



Decoding hotel brand loyalty in the digital era: A multidimensional analysis of online feedback, service quality, and customer engagement in western Thailand

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Abstract

The study aims to elucidate the impact of online guest feedback on hotel selection in Western Thailand. Its objective is to increase understanding of how internet users' reviews influence satisfaction, engagement, and loyalty in the luxury hotel sector. Based on a comprehensive literature review, the research examines key factors affecting online guest reviews: guest feedback, hotel management response, and customer decision-making processes. These factors, in turn, impact levels of service quality, customer satisfaction, and engagement in the hotel and tourism industry in Western Thailand. The practical problem arises when there is a decline in customer engagement and loyalty. Hotel management particularly faces challenges in addressing negative comments in the online market. The quantitative method tested the validity of measurements and the correlation of constructs through GSCAM and NCA tools. Four hundred and three respondents participated in the survey, primarily associated with the hotel and tourism profession. The results demonstrate that the customer's decision-making process and guest online feedback have the most significant impact on overall service quality, which in turn influences customer satisfaction and engagement behaviors. The study's implications are to foster luxury hotel management and sustainable tourism by effectively managing online reviews in developing regions. Limitations and suggestions for future research are also discussed to contribute to an overall understanding of existing and future hospitality studies.

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Introduction

In the current digital era, the internet has become a crucial source of information, significantly influencing consumer decision-making across various industries, particularly in the hotel and tourism sectors (Vo et al., 2019a; Vo et al., 2019b). The rapid growth of information technology has compelled most hotel businesses to adapt by developing their own websites and collaborating with online travel agencies (OTAs) as effective tools for sales and marketing. Online reviews from previous guests have emerged as a critical factor influencing tourists' decisions to choose hotel services. Korfiatis et al. (2012) found that reading reviews greatly impacts decision-making, while Malik and Hussain (2018) highlighted that the content of reviews is highly effective for information seekers.

Previous studies have confirmed the importance of online reviews in consumer decision-making processes. Erkan and Evans (2016) found that electronic word-of-mouth (e-WOM) on social media significantly influences consumers' purchase intentions. Furthermore, Ukpabi and Karjaluoto (2017) noted that user reviews on OTA websites have a substantial impact on consumer behavior. This is consistent with Sparks et al. (2016), who affirmed that consumers actively engage with online reviews when evaluating hotels. However, Ahmad and Sun (2018) cautioned that unreliable reviews can undermine consumer trust.

The response of hotel management to online feedback plays a crucial role in guests' decision-making processes. Sparks et al. (2016) demonstrated that management responses can mitigate the risk of readers misinterpreting negative feedback, particularly in cases where negative comments are made. Li et al. (2017) found that the frequency, promptness, and length of responses influence the quality of interactions with customers, reflecting the complexity of communication between hotels and guests in the digital era.

The western region of Thailand is a significant tourist destination, with a diverse range of hotels and accommodations. Understanding the factors that influence guests' decisions to choose hotel services based on online information in this specific regional context is therefore essential. This study aims to develop and test an integrated model that explains the interaction between online customer feedback, hotel management responses, decision-making processes, service quality, customer satisfaction, and customer engagement behaviors, which ultimately impact hotel brand loyalty and sustainable tourism in the western region of Thailand. The study

employs quantitative analysis and Necessary Condition Analysis (NCA) to identify key factors and necessary conditions for enhancing the sustainability of the hotel and tourism industry in the digital age.

This research is expected to provide valuable insights for hotel operators in the western region of Thailand, aiding in a deeper understanding of online consumer behavior. The findings will help operators to develop effective digital marketing strategies, increase customer satisfaction, promote engagement, and build long-term brand loyalty. Additionally, the study will benefit academics and policymakers by offering insights into consumer behavior trends in the digital era, leading to the sustainable development of the tourism and hotel industry in the western region of Thailand.

Literature Review

This literature review examines relevant theories and research to inform the study of hotel selection decisions by guests in the western region of Thailand based on online information.

Guest Online Feedback (GOF)

Online reviews have a significant influence on hotel selection decisions, particularly in the western region of Thailand. Casaló et al. (2015) presented empirical evidence supporting the credibility of online reviews, which aligns with the current study's finding that guest online feedback (GOF) has a positive impact on the perception of overall service quality (OSQ). Mauri and Minazzi (2013) demonstrated a positive relationship between online reviews and service quality and customer satisfaction, while Fuentes (2016) found that customers are willing to pay more for services that receive positive reviews. However, Li et al. (2017) emphasized the negative impact of unfavourable reviews on a hotel's reputation and booking decisions. Casaló et al. (2015) showed that hotels with high rankings in reputable online communities tend to receive more bookings. The current study confirms the importance of GOF, identifying it as a necessary condition for hotel brand loyalty and sustainable tourism (HBST). Although social media is a key communication channel, Li et al. (2017) warned of the severe consequences of negative reviews. Effective management of online reviews is therefore crucial for hotel operators in the western region.

Hotel Management Response (HMR)

The response of hotel management to online feedback plays a crucial role in the decision-making process of guests. Sparks et al. (2016) provided evidence that management responses can mitigate the risk of misinterpreting negative feedback, particularly when dealing with negative comments. Li et al. (2017) found that the frequency, promptness, and length of management responses significantly affect the quality of interactions with customers, reflecting the complexity of communication between hotels and guests in the digital era. For hotel operators in the western region of Thailand, Kim and Busser (2018) recommend monitoring online discussions and real-time reviews across multiple platforms to maintain their reputation and respond promptly to customer needs. Effectively managing online reviews, both positive and negative, is therefore a crucial strategy for hotel operators in the western region. Such efforts not only enhance credibility but also attract new customers through online channels. In an era where digital communication is paramount, timely and appropriate responses to customer feedback are key factors in gaining a competitive advantage in the hotel industry (Kim & Busser, 2018; Li et al., 2017; Sparks et al., 2016).

Decision-Making Process (DMP)

The decision-making process for selecting hotel services is a complex phenomenon, influenced by both internal and external factors. The development of internet technology has significantly transformed how consumers choose and book hotels, particularly in the western region of Thailand. Numerous studies have demonstrated a positive relationship between online reviews and booking decisions (Chan et al., 2017; Mauri & Minazzi, 2013). Additionally, electronic word-of-mouth (e-WOM) communication is widely recognized as an effective tool for attracting new customers (Reimer & Benkenstein, 2018). However, there is a caution that consumers are often more influenced by negative information in the early stages of decision-making, which can impact their choice of services. In contrast, online reviews from reputable travel communities tend to increase booking intentions (Casaló et al., 2015). For hotel operators in the western region of Thailand, understanding the decision-making process of consumers and the influence of online information is crucial for developing effective marketing and service strategies. The key challenge lies in managing both positive and negative reviews

effectively to build a strong reputation and attract new customers while balancing the benefits of e-WOM with the potential negative impacts of unfavourable reviews.

Overview of Service Quality and Customer Satisfaction

The relationship between service quality and customer satisfaction in the service sector has garnered extensive attention from researchers worldwide. Numerous factors have been found to influence customer satisfaction and loyalty (Rianthong et al., 2016). Online reviews and management responses play a crucial role in shaping customer expectations and decisions (Li et al., 2017; Mauri & Minazzi, 2013). Moreover, service quality is a fundamental determinant of hotel performance (Rianthong et al., 2016; Zhao et al., 2018). Perceived service quality forms the basis for overall quality perception and customer behavior prediction. When service quality aligns with customer satisfaction, customers are more likely to rely on online reviews and recommend the hotel to others (Berezina et al., 2016; Mauri & Minazzi, 2013). The impact of online customer ratings on hotel performance is significant, with a mere 1 percent increase in ratings potentially leading to a substantial increase in sales (Ogut & Tas, 2012). Therefore, hotels must prioritize service quality and customer satisfaction in their operational strategies to maintain competitiveness and sustainability in the market.

Customer Engagement Behaviors (CEB)

Customer Engagement Behaviors (CEBs) play a crucial role in decision-making processes for hotel services in the digital age. Zhao et al. (2018) define CEBs as behaviors that extend beyond transactional interactions, focusing on brand or company engagement. In the context of the hotel industry, online reviews are a key form of CEBs that significantly influence other consumers' decision-making (Li et al., 2017). Key factors influencing repeat purchases in the online context include trust, perceived ease of use, perceived benefits, and satisfaction, all of which are reflected in online reviews and impact consumer decisions. Moreover, service quality is directly related to the generation of positive or negative reviews, which in turn affect the decisions of those seeking information. Service recovery measures, such as refunds, can positively impact satisfaction and CEBs. However, failure to address customer dissatisfaction may lead to customer attrition to competitors. Therefore, when studying the factors influencing hotel selection decisions

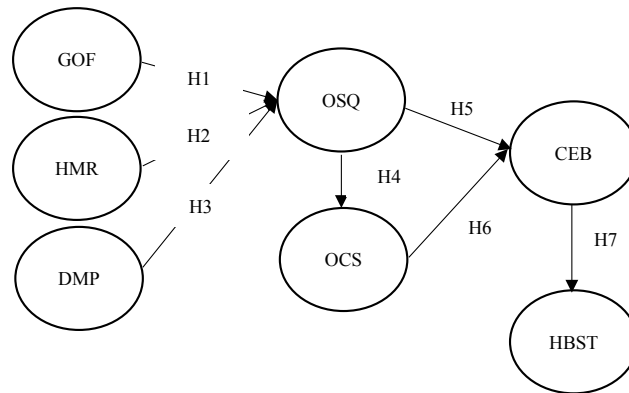


Figure 1 Conceptual framework

based on online information, it is essential to consider the influence of CEBs, particularly online reviews, on consumer perceptions and decision-making. This should include an analysis of the factors affecting hotel choice in the online context, which, based on the aforementioned literature review, can be formulated into the following hypotheses for study (Figure 1).

- H1: GOF is related to anticipated OSQ
- H2: HMR is related to anticipated OSQ
- H3: DMP is related to anticipated OSQ
- H4: OSQ is related to anticipated OCS
- H5: OSQ is related to anticipated CEB
- H6: OCS is related to anticipated CEB
- H7: CEB is related to anticipated HBST

Methodology

Measurement and Data Collection

The present investigation employed a quantitative methodology, utilizing both Structural Equation Modeling (SEM) and Necessary Condition Analysis (NCA). The operationalization of variables was derived from established measurement scales in extant literature (Chan et al., 2017; Fuentes, 2016; Li et al., 2020; Vo et al., 2022). The conceptual framework of this study comprises several constructs, each operationalized through multiple indicators. Guest Online Feedback was assessed using a four-item scale, while Hotel Management Response was measured via a three-item instrument. The Decision-Making Process construct incorporated four items, and both Overall Service Quality and Overall Customer Satisfaction were evaluated using three-item scales. Customer Engagement Behaviors were captured through a five-item measure, and Hotel Brand Loyalty

Sustainability was gauged using a three-item scale. All measurement items underwent contextual adaptation to align with the study's specific focus on factors influencing hotel service decisions among guests in Thailand's western region, based on online information sources.

Data collection was conducted in July 2024, with the assistance of research students who distributed online questionnaire links to the target sample group. A convenience sampling method was employed to select participants who had used hotel services within the past 12 months. A total of 403 responses were collected and subsequently analyzed using statistical methods.

Descriptive data revealed that 52.6 percent of respondents were female, 35.0 percent were male, and 12.4 percent chose not to disclose their gender. The majority of respondents were young adults, with 44.2 percent aged between 16 and 25 years, followed by those aged 26 to 35 years (32.8%), and individuals over 45 years accounted for 10.4 percent. More than 50% of respondents reported using the internet for more than 4 hours per day. The most popular booking channel was online travel agencies (OTAs), utilized by 47.5 percent of respondents, with 42.9 percent having used OTAs 1 to 3 times. Additionally, the findings indicated that the majority of respondents were students (38.0%) and had a monthly income of less than or equal to 12,000 THB (34.2%).

Table 1 presents the results of the measurement model assessment, including component loadings (λ_i), estimated weights ($\hat{w}_i$), Dijkstra-Henseler's rho_A, and Average Variance Extracted (AVE) for all constructs: GOF, HMR, DMP, OSQ, OCS, CEB, and HBST. All rho_A values exceeded the 0.7 threshold, confirming internal consistency reliability. AVE values for all constructs surpassed the 0.5 benchmark, demonstrating convergent validity. These results confirm that the measurement

Table 1 Measurement model assessment

Construct	Indicator	AVE	Rho A	w_i	CIw_i	(L/U)	λ_i	$CI\lambda_i$	(L/U)
GOF1	Online feedback is considered trustworthy.	0.532	0.708	0.211	0.158	0.281	0.766	0.763	0.795
GOF2	Negative comments can damage a hotel's reputation as a form of retaliation.			0.453	0.394	0.527	0.784	0.713	0.913
GOF3	Negative reviews have the potential to harm the hotel's reputation.			0.446	0.394	0.5	0.771	0.688	0.843
GOF4	Customers are willing to pay a higher price influenced by online reviews.			0.36	0.311	0.394	0.622	0.525	0.698
HMR1	The hotel regularly responds to guests' online comments.	0.667	0.853	0.398	0.375	0.42	0.796	0.736	0.865
HMR2	The hotel promptly addresses guests' online feedback.			0.431	0.406	0.464	0.863	0.818	0.909
HMR3	The hotel's responses are clear and effectively engage customers.			0.394	0.37	0.419	0.789	0.735	0.849
DMP1	The decision to book a room is influenced by positive online reviews.	0.577	0.841	0.328	0.304	0.347	0.758	0.719	0.809
DMP2	Online rating lists on TripAdvisor are considered more useful and credible.			0.3	0.275	0.324	0.692	0.619	0.776
DMP3	Higher booking intentions are observed on TripAdvisor.			0.341	0.315	0.362	0.786	0.735	0.842
DMP4	Online reviews significantly impact hotel booking intentions.			0.346	0.31	0.379	0.798	0.747	0.852
OSQ1	Evaluating service quality encourages positive online reviews.	0.515	0.721	0.421	0.396	0.536	0.65	0.606	0.758
OSQ2	Customers are willing to pay based on the hotel's star rating.			0.347	0.31	0.443	0.536	0.482	0.626
OSQ3	Individual reviewers tend to be subjective when assessing value, sleep quality, and service.			0.592	0.505	0.622	0.914	0.721	0.935
OCS1	Feel satisfied with guest online reviews.	0.544	0.770	0.436	0.383	0.49	0.711	0.652	0.812
OCS2	Continue relying on online reviews to make booking decisions.			0.452	0.407	0.503	0.737	0.666	0.837
OCS3	Feel pleased with hotel management's responses to online comments.			0.468	0.424	0.506	0.763	0.701	0.844
CEB1	Express dissatisfaction through negative feedback if service quality is unsatisfactory.	0.567	0.86	0.276	0.257	0.291	0.783	0.718	0.844
CEB2	Post positive online reviews if satisfied with service quality.			0.272	0.256	0.291	0.77	0.718	0.814
CEB3	Request a refund if service quality does not meet expectations.			0.227	0.198	0.248	0.643	0.542	0.723
CEB4	Repurchase services based on positive online feedback.			0.248	0.231	0.272	0.702	0.645	0.771
CEB5	Switch to another hotel if experiencing unfair pricing.			0.3	0.274	0.324	0.85	0.807	0.891
HBST1	Be willing to pay a higher price to book a room based on the hotel's star rating.	0.716	0.876	0.413	0.391	0.437	0.887	0.839	0.937
HBST2	Be willing to pay more to book a room based on the hotel's score rating.			0.42	0.392	0.45	0.902	0.861	0.94
HBST3	Plan to book with the hotel again in the future, considering its pricing policy.			0.344	0.327	0.365	0.739	0.684	0.798

Note: w_i = the estimated weight, CIw_i = the 95% confidence interval for the estimated weight, λ_i = the estimated component loading, $CI\lambda_i$ = the 95% confidence interval for the estimated component loading, rho_A = the Dijkstra-Henseler rho_A value, and AVE = the Average Variance Extracted.

model meets acceptable standards for both reliability and validity.

Analytical Procedures

This study followed the methodology of Richter et al. (2020) to conduct a combined analysis using Structural Equation Modeling (SEM) and Necessary Condition Analysis (NCA), similar to the approach taken by Wattanacharoensil et al. (2024). The data were divided into two sets: a training sample comprising 80 percent of the data and a testing sample comprising the remaining 20 percent. Although specific measures were not applied to assess the reliability and validity of the latent variables within the NCA, the study model was evaluated using SEM criteria as previously outlined by Richter et al. (2020).

Component-based SEM was employed in this study due to its ability to create appropriate linear composite scores for subsequent analysis (Chumwichan et al., 2023; Leruksa et al., 2023; Rasmidatta, 2023). Following the recommendations of Hwang et al. (2017), GSCAM was selected as the primary estimator. GSCAM addresses both the common and unique aspects of indicators, similar to how factor-based SEM handles measurement errors. After determining net effects and individual necessary conditions, the analysis revealed distinct conditions that were not previously identified in the SEM analysis. These conditions are necessary and/or sufficient for the occurrence of the outcome (HBST).

Results

Assessment of the Measurement Model and Net Effects

In this study, the GSCAM approach was employed

to assess the measurement model, with the results summarized in Table 1. The validation process confirmed internal consistency by verifying that common reliability estimates, such as Dijkstra-Henseler’s rho_A, exceeded the threshold of 0.7. Convergent validity was affirmed through all component loadings and average variance extracted (AVE) values, both of which were above the 0.5 benchmark (Fakfare et al., 2023; Meeprom & Fakfare, 2023). To further assess discriminant validity, the advanced Heterotrait-Monotrait Ratio (HTMT) criterion was applied, revealing that all measured values were below the recommended cutoff of 0.85, thus confirming discriminant validity. Collinearity was evaluated by examining the Variance Inflation Factor (VIF), with all VIF scores generally below 5 (Fakfare et al., 2020; 2021; Hair et al., 2011), indicating no significant issues. Additionally, the fit measures suggested an acceptable fit with the data (SRMR = 0.06, GFI = 0.979), confirming that the measurement model demonstrated both validity and reliability.

Table 2 presents the results of the path analysis derived from GSCAM. Overall, the results support the hypothesized relationships. The analysis results indicate that Guest Online Feedback (GOF) has a significant positive influence on Overall Service Quality (OSQ), with a path coefficient of 0.231, thereby supporting Hypothesis H1. However, no significant relationship was found between Hotel Management Response (HMR) and OSQ ($\beta = 0.046$), which does not support Hypothesis H2. Additionally, the Decision-Making Process (DMP) was found to have a substantial impact on OSQ ($\beta = 0.622$), supporting Hypothesis H3. Moreover, OSQ significantly affects both Overall Customer Satisfaction (OCS) ($\beta = 0.812$) and Customer Engagement Behaviors (CEB) ($\beta = 0.36$), supporting Hypotheses H4 and H5, respectively. The analysis also reveals that OCS positively influences CEB ($\beta = 0.496$), supporting Hypothesis H6. Finally,

Table 2 Net effect analysis

Construct	Estimate	SE	95% CI	
H1: GOF→OSQ	0.231	0.072	0.1	0.36
H2: HMR→OSQ	0.046	0.054	-0.064	0.159
H3: DMP→OSQ	0.622	0.073	0.504	0.771
H4: OSQ→OCS	0.812	0.035	0.753	0.894
H5: OSQ→CEB	0.36	0.124	0.154	0.672
H6: OCS→CEB	0.496	0.123	0.181	0.696
H7: CEB→HBST	0.764	0.036	0.696	0.83

Note: GOF = Guest Online Feedback, HMR = Hotel Management Response, DMP = Decision-Making Process, OSQ = Overall Service Quality, OCS = Overall Customer Satisfaction, CEB = Customer Engagement Behaviors, HBST = Hotel Brand Loyalty/Sustainable Tourism R-square: GOF = 0.956, HMR =0.987, DMP =0.983, OSQ =0.913, OCS =0.968, CEB =0.967, HBST = 0.989, Bold value = significant

CEB has a significant impact on Hotel Brand Loyalty/Sustainable Tourism (HBST) ($\beta = 0.764$), supporting Hypothesis H7. These findings highlight the critical relationships among various factors in the hotel service context, particularly the pivotal role of Overall Service Quality in driving customer satisfaction and engagement behaviors, which ultimately lead to hotel brand loyalty and sustainable tourism.

Figure 2 presents the confirmed research model, illustrating the structural path relationships among all latent variables. As shown, GOF ($\beta = 0.231$) and DMP ($\beta = 0.6225$) significantly influence OSQ, while HMR did not reach significance ($\beta = 0.046$). OSQ subsequently drives both OCS ($\beta = 0.812$) and CEB ($\beta = 0.360$), with CEB exhibiting the strongest direct effect on HBST ($\beta = 0.764$), confirming the sequential mediation pathway proposed in this study.

NCA Results

In the NCA model, the combined factor scores derived from the GSCAM-SEM were employed, following the methodology proposed by Dul (2016). This approach has been consistently applied in studies related

to recreation and tourism, as demonstrated in the research by Satitsamitpong et al. (2024) and Wattanacharoensil et al. (2024). These references highlight the relevance and effectiveness of this method, reinforcing its applicability in the context of this study.

Table 3 presents the Necessary Condition Analysis (NCA) process, focusing on deepening the understanding of essential factors required for achieving desired outcomes, particularly in the context of identifying necessary conditions for significant results. In this study, six key variables were selected to serve as the foundational framework for constructing the NCA model, each playing a specific role in determining the targeted behavioral outcomes, which in this case is the dependent variable (HBST). These variables include GOF, HMR, DMP, OSQ, OCS, and CEB, and they were analyzed through the creation of NCA graphs to reflect the causal relationships between these variables and the desired outcomes.

The analysis effectively demonstrates the significance of these latent variables as fundamental conditions influencing HBST, presenting a clear and comprehensive summary of the ceiling lines, which define the upper bounds of the necessary conditions for all identified

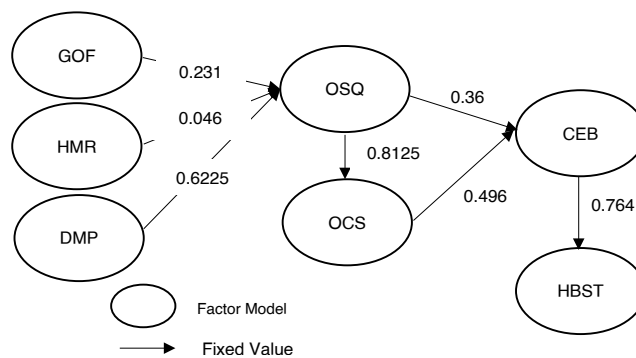


Figure 2 Confirmation of our research model.

Note: GOF = Guest Online Feedback, HMR = Hotel Management Response, DMP = Decision-Making Process, OSQ = Overall Service Quality, OCS = Overall Customer Satisfaction, CEB = Customer Engagement Behaviors, HBST = Hotel Brand Loyalty/Sustainable Tourism

Table 3 Single necessary condition analysis

Outcome HBST	CE-FDH (d)	p-value	Triggered level 80% Outcome	Necessary
GOF	0.665	2.060	32.00%	In kind**
HMR	0.517	2.730	28.50%	In kind**
DMP	0.638	2.010	47.10%	In kind**
OSQ	0.723	1.780	39.00%	In kind**
OCS	0.878	4.210	35.20%	In kind**
CEB	0.788	3.720	34.70%	In kind**

relationships. The research analysis reveals that each determinant variable has a statistically significant effect size of the necessary condition ($d > 0.1$, $p < .05$), consistent with previous research findings (Dul, 2016; Wattanacharoensil et al., 2024). Consequently, all identified determinant variables are considered critical factors that play a significant role in HBST, indicating that all independent variables—GOF, HMR, DMP, OSQ, OCS, and CEB—have a positive relationship with HBST. This suggests that an increase in these independent variables is likely to enhance HBST, with OCS showing the highest effect, followed by CEB, OSQ, GOF, DMP, and HMR, respectively.

These results indicate that all independent variables are considered necessary conditions "In kind" for predicting HBST, aligning with quantitative analyses that show an increase in these variables significantly impacts HBST. These findings will be discussed in detail in the discussion section. Additionally, Figure 2 provides a visual representation of the NCA chart, offering a clear depiction of the interactions among the key latent variables within the model.

Discussion and Implications

The primary objective of this study was to understand the relationships between various factors influencing overall service quality (OSQ) and overall customer satisfaction (OCS) within the hotel industry. The factors examined include Guest Online Feedback (GOF), Hotel Management Response (HMR), Decision-Making Process (DMP), Overall Service Quality (OSQ), Customer Engagement Behaviors (CEB), and Hotel Brand Loyalty/Sustainable Tourism (HBST).

The analysis revealed that the Guest Online Feedback (GOF) model component has a significantly positive influence on the perception of Overall Service Quality (OSQ), which aligns with the established hypotheses (Fuentes, 2016; Li et al., 2020). However, Hotel Management Response (HMR) did not show a significant impact on OSQ, suggesting that customers' perceptions of hotel management responses may not substantially affect their evaluation of overall service quality in this context. In contrast, the Decision-Making Process (DMP) had a strong influence on OSQ, underscoring the importance of decision-making in customers' assessments of service quality (Mauri & Minazzi, 2013).

Further analysis also revealed that OSQ has a significantly positive influence on both Overall Customer Satisfaction (OCS) and Customer Engagement Behavior

(CEB), underscoring the crucial role of service quality in fostering customer satisfaction and engagement (Casaló et al., 2015; Reimer & Benkenstein, 2018). Additionally, OCS was found to positively influence CEB, and CEB, in turn, has a significant impact on Hotel Brand Loyalty and Sustainable Tourism (HBST). This demonstrates that customer engagement behaviors contribute to long-term brand loyalty and support for the brand. This study thus highlights the importance of enhancing customer satisfaction and engagement to promote brand loyalty and sustainable tourism (Casaló et al., 2015; Mauri & Minazzi, 2013).

In the context of hotel services, customer satisfaction (OCS) is often influenced by the perceived overall service quality (OSQ), which aligns with the theory that when consumers receive high-quality service, they are more likely to feel satisfied and inclined to return. Moreover, the perception of service quality is linked to customer engagement behaviors (CEB), indicating that customers who perceive the service they receive as high quality are more likely to engage in behaviors such as posting online reviews or recommending the service to others. These behaviors play a key role in fostering brand loyalty and promoting sustainable tourism (HBST) (Li et al., 2020; Reimer & Benkenstein, 2018).

The relationship between service quality and customer satisfaction is a critical indicator that underscores the importance of guest online feedback (GOF). This study demonstrates that GOF has a significant impact on the perception of overall service quality, allowing consumers to express pride or dissatisfaction when providing feedback online. Although Hotel Management Response (HMR) does not directly affect the perception of service quality in this context, it can help alleviate any feelings of guilt that may arise when customers recognize their role and responsibility in the service process. This finding highlights the complexity of the interaction between customers' emotional responses and their decision-making process when selecting hotel services (Fuentes, 2016).

Further research reveals that the Decision-Making Process (DMP) plays a crucial role in shaping customers' perceived service quality. This aligns with the concept that when customers are involved in a clear and transparent decision-making process, they are more likely to feel confident and perceive service quality more positively. These feelings can lead to increased satisfaction, which ultimately enhances Customer Engagement Behaviors (CEB)—a key factor in fostering brand loyalty and sustainable tourism (Casaló et al., 2015; Mauri & Minazzi, 2013).

Furthermore, in the context of sustainable tourism, fostering customer satisfaction and engagement is crucial, as these factors directly influence brand loyalty (HBST). This study suggests that promoting a sense of pride and awareness of responsibility in the service process can be an effective strategy for encouraging sustainable customer behaviors. By making customers aware of the impact of their actions and involving them in the decision-making process, hotel operators can enhance customer loyalty and support long-term sustainable tourism (Li et al., 2020; Reimer & Benkenstein, 2018).

These studies also emphasize the relationship between service quality and customer satisfaction, which serves as a key indicator of the importance of guest online feedback (GOF). This study reveals that GOF significantly influences the perception of overall service quality, allowing consumers to express either pride or dissatisfaction when providing feedback online. Although Hotel Management Response (HMR) does not directly impact service quality perception in this context, it can help mitigate feelings of guilt that may arise when customers recognize their roles and responsibilities in the service process. This underscores the complexity of the interaction between customers' emotional responses and their decision-making process in choosing hotel services (Fuentes, 2016).

Additionally, for the development of Hotel Brand Loyalty and Sustainable Tourism (HBST), this study identified six necessary conditions: Guest Online Feedback (GOF), Hotel Management Response (HMR), Decision-Making Process (DMP), Overall Service Quality (OSQ), Overall Customer Satisfaction (OCS), and Customer Engagement Behavior (CEB) (Fuentes, 2016; Mauri & Minazzi, 2013; Reimer & Benkenstein, 2018). These findings underscore the complex nature of brand loyalty and sustainable tourism, highlighting the importance of addressing various psychological factors such as perceived service quality, customer satisfaction, and engagement behaviors. To achieve the desired outcomes in terms of brand loyalty, it is crucial that interventions and strategies comprehensively address all these necessary conditions.

Theoretical Implications

This study offers key contributions to both academic research and practical applications in the hospitality sector, particularly in luxury hotels. Academically, it contextualizes the dynamics between Overall Service Quality (OSQ) and Overall Customer Satisfaction (OCS), incorporating variables such as Guest Online Feedback

(GOF), Hotel Management Response (HMR), and Decision-Making Processes (DMP). It further extends the frameworks of Customer Engagement Behavior (CEB) and Hotel Brand Loyalty and Sustainable Tourism (HBST), especially in the context of sustainable tourism. Additionally, by using Necessary Condition Analysis (NCA), the study identifies essential conditions for HBST, enriching the analytical methods available to researchers.

From a practical perspective, the research offers actionable insights for hoteliers and policymakers. It emphasizes managing online feedback to build trust and satisfaction, while also highlighting the importance of improving service quality to foster customer engagement and brand loyalty. The application of NCA helps hotel managers design more precise strategies for promoting loyalty and sustainability. Overall, the findings bridge theoretical insights with practical implications, providing a comprehensive framework to enhance service quality, customer satisfaction, and brand loyalty in the evolving landscape of sustainable tourism.

Limitations and future research

This study has several limitations. First, the cross-sectional design captures data at a single point in time, limiting the ability to observe changes over time. Future research should consider longitudinal studies for a more dynamic analysis. Second, the study focuses on specific constructs like Guest Online Feedback (GOF) and Hotel Management Response (HMR), which may not capture all relevant factors. Future studies could incorporate additional variables or alternative models, such as the Technology Acceptance Model (TAM). Lastly, the use of GSCAM for analysis, while effective, could be complemented by other estimation methods like Maximum Likelihood Estimation (MLE) in future research to verify robustness.

Conflict of Interest

The author declares that there is no conflict of interest.

References

- Ahmad, N., & Sun, J. (2018). Modelling consumer trust in online hotel reviews. *Journal of Hospitality and Tourism Technology*, 9(2), 206–219. <https://doi.org/10.1108/JHTT-02-2017-0014>
- Berezina, K., Bilgihan, A., Cobanoglu, C., & Okumus, F. (2016).

- Understanding satisfied and dissatisfied hotel customers: Text mining of online hotel reviews. *Journal of Hospitality Marketing & Management*, 25(1), 1–24. <https://doi.org/10.1080/19368623.2015.983631>
- Casaló, L. V., Flavián, C., & Guinalíu, M. (2015). The role of satisfaction and website usability in developing customer loyalty and positive word-of-mouth in e-banking services. *International Journal of Bank Marketing*, 33(6), 759–785. <https://doi.org/10.1108/IJBM-07-2014-0103>
- Chan, E. S. W., Hon, A. H. Y., Chan, W., & Okumus, F. (2017). What drives employees' intentions to implement green practices in hotels? The role of knowledge, awareness, concern and ecological behavior. *International Journal of Hospitality Management*, 46, 83–93. <https://doi.org/10.1016/j.ijhm.2015.01.001>
- Chumwichean, S., Leruksa, P., & Rasmidatta, S. (2023). Advancing component-based SEM: A case study in hospitality management. *Journal of Business Research*. Advance online publication. <https://doi.org/10.1016/j.jbusres.2023.06.012>
- Dul, J. (2016). Necessary Condition Analysis (NCA): Logic and methodology of “necessary but not sufficient” causality. *Organizational Research Methods*, 19(1), 10–52. <https://doi.org/10.1177/1094428115584005>
- Erkan, I., & Evans, C. (2016). The influence of eWOM in social media on consumers' purchase intentions: An extended approach to information adoption. *Computers in Human Behavior*, 61, 47–55. <https://doi.org/10.1016/j.chb.2016.03.003>
- Fakfare, P. (2023). Evaluating measurement models using GSCAM: Insights and implications for hospitality research. *International Journal of Contemporary Hospitality Management*. Advance online publication. <https://doi.org/10.1108/IJCHM-02-2023-0150>
- Fakfare, P., Lee, D., & Meeprom, S. (2020). Assessing measurement models in tourism research: Insights from GSCAM applications. *Journal of Hospitality & Tourism Research*, 44(6), 1079–1096. <https://doi.org/10.1177/1096348020936721>
- Fakfare, P., Lee, D., & Meeprom, S. (2021). Advanced techniques in structural equation modeling: Application of HTMT and VIF in hospitality research. *Journal of Hospitality & Tourism Management*, 46, 90–102. <https://doi.org/10.1016/j.jhtm.2020.12.004>
- Fuentes, M. M. (2016). Analyzing the effect of satisfaction and trust on loyalty to hotel chains. *International Journal of Contemporary Hospitality Management*, 28(4), 804–826. <https://doi.org/10.1108/IJCHM-12-2014-0617>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2011). *Multivariate data analysis* (7th ed.). Pearson.
- Hwang, H., Sarstedt, M., Cheah, J. H., & Ringle, C. M. (2017). Component-based SEM: Guidelines for the use of partial least squares path modeling in international marketing. *Journal of International Marketing*, 25(4), 1–23. <https://doi.org/10.1509/jim.17.0070>
- Kim, S., & Busser, J. A. (2018). Online reviews: The effect of culture, trust, and satisfaction on purchase intention. *Journal of Hospitality Marketing & Management*, 27(2), 204–225. <https://doi.org/10.1080/19368623.2017.1306820>
- Korfiatis, N., García-Bariocanal, E., & Sánchez-Alonso, S. (2012). Evaluating content quality and helpfulness of online product reviews: The interplay of review helpfulness vs. review content. *Electronic Commerce Research and Applications*, 11(3), 205–217. <https://doi.org/10.1016/j.elerap.2011.10.003>
- Leruksa, P., Chumwichean, S., & Rasmidatta, S. (2023). The role of component-based SEM in tourism research: A practical guide. *Tourism Management*, 95, 104393. <https://doi.org/10.1016/j.tourman.2023.104393>
- Li, H., Ye, Q., & Law, R. (2017). Analyzing the relationship between online reviews and hotel sales: A study based on user-generated content. *Journal of Travel & Tourism Marketing*, 34(2), 239–256. <https://doi.org/10.1080/10548408.2016.1182454>
- Li, H., Ye, Q., & Law, R. (2020). Exploring the impact of online reviews on hotel sales: A comparison of different data mining approaches. *Tourism Management*, 76, 103962. <https://doi.org/10.1016/j.tourman.2019.103962>
- Li, M., Wu, Z., & Mai, F. (2020). The effect of online reviews on product sales: A joint sentiment-topic analysis. *Journal of Business Research*, 108, 241–250. <https://doi.org/10.1016/j.jbusres.2019.10.047>
- Malik, M. E., & Hussain, S. (2018). How e-commerce reviews influence customer attitude and purchasing intention. *International Journal of Electronic Customer Relationship Management*, 12(4), 325–339. <https://doi.org/10.1504/IJECRM.2018.10016955>
- Mauri, A. G., & Minazzi, R. (2013). Web reviews influence on expectations and purchasing intentions of hotel potential customers. *International Journal of Hospitality Management*, 34, 99–107. <https://doi.org/10.1016/j.ijhm.2013.02.012>
- Meeprom, S., Fakfare, P., & Wattanacharoensil, W. (2023). NCA and SEM applications in tourism studies: A case study on service quality. *Journal of Travel Research*. Advance online publication. <https://doi.org/10.1177/00472875221123784>
- Ogut, H., & Tas, B. K. O. (2012). The influence of internet customer reviews on online sales and prices in the hotel industry. *Service Industries Journal*, 32(2), 197–214. <https://doi.org/10.1080/02642069.2010.529436>
- Rasmidatta, S. (2023). Exploring new avenues in component-based SEM: Applications in tourism studies. *Journal of Hospitality & Tourism Research*. Advance online publication. <https://doi.org/10.1177/10963480231167012>
- Reimer, T., & Benkenstein, M. (2018). The impact of online reviews on brand attitude: The moderating role of involvement. *International Journal of Electronic Commerce*, 22(3), 399–426. <https://doi.org/10.1080/10864415.2018.1485083>
- Rianthong, N., Dumrongkiri, A., & Kohda, Y. (2016). Maximizing hotel revenue through optimal room upgrade management: A case study of a hotel chain in Thailand. *Tourism Management*, 56, 1–10. <https://doi.org/10.1016/j.tourman.2016.02.015>
- Richter, N. F., Schubring, S., Hauff, S., Ringle, C. M., & Sarstedt, M. (2020). When predictors of outcomes are necessary: Guidelines for the combined use of PLS-SEM and NCA. *Industrial Management & Data Systems*, 120(12), 2400–2418. <https://doi.org/10.1108/IMDS-12-2019-0648>
- Satitsamitpong, S., Fakfare, P., & Wattanacharoensil, W. (2024). Integrating NCA and SEM in recreation research: Insights from a Thai context. *Tourism Management*, 95, 104401. <https://doi.org/10.1016/j.tourman.2023.104401>
- Sparks, B. A., So, K. K. F., & Bradley, G. L. (2016). Responding to negative online reviews: The effects of hotel responses on customer inferences of trust and concern. *Tourism Management*, 53, 74–85. <https://doi.org/10.1016/j.tourman.2015.09.011>
- Ukpabi, D. C., & Karjaluo, H. (2017). Consumers' acceptance of information and communications technology in tourism: A review. *Telematics and Informatics*, 34(5), 618–644. <https://doi.org/10.1016/j.tele.2016.12.002>
- Vo, D. H., Nguyen, T. A., & Nguyen, T. C. (2019a). Foreign direct investment and economic growth in the short run and long run: Empirical evidence from developing countries. *Journal of Risk and Financial Management*, 12(4), 176. <https://doi.org/10.3390/jrfm12040176>
- Vo, D. H., Nguyen, T. A., & Tran, T. D. (2019b). Financial development and income inequality in emerging markets: A new approach. *Journal of Risk and Financial Management*, 12(4), 173. <https://doi.org/10.3390/jrfm12040173>

- Vo, N. T., Hung, V. V., Tuckova, Z., Pham, N. T., & Nguyen, L. H. L. (2022). Guest online review: An extraordinary focus on hotel users' satisfaction, engagement, and loyalty. *Journal of Quality Assurance in Hospitality & Tourism*, 23(4), 913–944. <https://doi.org/10.1080/1528008X.2021.1920550>
- Wattanacharoensil, W., Fakfare, P., & Meeprom, S. (2024). Exploring the nexus of service quality and customer satisfaction through NCA and SEM: A mixed-method approach. *International Journal of Hospitality Management*. Advance online publication. <https://doi.org/10.1016/j.ijhm.2023.105051>
- Zhao, X., Xu, X., & Wang, M. (2018). Predicting overall customer satisfaction: Big data evidence from hotel online textual reviews. *International Journal of Hospitality Management*, 76, 111–121. <https://doi.org/10.1016/j.ijhm.2018.04.007>