	0.000
Acceptable rating score	11,421	3	0.700	238	16,317	0.000
Gender	3891	3	0.200	238	19,502	0.000
Age range	74,964	3	1005	238	74,606	0.000
Highest level of education	11,889	3	0.748	238	15,889	0.000
Occupation	7504	3	0.508	238	14,773	0.000
Influence of negative reviews	59,976	3	0.467	238	128,554	0.000
Influence of positive reviews	22,877	3	0.569	238	40,240	0.000
Influence of recent reviews	22,382	3	0.754	238	29,679	0.000
Attention to cleanliness	4557	3	0.360	238	12,647	0.000
Attention to staff	2211	3	0.626	238	3535	0.015
Attention to amenities	17,053	3	0.468	238	36,400	0.000
Attention to location	19,417	3	0.572	238	33,956	0.000
Attention to price/quality ratio	5591	3	0.523	238	10,694	0.000
Attention to comfort	13,057	3	0.499	238	26,152	0.000
Accommodation vs. online reviews perception	1622	3	0.470	238	3453	0.017
Travel frequency in the past 12 months	3827	3	0.854	238	4482	0.004

According to the ANOVA results, all analysed variables have a significance level greater than 0.05.

For significant ANOVA results, Tukey's HSD post hoc tests were performed to identify specific pairwise differences between clusters. These tests allowed for rigorous comparisons while controlling for Type I errors. The post hoc analysis revealed significant differences in behaviors and demographic attributes across consumer clusters. Clusters 3 and 4 demonstrated greater reliance on online review sources compared to Clusters 1 and 2. Gender distribution was notably distinct in Cluster 3 compared to the other clusters. Additionally, Cluster 3 exhibited lower attention to amenities than Clusters 1 and 2. Cluster 4 was found to be less influenced by negative reviews compared to Clusters 1 and 2. While age differences were pronounced across clusters, there was little variability in the influence of positive reviews or travel frequency.

A correlation analysis revealed that the majority of variables exhibit low to moderate correlations, confirming that they capture distinct aspects of consumer behavior. Higher correlations, such as between attention to facilities and comfort (Cluster 4, $r = 0.556$, $p < 0.01$), suggest thematic groupings rather than redundancy, further validating the selection of variables used in the clustering model.

5. Discussion

This research elucidates the nuanced nature of consumer perceptions toward online accommodation reviews in the hospitality sector, underscoring the critical role these reviews play in influencing booking decisions. Employing rigorous cluster analysis, four distinct

consumer segments were identified with varying levels of trust and responsiveness: Young Risk-Averse Planners, Trust-Oriented Quality Seekers, Skeptical Detail Seekers and Independent Value Seekers. Each segment exhibits unique characteristics regarding trust levels and responsiveness to online reviews, revealing that consumers are not homogeneous but shaped by various psychological and contextual factors. Considering these two characteristics, the following conclusions were drawn:

- Cluster 1 Young Risk-Averse Planners exhibit moderate trust in online reviews and high sensitivity to negative reviews
- Cluster 2 Trust-Oriented Quality Seekers stand out for their high level of trust in online reviews and their decisions are influenced by both positive and negative feedback.
- Cluster 3 Skeptical Detail Seekers exhibit the highest trust in online reviews among all clusters being sensitive to negative feedback highlights.
- Cluster 4 Independent Value Seekers display lower trust in online reviews and exhibit moderate sensitivity to reviews.

Young Risk-Averse Planners rely heavily on online reviews to avoid negative experiences. In contrast, Trust-Oriented Quality Seekers place high trust in reviews, focusing strongly on quality and value. Meanwhile, Skeptical Detail Seekers are highly analytical, preferring detailed and recent reviews to guide their decisions. Finally, Independent Value Seekers are less dependent on reviews, prioritizing general value and comfort in their accommodation choices.

Young Risk-Averse Planners prefer positive and recent reviews and show a moderate level of trust in online reviews. They rely heavily on reviews, especially negative ones, to minimize risks. This behavior aligns with Xie et al. [7], who found that negative reviews have a strong impact on consumer decisions. Key factors like cleanliness, comfort, and price/quality ratio are crucial for this group, reinforcing Browning et al.'s [47] findings that perceived credibility and quality significantly influence consumer trust. Additionally, the usefulness and relevance of recent information play a vital role in their decision-making process.

Trust-Oriented Quality Seekers have a high level of trust in online reviews and rely on both positive and negative feedback to make informed decisions. They prefer detailed and recent reviews, reflecting Zhao et al.'s [37] findings that recency enhances trust and increases booking intentions. This cluster places significant emphasis on service quality, particularly in areas like staff behavior and location, which aligns with Hu and Yang [51], who highlighted the importance of service excellence in attracting quality-focused consumers. Their decision-making is influenced by the expertise conveyed in detailed reviews, the valence of both positive and negative feedback, and the perceived value of critical aspects such as cleanliness and location.

Skeptical Detail Seekers are highly analytical, placing a strong emphasis on recent and comprehensive reviews. Their behavior aligns with the Critical Evaluators described by Xie et al. [7], who seek detailed information to minimize risks. This group's heightened sensitivity to negative reviews underscores the importance of businesses maintaining transparency and promptly addressing customer concerns. Their focus on factors like cleanliness and staff behavior is consistent with Fang et al. [29], who found that detailed reviews and rich media significantly improve perceptions of quality. This segment demonstrates the highest level of trust in online reviews among all clusters. Their decision-making is influenced by the valence of negative reviews, the recency of information, and the complexity of reviews, which collectively help them make well-informed, risk-averse choices.

Independent Value Seekers place less emphasis on online reviews, focusing instead on overall value and comfort. While they partially align with Hu and Yang [51] findings, but they adopt a more balanced approach. Their moderate reliance on reviews highlights the need for hospitality managers to focus on promoting value-oriented offerings in their marketing strategies. This cluster moderately considers positive and recent reviews but shows lower trust in online feedback. Their decisions are driven by factors such as perceived

value, emphasizing comfort and price/quality ratio, with minimal sensitivity to the valence of reviews.

6. Conclusions and Implications

The exploration of online reviews and their influence on accommodation booking decisions reveals insights into consumer minds in the hospitality sector. This study highlights the significance of various factors that collectively inform how consumers perceive and select accommodations, fulfilling the identified research gap from the bibliometrical review section. The bibliometric analysis conducted to identify research gaps in the research represents a key strength of this study. This approach provided a systematic and in-depth examination of the existing literature, the critical contributions of key authors, and under-explored areas within the field. The identified trends highlight the enduring relevance of foundational works, the growing prominence of technology-driven research, and the need for continuous innovation to maintain relevance in the rapidly evolving field of consumer behavior in hospitality. Also, the bibliometric analysis highlights a significant research gap in the understanding of the complex dynamics of consumer behavior concerning online accommodation reviews. Specifically, there is a need for a comprehensive client profiling approach that integrates multiple influencing factors.

This research addresses the identified gap by achieving the objectives set forth in the study. The study explored the significance of online accommodation reviews in shaping consumer decision-making, identifies and profiles distinct consumer segments based on their levels of trust and responsiveness to online reviews, and provides actionable insights for hotel managers and marketers. The research offers a comprehensive understanding of the dynamics underlying this decision-making process. These findings contribute valuable knowledge to both academic and practical domains, enabling better-informed strategies in the hospitality industry.

6.1. Theoretical Implications

The findings of this study make significant contributions to the existing literature on consumer behavior in the context of online accommodation reviews. By identifying and profiling four distinct consumer segments—Young Risk-Averse Planners, Trust-Oriented Quality Seekers, Skeptical Detail Seekers, and Independent Value Seekers—this research addresses a notable gap in the current understanding of how various factors, including trust and review characteristics, influence consumer decision-making processes.

Also, this study advances the state of the art by highlighting the importance of segmentation-based approaches to consumer behavior analysis, offering detailed insights into how demographic, psychological, and situational factors shape responses to online reviews.

The results of this study have significant implications for the theoretical understanding of consumer behavior in the context of online reviews. By employing a segmentation approach grounded in established psychological theories, particularly the Elaboration Likelihood Model [52], we demonstrate that consumer engagement with online reviews is influenced by the content of the reviews but also by the individual's predispositions.

The study extends the theoretical discourse on consumer trust by highlighting that trust is a multifaceted construct influenced by demographic factors, psychological traits, and situational contexts, as supported by Beldad et al. [53]. They assert that understanding these factors is essential for comprehending consumer trust in online environments. By segmenting consumers into distinct profiles, this research provides a robust framework for understanding the motivations behind consumer trust and skepticism within the hospitality industry. Such a nuanced understanding is vital for future research aimed at exploring the antecedents and consequences of consumer trust in online environments.

6.2. Managerial Implications

The implications for practice derived from this research suggest tailored strategies for addressing the needs of each consumer segment. This study emphasizes the practical implications of consumer profiling for promoting sustainable tourism practices. By linking distinct consumer segments to tailored strategies, this research provides actionable guidance for hospitality managers seeking to enhance consumer satisfaction, improve service delivery, and foster long-term economic sustainability. Addressing the needs of these segments enhances customer experiences and also supports sustainability goals by optimizing resource allocation, reducing waste (wasted opportunities, time, or effort in delivering services that do not align with customer needs or preferences), and driving repeat business through positive word-of-mouth.

6.2.1. Young Risk-Averse Planners

This segment, composed predominantly of younger individuals, relies heavily on online reviews to avoid potential risks. Negative reviews significantly influence their decision-making, highlighting the importance of maintaining a strong online reputation. Managers should focus on promptly addressing negative feedback, demonstrating transparency and a commitment to improvement. Positive reviews emphasizing cleanliness, comfort, and value for money should be prominently displayed, as these factors are critical to this group. Additionally, encouraging satisfied guests to leave recent reviews can help build trust and reassure potential customers.

To optimize resource allocation for Cluster 1 Young Risk-Averse Planners, hospitality managers should focus on creating recent, credible, and positive reviews while enhancing key factors such as cleanliness, comfort, and value for money. Resources should also be allocated to promptly addressing negative feedback, which is critical for maintaining the trust of this risk-averse segment. Reducing waste involves avoiding overinvestment in amenities that this group deems less critical and minimizing unnecessary promotional materials. Targeted marketing efforts that emphasize trust-building elements will help avoid resource misallocation. To drive repeat business through positive word-of-mouth, managers must build trust by emphasizing practical aspects like cleanliness and comfort, transparently addressing potential risks, and meeting their expectations for quality. Satisfying this group's needs can foster loyalty and generate favorable recommendations.

6.2.2. Trust-Oriented Quality Seekers

This group exhibits high trust in online reviews and seeks high-quality accommodations. Managers should prioritize maintaining high service standards, particularly in areas like cleanliness, staff behavior, and location, which are crucial to this segment. Highlighting recent, detailed positive reviews will reinforce their trust and enhance booking intentions. Loyalty programs and personalized experiences can further appeal to this group, fostering long-term relationships and repeat bookings.

Optimizing resource allocation for Cluster 2 Trust-Oriented Quality Seekers involves maintaining consistent high-quality service standards and focusing on factors such as cleanliness, staff behavior, and location. Highlighting detailed and recent reviews is essential, along with offering personalized services and loyalty programs to strengthen their relationship with the brand. Reducing waste can be achieved by avoiding redundant or unnecessary services that do not align with their high expectations and by ensuring only relevant information is communicated through targeted channels. To drive repeat business, managers should prioritize loyalty incentives and personalized experiences. Consistently meeting or exceeding their quality expectations will encourage repeat visits and foster positive word-of-mouth.

6.2.3. Skeptical Detail Seekers

Skeptical Detail Seekers are highly analytical and place significant importance on recent and comprehensive reviews. To cater to this segment, managers should ensure the

availability of detailed and up-to-date information about their accommodation. Negative feedback should be addressed thoroughly, with specific solutions and improvements clearly communicated. The use of rich media, such as images and videos, can provide a more tangible sense of quality, further reassuring this group. Regularly updating review platforms with recent feedback will also enhance their perception of reliability.

For Cluster 3 Skeptical Detail Seekers, optimizing resource allocation requires providing comprehensive, up-to-date, and detailed information about services. Resources should be focused on maintaining high standards in core areas like cleanliness and staff behavior, as these are critical for this analytical group. Reducing waste involves avoiding expenditures on secondary factors such as amenities and location, which are less relevant to their decision-making process. Operations can be streamlined to prioritize areas of high perceived importance. To drive repeat business through positive word-of-mouth, managers should transparently address concerns with clear and detailed resolutions. This group values reliability and transparency, and exceeding their analytical expectations can help build a strong reputation and encourage repeat bookings.

6.2.4. Independent Value Seekers

This segment values general comfort and affordability over detailed review content. Managers should emphasize value-for-money propositions in their marketing efforts, highlighting key features like comfortable accommodation and competitive pricing. While this group is less dependent on reviews, concise and straightforward positive feedback can still provide reassurance. Promotions such as package deals or discounts may further appeal to their price-conscious nature, encouraging bookings.

To optimize resource allocation for Cluster 4 Independent Value Seekers, managers should emphasize affordability and value-for-money options in promotions, highlighting competitive pricing and package deals. Limited resources should be spent on secondary factors like staff and amenities, which are of lower priority for this segment. Reducing waste can be achieved by avoiding unnecessary upgrades or luxury features that are less likely to appeal to them and limiting excessive offerings that do not align with their cost-conscious preferences. Driving repeat business requires reinforcing the value of their experience through concise, positive feedback and consistently delivering on their practical needs for cleanliness, comfort, and affordability. Promoting cost-effective offerings and ensuring a balance of affordability and comfort will attract repeat visits and generate favorable word-of-mouth recommendations.

7. Limitation and Future Directions of Research

While this study provides valuable insights into consumer behavior in the context of online accommodation reviews, several limitations must be acknowledged. The reliance on a non-probability convenience sampling method raises questions about the generalizability of the findings across different geographical and cultural contexts [48]. Future research should aim for more robust sampling techniques, including stratified random sampling, to enhance the representativeness of the findings.

All respondents were Romanian residents, with survey distribution targeting a broad geographical spread across urban and rural areas. While the study does not analyze regional differences explicitly, the diversity in respondent demographics (age, education, and occupation) suggests a reasonably representative sample of Romanian consumers engaging with online accommodation reviews. Expanding the study to include participants from multiple countries or regions would enhance the external validity of the findings and allow for a more comprehensive understanding of how cultural factors influence consumer behavior. For instance, variables such as trust in online reviews or preferences for detailed feedback might vary based on cultural norms or technological adoption rates in different parts of the world. To adapt the research framework to global perspectives, future studies could also incorporate cross-cultural comparisons to explore how consumer behavior varies between collectivist and individualist societies, or between regions with

differing levels of technological infrastructure. These insights would not only validate the findings on a broader scale but also offer nuanced implications for international hospitality marketing strategies.

Additionally, the analysis did not incorporate certain relevant variables, such as the reputation of review platforms, which could have offered a deeper understanding of the factors influencing consumer perceptions. Future studies could also examine the interplay between review platform reputation and other key variables, such as demographic traits, review valence, and the influence of visual content, to uncover more nuanced patterns of consumer behavior.

Another of the key limitations lies in the absence of an explicit integration of established theoretical frameworks such as the Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM). While these theories were not the primary focus of this empirical study, they offer significant potential for exploring the psychological and technological dimensions of consumer trust and decision-making processes. Future studies could build upon the findings of this research by incorporating TPB and TAM to examine how attitudes, subjective norms, perceived behavioral control, perceived usefulness, and ease of use influence consumer engagement with online reviews. This would provide a deeper theoretical understanding of the behavioral drivers behind the consumer segments identified in this study. Additionally, such an approach could offer a robust framework for linking psychological and technological factors to consumer profiling, thereby complementing the data-driven insights presented here.

Moreover, the study relies exclusively on quantitative methods, which limits the depth of understanding regarding consumer motivations and behaviors. Complementing the research with qualitative methods, such as interviews or focus groups, could have provided a more nuanced and comprehensive analysis.

Finally, the cross-sectional design of this study limits the ability to draw conclusions about causal relationships between consumer perceptions and booking intentions. Longitudinal research designs, as suggested by Zhang et al. [54], could provide deeper insights into how consumer perceptions evolve over time in response to changing review dynamics and marketing strategies. This approach would allow researchers to track shifts in consumer behavior and their implications for hospitality management.

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Appendix A. Development of the Questionnaire That Considered Both the Characteristics of Online Reviews and the Factors Influencing Their Evaluation

Variable	Question	Response Options and Codifications	Online Review Characteristics	Factors Influencing Online Reviews
Online review sources	What online reviews do you usually start with when analyzing an accommodation unit?	1.00 = "negative reviews" 2.00 = "positive reviews" 3.00 = "recent reviews" 4.00 = "read in random order"	Recency Consumers prioritize recent reviews for relevance and reliability	Type of Reviews (Valence) Recent reviews, whether positive or negative, have a stronger impact on consumer decisions, especially in a landscape filled with both types of feedback.
Trust level in online reviews	Please rate your level of trust in online reviews	1.00 = "no trust" 5.00 = "full trust"	Expertise Trust is influenced by the perceived expertise of the reviewer. Established reviewers or influencers are seen as more trustworthy.	Trust Trust is a key factor that influences booking decisions, especially in the context of perceived risks. The credibility of the review source, such as third-party sites, can significantly affect consumer confidence.
Frequency of accommodation choices based on online reviews	In the past 12 months, how often did you choose accommodation based on online reviews?	1.00 = "Never" 5.00 = "Always"	Usefulness Reviews that are deemed helpful and informative are critical in guiding consumer decisions, especially when reviews are numerous.	Price Consumers are more likely to book accommodation that has at least one online review, regardless of its valence. Positive reviews can allow businesses to charge higher prices.
Acceptable rating score	What rating score do you consider acceptable for you?	1.00 = "Very poor 1–3" 2.00 = "Poor 3+" 3.00 = "Acceptable 5+" 4.00 = "Pleasant 6+" 5.00 = "Good 7+" 6.00 = "Very good 8+" 7.00 = "Excellent 9+"	Valence Consumers often focus on the valence of reviews (positive or negative) when assessing accommodation options. Negative reviews highlight weaknesses, while positive reviews focus on strengths.	Star Ratings Higher rating scores often correlate with higher prices and expectations of better service. Reviews for high-star properties can influence whether consumers feel the price is justified based on the service provided.
Gender		1.00 = "Male" 2.00 = "Female"	Complexity Female consumers may prioritize the tone and sentiment of reviews over the sheer number of reviews.	Brand Recognition Gender may influence consumer trust in the brand.

Variable	Question	Response Options and Codifications	Online Review Characteristics	Factors Influencing Online Reviews
Age range		1.00 = "16–24 years" 2.00 = "25–34 years" 3.00 = "35–44 years" 4.00 = "45–54 years" 5.00 = "55–64 years" 6.00 = "65 years and older"	Volume Age can influence the importance placed on the quantity of reviews. Younger consumers may be more focused on the tone, while older consumers may look for detailed information in a larger volume of reviews.	Price Age-related factors influence the attention paid to the volume and price of accommodations. Older consumers might focus more on the cost, while younger consumers might pay more attention to the overall content and tone of reviews.
Highest level of education		1.00 = "Primary" 2.00 = "Secondary" 3.00 = "High school" 4.00 = "Post-secondary" 5.00 = "Higher education"	Complexity Consumers with higher education levels may value detailed, complex reviews that offer thorough insights into the accommodation's features.	Trust Educated consumers may also place more trust in detailed, informative reviews, as they prefer comprehensive insights to make well-informed decisions.
Occupation		1.00 = "Student" 2.00 = "Employee (public/private sector)" 3.00 = "Freelancer" 4.00 = "Retired" 5.00 = "Unemployed"	Volume and Expertise Occupation can influence whether consumers prioritize the volume of reviews or the expertise of the reviewer. Those with more experience (e.g., employees or freelancers) may look for detailed insights.	Management Responses Occupation might impact how consumers view the response from hotel managers to negative reviews. Consumers who are employees or freelancers may appreciate proactive and professional responses to concerns.
Influence of negative reviews	To what extent do the following types of reviews influence your purchase decision? [negative]	1.00 = "Does not influence me" 2.00 = "Slightly influences me" 3.00 = "Neither influences nor not influences me" 4.00 = "Greatly influences me" 5.00 = "Strongly influences me"	Valence Negative reviews often have a stronger impact on consumers as they highlight potential risks or problems, especially in the context of accommodation.	Type of Reviews (Valence) Negative reviews are especially influential, discouraging bookings and highlighting issues with cost vs. experience. These reviews can lead to a mismatch in expectations and affect overall consumer perceptions.
Influence of positive reviews	To what extent do the following types of reviews influence your purchase decision? [positive]	1.00 = "Does not influence me" 2.00 = "Slightly influences me" 3.00 = "Neither influences nor not influences me" 4.00 = "Greatly influences me" 5.00 = "Strongly influences me"	Valence Positive reviews are highly influential when they highlight strengths and positive experiences, influencing consumer decisions towards booking.	Type of Reviews (Valence) Positive reviews are more effective for encouraging bookings, especially if they focus on critical attributes such as location and amenities. Positive reviews help to increase trust in the accommodation.

Variable	Question	Response Options and Codifications	Online Review Characteristics	Factors Influencing Online Reviews
Influence of recent reviews	To what extent do the following types of reviews influence your purchase decision? [recent]	1.00 = "Does not influence me" 2.00 = "Slightly influences me" 3.00 = "Neither influences nor not influences me" 4.00 = "Greatly influences me" 5.00 = "Strongly influences me"	Recency Recent reviews are prioritized for their relevance, as they provide the most up-to-date information regarding the accommodation's condition and services.	Trust The timeliness of reviews is vital. Recent reviews are seen as more relevant and trustworthy, influencing decision-making significantly.
Attention to cleanliness	Please rate the following aspects based on the attention you give them when analyzing online reviews during your decision-making process for selecting an accommodation unit: [cleanliness]	1.00 = "Not important at all" 5.00 = "Absolutely essential"	Complexity Detailed reviews on cleanliness help consumers make more informed decisions, as cleanliness is a key factor in selecting accommodations.	Management Responses How cleanliness issues are addressed in reviews and the responses to such complaints can affect consumer perceptions. Prompt responses show the business cares about maintaining cleanliness.
Attention to staff	Please rate the following aspects based on the attention you give them when analyzing online reviews during your decision-making process for selecting an accommodation unit: [staff]	1.00 = "Not important at all" 5.00 = "Absolutely essential"	Complexity Reviews that provide detailed feedback on staff behavior and quality are valued, as they impact the overall accommodation experience.	Management Responses Proactive management responses to staff-related complaints can improve perceptions, showing a commitment to guest satisfaction.
Attention to amenities	Please rate the following aspects based on the attention you give them when analyzing online reviews during your decision-making process for selecting an accommodation unit: [amenities]	1.00 = "Not important at all" 5.00 = "Absolutely essential"	Complexity Reviews that provide detailed descriptions of amenities are crucial for consumers in making decisions about the value and quality of the accommodation.	Price Detailed reviews on amenities help consumers assess the overall value of the accommodation, especially in terms of whether the amenities justify the price paid.
Attention to location	Please rate the following aspects based on the attention you give them when analyzing online reviews during your decision-making process for selecting an accommodation unit: [location]	1.00 = "Not important at all" 5.00 = "Absolutely essential"	Complexity Location details in reviews are important for consumers who prioritize convenience and proximity to key attractions.	Price Location feedback can influence how consumers assess whether higher prices are justified by convenience or access to attractions.

Variable	Question	Response Options and Codifications	Online Review Characteristics	Factors Influencing Online Reviews
Attention to price/quality ratio	Please rate the following aspects based on the attention you give them when analyzing online reviews during your decision-making process for selecting an accommodation unit: [price/quality ratio]	1.00 = "Not important at all" 5.00 = "Absolutely essential"	Complexity Consumers look for detailed feedback on price-quality balance, helping them assess whether the accommodation offers good value for money.	Price Reviews focusing on the price-quality ratio can help consumers determine if the cost is justified based on the value.
Attention to comfort	Please rate the following aspects based on the attention you give them when analyzing online reviews during your decision-making process for selecting an accommodation unit: [comfort]	1.00 = "Not important at all" 5.00 = "Absolutely essential"	Complexity Reviews that provide detailed insights into comfort, such as bed quality and room conditions, are essential for consumers in their decision-making process.	Star Ratings Comfort-focused reviews may influence perceptions more significantly for higher-star accommodations, where comfort expectations are higher.
Accommodation vs. online reviews perception	Please evaluate the following statement: "In general, the accommodation matched the opinion I formed after reading the online reviews."	1.00 = "Strongly disagree" 5.00 = "Strongly agree"	Usefulness Consumers' satisfaction is often influenced by the usefulness of reviews in forming expectations about the accommodation.	Trust Reviews that align with actual experiences can reinforce trust and influence repeat bookings or recommendations.
Travel frequency in the past 12 months	How often have you traveled in the past 12 months?	1.00 = "I have not traveled" 2.00 = "Once or twice" 3.00 = "3–5 times" 4.00 = "6–8 times" 5.00 = "More than 8 times"	Volume Frequent travelers may place more importance on the quantity and diversity of reviews to ensure broad and reliable insights.	Type of Reviews (Valence) Travelers may prioritize recent or detailed reviews during frequent travels to avoid inconsistent experiences.

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