

The Role Of User-Generated Content (UGC) On Social Media Platforms And Online Review Sites In Shaping Generation Z's Perception Of Smart Hotels In India

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ABSTRACT

The increasing reliance on user-generated content (UGC) has significantly influenced consumer decision-making in the hospitality industry, particularly among Generation Z travelers who actively engage with digital platforms when selecting hotels. This study investigates the role of UGC in shaping Generation Z's perception and booking behavior concerning smart hotels in India. Focusing on five key platforms—Google Reviews, TripAdvisor, Instagram, YouTube, and Facebook—the study examines the frequency of use, trust levels, and platform-specific influence on hotel perception and booking likelihood. A quantitative, cross-sectional design was employed, and data were collected from **833 valid respondents** using a structured questionnaire. Non-parametric statistical techniques, including **Spearman's rank correlation**, **Friedman tests**, and **Mann-Whitney U tests**, were used to analyze the ordinal data. Results reveal that **YouTube and Instagram**, driven by visual content and influencer engagement, exert the strongest influence on smart hotel perception, followed by structured review platforms such as **Google Reviews** and **TripAdvisor**. **Facebook**, in contrast, shows significantly lower influence among Gen Z users, signaling a generational shift away from text-dominant platforms. Notably, the study finds that **occasional negative reviews do not significantly deter booking decisions** if the overall sentiment and rating remain positive. Gen Z travelers demonstrate a more balanced and discerning evaluation approach, prioritizing peer-authored content, authenticity, and overall guest experience over isolated negative feedback. These findings offer critical managerial implications: smart hotels should invest in **strategic visibility on high-trust platforms**, leverage **video-based storytelling** through YouTube and Instagram, and collaborate with credible influencers to build trust and engagement. Given the limited impact of negative UGC, emphasis should be placed on curating and amplifying **positive guest narratives** rather than excessive reputation management. This research contributes to the literature on digital hospitality marketing by providing empirical evidence of platform-specific UGC influence on Generation Z, offering actionable insights for hoteliers, digital marketers, and strategic decision-makers navigating the evolving smart hotel ecosystem.

Keywords: Smart Hotels, Generation Z, User-Generated Content (UGC), Social Media Influence, Online Reviews, Google Reviews, TripAdvisor, Instagram, YouTube.

1. INTRODUCTION

Smart technologies have fundamentally changed the hospitality sector and produced smart hotels using artificial intelligence (AI), the Internet of Things (IoT), and automation to improve guest experiences (Buhalis& Leung, 2018). These innovative technologies include keyless entry to room access, AI-powered chatbots, voice-enabled assistants, and personalized in-room experiences are redefining traditional lodging services. As digital transformation accelerates, understanding consumer attitudes toward smart hotels has become essential for hospitality businesses.

Generation Z, those who are all born between the mid-1990s and early 2010s, are one of the future consumer demographics influencing this change (Sharma & Singh, 2023). The hospitality industry brought about transformation through smart technologies which led to smart hotel creation that utilizes AI alongside IoT as well as automation to raise guest quality (Buhalis& Leung, 2018). Keyless room access among other innovations powered by AI and voice-activated assistants creates personalized in-room services which redefine traditional lodging standards. Businesses in the hospitality industry need to grasp how consumers feel about smart hotels as digital transformation speeds up its pace. (Dwivedi et al., 2021).The Indian hotel industry is adopting smart technologies through digital

solutions operated by hospitality firms like Taj, Marriott, and ITC Hotels as part of their development. Technological advancements succeed chiefly because of consumer acceptance patterns that result from both online discussions and digital reputation standards (Singh *et al.*, 2024). Generation Z trusts hospitality sector businesses more when they engage with user-generated content such as reviews and ratings and visual material and online blogs (Fileri 2014). The process of selecting hotels has evolved significantly with the rise of user-generated content, highlighting the increasing role of technology in decision-making (Browning & Sparks, 2013; Fotis *et al.*, 2012). Traditionally, travelers relied on brochures distributed by travel agents or government tourism agencies for information on accommodation and travel expenses, as they had limited resources for making informed purchase decisions (Hu & Wei, 2013). However, social media has become a vital tool in tourism planning, offering travelers access to extensive information while supporting various pre- and post-travel activities (Zeng & Gerritsen, 2014). Advancements in online technology, particularly ICT and Web 2.0, have transformed how consumers choose hotels (Buhalis & Law, 2008; Gupta, 2019; Gohil, 2015; Neuhofer *et al.*, 2012). The hotel selection process is now heavily influenced by social media, shaping consumer behavior and preferences. Modern travelers, who are more independent and well-informed, exhibit unique purchasing patterns, prioritizing value for money and efficient use of their limited free time. Understanding the influence of social media on consumer decisions provides insights into how travelers select their accommodation. Despite the growing impact of social media on hotel selection, research remains limited in exploring how visitors utilize these platforms in hotel decision-making (Ayeh *et al.*, 2012; Cox *et al.*, 2009; Gohil, 2015). Furthermore, studies have yet to examine the perspective of hotel staff on how social media influences customer choices, leaving a gap in the existing literature.

The research investigates the impact of public digital content on social networks and review platforms on Generation Z hotel perception in India. This study investigates different UGC types through textual reviews and social media posts and influencer content and video-based testimonials to determine critical components which influence Gen Z smart hospitality service perception.

2. LITERATURE REVIEW

2.1 Smart hotels and their growing popularity

Smart technologies are being progressively integrated into the hospitality sector to improve operational effectiveness and seamless guest experience. Smart hotels utilize automation, AI-driven chatbots, biometric authentication, and IoT-enabled room controls to provide memorize and personalized services (Buhalis & Leung, 2018). These technologies gained extra momentum because of customer requests for touchless solutions and sustainable and convenient services following the pandemic. Several studies have highlighted the benefits of smart hotels, including enhanced guest personalization, improved operational efficiency, and reduced energy consumption. Customers have different viewpoints about technology adoption in the hospitality industry based on their digital presence and online popularity. The growth of the smart hotel segment depends on effective understanding of how technology-savvy travellers especially Generation Z customers perceive these facilities.

2.2 Generation Z as digital consumers in hospitality

The first generation born into an entirely digital world uses social media reviews as their main source of travel choices (Williams & Page, 2011). Gen Z travellers choose authentic peer-generated content instead of traditional advertising because it stands as their preferred option above all else (Priporas *et al.* 2017). The evaluation process involves reviewing various platforms where Gen Z customers check reviews while following influencers who provide hotel recommendations and participate extensively with travel-based social media content leading up to their hotel reservation decisions (Kusuma *et al.* 2024). The selection of travel accommodation by Gen Z guests heavily depends on transparent operations and tailored options and easy digital access according to research evidence. Smart hotels experience influence from user-generated content because users heavily depend on such content to shape their behavior toward smart hotels. Video-based platforms YouTube, Instagram Reels and TikTok have strengthened the power of UGC to determine how people prefer to experience hospitality services.

2.3 Social Media and Its Role in Hospitality

Social media has emerged as a transformative force within the hospitality and tourism sectors, reshaping the ways in which consumers search, evaluate, and consume travel-related products and services. Jones (2009) categorizes social media channels relevant to the travel industry into several groups, including social networks and microblogging

platforms like Facebook and Twitter, review sites like TripAdvisor and Yelp, social sharing platforms such as YouTube, and purchase/review sites viz Amazon and Travelocity. Similarly, Constantinides and Fountain (2008) identify five core categories of social media: social networks, blogs, forums, content communities, and content aggregators.

Within the tourism and hospitality domain, social media has been widely studied for its role in consumer-generated reviews, ratings, and online discussions (Ayeh et al., 2012; Chung & Koo, 2015; Gohil, 2015; Hudson & Thal, 2013; Xiang & Gretzel, 2010). In the context of hotels, particularly in India, Web 2.0 platforms have been extensively utilized for information management, consumer behaviour analysis, digital marketing, and dissemination of travel content (Kim et al., 2010; Sigala et al., 2012; Xiang & Gretzel, 2010). These platforms serve as crucial digital tools linking diverse tourism stakeholders, while simultaneously reshaping traditional approaches to marketing and customer engagement (Sigala et al., 2012).

The widespread adoption of social media has fundamentally altered the way travellers explore, evaluate, and book tourism products, thereby positioning these platforms as an integral element of modern travel behaviour (Buhalis & Law, 2008; Gohil, 2015; Hudson & Thal, 2013; Zeng, 2013). Popular platforms frequently used in the Indian hospitality and tourism sector include Facebook, TripAdvisor, Twitter, YouTube, Flickr, Trivago, and even earlier platforms such as MySpace (Ayeh et al., 2012; McCarthy et al., 2010).

Empirical studies further emphasize the significance of social media in the pre-travel stage, where travellers use it for planning, information search, and decision-making (Cox et al., 2009; Verma et al., 2012). This is particularly evident in shaping visitor behaviours such as destination search, trust-building, and information exchange (Sigala et al., 2012). User-generated content (UGC), in this context, emerges as a reliable source of information that complements traditional channels such as travel agents or tourism websites, enabling potential visitors to draw insights from past traveller experiences (Del Chiappa, 2011; Fotis et al., 2012; Litvin et al., 2008). Cox et al. (2009) highlight that nearly 78% of travellers use social media for travel purposes, with a majority consulting online reviews and travel guides prior to finalizing their trip decisions. Consequently, social media significantly enhances the consumer decision-making process by providing authentic, peer-driven insights (Murphy & Chen, 2014; Zeng, 2013).

2.4 The Role of User-Generated Content in Consumer Decision-Making

User-generated content (UGC) has become a pivotal factor influencing consumer trust, engagement, and purchase decisions within the hospitality industry. Research indicates that over 90% of travellers consult online reviews before booking hotels, underscoring the centrality of UGC in shaping consumer choices (Filiari, 2014). The influence of UGC on decision-making can be broadly categorized into three domains:

- **Online Reviews and Ratings:** Review platforms such as TripAdvisor, Booking.com, and Google Reviews play a vital role in shaping hotel reputations and brand perceptions, significantly influencing customer trust (Kim, Lim, & Brymer, 2015).
- **Social Media Influence:** Platforms including Instagram, Facebook, and YouTube enable travellers and influencers to share authentic experiences, which in turn affect consumer perceptions and choices.
- **Visual Content and Video Reviews:** Particularly for Generation Z, video-based content is considered more persuasive than written reviews, rendering platforms such as Instagram and YouTube essential in the decision-making process (Singh et al., 2023).

The consumer decision-making process in hospitality is often explained through well-established models. The Engel, Kollat, and Blackwell (EKB) model (Engel et al., 1968) outlines five stages: need recognition, information search, evaluation of alternatives, purchase, and post-purchase outcomes. The Howard and Sheth (1969) model expands on this by emphasizing the role of external inputs in shaping purchase decisions. Similarly, Hoyer and MacInnis (2010) conceptualize the process in four stages—problem recognition, information search, decision-making, and post-purchase evaluation. More recently, McKinsey and Company (2009) introduced the “consumer decision journey,” which incorporates a “loyalty loop” to reflect repeat purchasing behaviours without the need to re-engage with all stages of the process.

In hospitality decision-making, stakeholders rely on various attributes such as location, price, cleanliness, security, and hotel facilities, which are considered critical determinants by consumers (Chu & Choi, 2000; Yusoff & Abdullah, 2010). According to the Consumer Decision Journey (Court et al., 2009), hotel selection typically begins in the pre-travel stage, during which travellers evaluate available alternatives (Ayeh et al., 2012). Importantly, social media

facilitates customer-to-customer interactions through review sites and blogs, thereby reducing the monopoly of service providers over information dissemination (Hudson & Thal, 2013).

Both positive and negative reviews significantly influence decision-making, with review ratings often serving as a key determinant of purchase likelihood (Almana & Mirza, 2013; Singh & Torres, 2015). While positive reviews enhance booking prospects, negative feedback discourages potential guests (Verma et al., 2012). Despite this, the nuances of consumer behaviour—particularly during the “evaluation phase” of decision-making—remain underexplored, as much of the existing literature has only partially examined the influence of UGC (Cox et al., 2009).

Although several studies have highlighted the impact of online reviews and blogs on travel behaviour (Gretzel et al., 2007; Vermeulen & Seegers, 2009; Murphy & Chen, 2014), there remains a gap in understanding how social media shapes the consumer decision journey holistically. Addressing this gap, the present research investigates the role of social media in influencing consumer decision-making within the hospitality sector, with a particular focus on how UGC affects hotel selection processes (Constantinides & Fountain, 2008).

2.5 The influence of social media and online reviews on smart hotels

The achievement of smart hotels is largely influenced by their digital reputation along with their online presence. Positive feedback from customers on review sites along with interesting social media posts helps create trust with potential guests who show higher tendencies to book (Park & Nicolau, 2015). The negative reviews centred around technological breakdowns and inadequate service quality have proved to have strong negative impacts on potential hotel visitors. Research conducted by Gupta (2019) proves how social media holds complete authority when consumers make hotel choices. Research established that customers use social media advice for all of their buying decisions and three main platforms including Facebook, Instagram, and Twitter guide how consumers view and expect hotels and destinations. Hotel brand positioning and consumer trust levels experience significant influence from interactive content formats that include images and videos as well as influencer testimonials.

Consumers in the Indian market rely heavily on user-generated content to make decisions through online travel agencies (OTAs) including MakeMyTrip, Yatra, and OYO as per Gupta (2019). The research shows hotels which maintain active social media profiles alongside positive client feedback achieve higher occupancy numbers (Kim, Lim, & Brymer, 2015). Research unveils that hotel sentiment analytics derived from Artificial Intelligence has become a vital instrument for hotels to improve customer satisfaction through review analysis. Consumer perceptions and preferences about smart hotels in India will be influenced more strongly by digital content and user-generated materials with the expansion of these establishments (Sharma et al., 2020).

3. OBJECTIVES OF THE STUDY

The main objective of this study is to examine the role of user-generated content (UGC) on social media platforms and online review sites in shaping Generation Z's perception of smart hotels in India.

4. HYPOTHESIS OF THE STUDY

H1: The Impact of UGC on Perception of Smart Hotels

H1a: Correlation between UGC usage & perception of smart hotels

- **H₀1a:** There is no significant correlation between the frequency of UGC usage and Generation Z's perception of smart hotels.
- **H_a1a:** There is a significant correlation between the frequency of UGC usage and Generation Z's perception of smart hotels.

H1b: The impact of trust in UGC on perception of smart hotels

- **H₀1b:** Trust in UGC (reviews and influencer posts) has no significant impact on Generation Z's perception of smart hotels.
- **H_a1b:** Trust in UGC (reviews and influencer posts) significantly impacts Generation Z's perception of smart hotels.

H1c: Different social media platforms (Instagram, YouTube, and Facebook) vary in their level of influence on Generation Z's perception of smart hotels.

- **H₀1c:** Different social media platforms (Instagram, YouTube, and Facebook) do not significantly vary in their level of influence on Generation Z's perception of smart hotels.
- **H_a1c:** Different social media platforms (Instagram, YouTube, and Facebook) significantly vary in their level of influence on Generation Z's perception of smart hotels.

H2: The Role of UGC in Booking Decisions

- **H₀2:** *Negative user-generated reviews on social media platforms and online review sites have no significant impact on Generation Z's likelihood of booking a smart hotel."*
- **H_a2:** *Negative user-generated reviews on social media platforms and online review sites significantly decrease the likelihood of Generation Z booking a smart hotel.*

5. RESEARCH METHODOLOGY

The present study adopts a **quantitative, descriptive, and explanatory research design** to investigate the potential of smart hotels in the Indian hospitality sector, with a particular focus on the influence of user-generated content (UGC) on Generation Z travelers. The core objective was to explore how UGC—across platforms such as Google Reviews, TripAdvisor, Instagram, YouTube, and Facebook—shapes perceptions, influences trust, and impacts booking decisions related to smart hotels among this tech-savvy demographic. A **cross-sectional survey method** was employed, enabling the collection of primary data at a single point in time. The approach was well-suited to quantitatively analyze relationships between variables such as frequency of UGC usage, trust in UGC, platform-specific influence, and perception of smart hotels. The study targeted **Generation Z travelers in India**, defined as individuals born between the mid-1990s and early 2010s (approximately 18 to 30 years of age). Recognizing the diversity of this population, a **stratified random sampling technique** was used. The sample was stratified based on key demographic criteria; **Geographical region:** North, South, East, West, and Central India, **Socio-economic status;** Middle-income and upper-income brackets and **Travel frequency;** Frequent travelers (3+ trips per year) vs. occasional travelers. This stratification ensured a representative distribution across key subgroups and improved the **external validity** of the results. A total of **833 valid responses** were collected, exceeding the minimum sample size requirements for non-parametric correlation and comparative analysis with adequate statistical power. A **mixed-mode data collection strategy** was adopted to leverage the digital fluency of Generation Z and also include offline travelers. A **structured, self-administered questionnaire** was developed based on an extensive review of existing literature covering smart hotel technologies, technology acceptance models, online consumer behavior, and user-generated content. Key constructs—such as trust in UGC, platform preference, influence of influencer content, and booking intentions—were **adapted from previously validated scales** and contextualized to the Indian hospitality setting. The instrument used a **5-point Likert scale** for attitudinal and behavioral items, ranging from “Not at all” to “Very much.” Demographic questions and frequency-based items were also included. Data analysis was conducted using **SPSS**, employing appropriate **non-parametric statistical techniques** due to the ordinal nature of Likert-scale responses and the non-normal distribution of data (verified using the Kolmogorov–Smirnov test).

6. RESULTS AND DISCUSSION**6.1 Demographic Profile Interpretation**

The demographic characteristics of the respondents were analyzed to understand their background and potential influence on hotel booking decisions. The key findings are summarized in Table 1 below.

Table 1: Demographic Profile of respondents

Particulars		Frequency	Percent
Age group	Under 18	95	11.4
	18-21	234	28.1
	22-25	256	30.7
	26-30	248	29.8
Gender	Male	517	62.1
	Female	316	37.9
Education	No Formal Education	5	.6
	High School	20	2.4
	Secondary	43	5.2
	Senior Secondary	121	14.5

	Bachelor's Degree	419	50.3
	Master's Degree or higher	225	27.0
Occupation	Unemployed	29	3.5
	Student	366	43.9
	Skilled Job	174	20.9
	Office worker/ Clerical Staff	43	5.2
	Professional (e.g., doctor, lawyer, engineer)	120	14.4
	Business Owner	101	12.1
	Family Income	Below 3,00,000	300
3,00,000 - 5,00,000		210	25.2
5,00,000 - 8,00,000		99	11.9
8,00,000 - 10,00,000		91	10.9
10,00,000 - 12,00,000		33	4.0
Above 12,00,000		100	12.0
Location of Hotel in India	North	329	39.5
	South	211	25.3
	West	126	15.1
	East & North East	86	10.3
	Central	81	9.7
Frequency of Stay in Hotels	Rarely	535	64.2
	Occasionally	200	24.0
	Frequently	98	11.8
Purpose of Stay	Business	72	8.6
	Education	118	14.2
	Leisure	290	34.8
	Family	218	26.2
	Personal	135	16.2

6.2 Descriptive Analysis

This section presents the results of the data analysis, focusing on the influence of user-generated content (UGC) on Generation Z's perception and booking decisions for smart hotels. The discussion interprets the findings in the context of previous research and their implications for the hospitality industry.

6.2.1 Frequency of using UGC platforms

User-generated content platforms such as Google Reviews, TripAdvisor, Instagram, YouTube, and Facebook play a critical role in shaping hotel booking decisions. Table 2 indicates the frequency of usage of key user-generated content platforms

Table 2: Frequency of usage of key User-generated content platforms

Variable	Mean	Std. Deviation
TripAdvisor	3.99	1.094
Google Reviews	4.55	0.634
Instagram	3.98	1.051
YouTube	4.05	1.049
Facebook	3.73	1.274

As per table 2, the analysis of the frequency of platform usage indicates that **Google Reviews** had the highest usage score ($M = 4.55$, $SD = 0.634$), followed by **YouTube** ($M = 4.05$, $SD = 1.049$) and **TripAdvisor** ($M = 3.99$, $SD = 1.094$). **Instagram** ($M = 3.98$, $SD = 1.051$) was also frequently used, whereas **Facebook** had the lowest average usage ($M = 3.73$, $SD = 1.274$). These results reinforce previous findings that **Generation Z favors structured and trusted review**

platforms (such as Google Reviews and TripAdvisor) over traditional social media platforms. The relatively high scores for **YouTUBE and Instagram** highlight the growing importance of **video and visual content** in influencing travel decisions. The low score for Facebook suggests its **declining relevance among Gen Z users**, consistent with trends seen in other digital behaviour studies.

6.2.2 Trust-Based Platform Preference

In addition to frequency of use, respondents were also asked to indicate which platform they **trust the most** when looking for hotel reviews (Refer table 3). The results show that **Google Reviews is the most trusted platform** for hotel-related feedback among Generation Z respondents, with **41.7%** selecting it as their top choice. **TripAdvisor follows at 25.5%**, while **Instagram, YouTube, and Facebook** trail behind. These findings further support the earlier conclusion that **structured review platforms carry greater credibility** compared to traditional social media. For hotel marketers, this indicates the importance of maintaining strong reputations on these platforms, as trust is a key driver in influencing booking behaviour.

Table 3: Frequency table indicating trust of respondents on various UGC platforms

Platform	Frequency	Percent	Cumulative Percent
TripAdvisor	212	25.5	25.5
Google Reviews	347	41.7	67.1
Instagram	110	13.2	80.3
YouTube	89	10.7	91.0
Facebook	75	9.0	100.0
Total	833	100.0	

6.2.3 Influence of social media and online reviews on perception of smart hotels

The study further examined how different forms of UGC influence the perception of smart hotels. The results in table 4 indicate that online reviews (Mean = 3.79, SD = 1.227) have a stronger influence on hotel perception than social media posts (Mean = 3.63, SD = 1.291). The trust in UGC authenticity (Mean = 3.80, SD = 1.100) is relatively high, suggesting that Generation Z considers online reviews and UGC as valuable decision-making tools.

These results confirm that **formal review platforms continue to be more influential than social media posts** in shaping hotel perceptions. Generation Z values **peer-authored, experience-based reviews**, suggesting that authenticity and reliability are key criteria when evaluating hotel options.

Table 4: Descriptive Statistics of Key Variables (N = 833)

Variable	Mean	Std. Deviation
Influence of Social Media Posts on Perception of Smart Hotels	3.63	1.291
Influence of Online Reviews on Booking Decision	3.79	1.227
Trust in UGC Authenticity	3.80	1.1
Reliance on Influencer Reviews	3.66	1.124
Likelihood of Booking Without Social Media Presence (if Reviews are Positive)	3.82	1.171

6.2.4 Influence of social media influencers on hotel perception

Influencer marketing is becoming an essential tool for digital engagement in the hospitality sector. The results in table 4 show that Reliance on influencer reviews (Mean = 3.66, SD = 1.124) is moderate-to-high. As per table 6, 57.7% of respondents either mostly or completely rely on influencers’ hotel recommendations. This highlights that Generation Z trusts influencers as credible sources for hotel recommendations. These findings support the view that influencer marketing continues to be a **viable strategy for hospitality brands targeting Generation Z**.

6.2.5 Likelihood of booking a smart hotel with minimal social media presence

The study also examine whether social media presence plays a critical role in the booking decision, respondents rated their likelihood of booking a smart hotel with positive reviews but minimal social media presence. The mean score of 3.82 (SD = 1.171) indicating a moderate-to-high likelihood of booking under these conditions (Refer Table 4)

In addition, the **frequency analysis** showed that **77.9% of Generation Z respondents** stated they would still book a **smart hotel with a 4–5 star rating**, even if there were a few negative reviews. Furthermore, **65% of respondents** expressed a willingness to book a hotel **with limited social media presence**, provided that **the online reviews were positive** (Refer Table 5 & 6)

Table 5: Frequency percentage of willingness to book smart hotel in different conditions

Variable		Frequency	Percent
Has a negative review or social media post ever discouraged you from booking a hotel?	Yes	639	76.7
	No	194	23.3
Would you book a smart hotel with a 4-5 star rating on TripAdvisor/ Google etc even if there are a few negative comments?	Yes	649	77.9
	No	184	22.1

Table 6 Frequency percentage of various variables

Variable	Not at All	Rarely	Moderately	Often	Very Much	Total
How much do social media posts influence your perception of a smart hotel?	10.9	8.2	18.6	31.7	30.6	100.0
How much do online reviews influence your decision to book a smart hotel?	8.0	7.3	17.3	31.8	35.5	100.0
To what extent do you rely on reviews from social media influencers to shape your view of smart hotels?	5.0	9.0	28.3	29.8	27.9	100.0
How likely are you to choose a smart hotel if it has positive reviews but minimal social media presence?	5.4	8.6	20.4	29.2	36.4	100.0

These findings suggest that **Generation Z travelers are not easily discouraged by occasional negative feedback** when the overall sentiment and ratings remain strong. Rather than being influenced by isolated criticisms or the level of a hotel's social media engagement, they appear to adopt a **balanced, informed, and experience-focused approach** to decision-making. This behavior reflects a **mature evaluation style**, where **peer-generated content and aggregate review scores** carry more weight than promotional visibility.

6.3 Testing of Hypothesis

6.3.1 Hypothesis H1: The Impact of UGC on Perception of Smart Hotels

H1a: Correlation between UGC usage & perception about smart hotels

Hypothesis Statements:

- **H_{01a}**: *There is no significant correlation between the frequency of UGC usage and Generation Z's perception of smart hotels.*
- **H_{a1a}**: *There is a significant correlation between the frequency of UGC usage and Generation Z's perception of smart hotels.*

Since both variables (UGC usage and perception) are measured using **ordinal Likert scales**, and the data was **not normally distributed**, the **Spearman correlation** is the most appropriate non-parametric test to examine the relationship between the frequency of using UGC on different platforms (TripAdvisor, Google Reviews, Instagram, YouTube, and Facebook) and Generation Z's perception of smart hotels.

Table 7: Spearman's Correlation between Frequency of UGC Platform Use and Perception of Smart Hotels (N = 833)

Platform	Spearman's ρ (rho)	Sig. (2-tailed)
TripAdvisor	0.247**	0.000
Google Reviews	0.322**	0.000

Instagram	0.394**	0.000
YouTube	0.401**	0.000
Facebook	0.237**	0.000
Note: ** ρ = Spearman's rho; Significance level $p < .01$		

The Spearman correlation analysis reveals statistically significant positive relationships between the **frequency of using UGC platforms** and **Generation Z's perception of smart hotels**. Among the five platforms analyzed, **YouTube** ($\rho = 0.401, p < 0.001$) and **Instagram** ($\rho = 0.394, p < 0.001$) showed the **strongest correlations** with smart hotel perception. **Google Reviews** also demonstrated a **moderate correlation** ($\rho = 0.322, p < 0.001$), indicating that higher usage is associated with more favorable perceptions. In contrast, **TripAdvisor** ($\rho = 0.247, p < 0.001$) and **Facebook** ($\rho = 0.237, p < 0.001$) showed **weaker yet significant relationships** (Table 7)

These findings suggest that **Generation Z's perception of smart hotels is more positively influenced by visual and influencer-driven platforms (YouTube and Instagram)** than by text-based or traditional review sites. However, the statistical significance across all platforms reaffirms that **frequent engagement with any form of UGC—whether review-based or social—contributes to perception formation**. The relatively lower correlation of Facebook aligns with earlier results that indicate its **declining popularity among younger demographics**, while the strong performance of YouTube and Instagram reflects **Gen Z's preference for visual content and peer endorsements** in travel decision-making.

The findings indicate that the frequency of UGC usage on social media and review platforms significantly influences Generation Z's perception of smart hotels. This supports the hypothesis (H1a) and aligns with previous studies that highlight the growing reliance on online reviews and social media content in shaping consumer perceptions (e.g., Gretzel& Yoo, 2008; Xiang et al., 2017). However, the degree of influence varies across platforms, with YouTube, Instagram, and Google Reviews being the most impactful. These insights highlight the importance of strategic digital engagement for smart hotel brands looking to enhance their appeal among younger consumers.

Hypothesis H1b: The Impact of Trust in UGC on Perception of Smart Hotels

Hypothesis Statements:

- **H₀1b:** Trust in UGC (reviews and influencer posts) has no significant impact on Generation Z's perception of smart hotels.
- **H_a1b:** Trust in UGC (reviews and influencer posts) significantly impacts Generation Z's perception of smart hotels.

Spearman's Rank test was used to examine the relationship between trust in user-generated reviews, reliance on influencer reviews and perception of smart hotels based on social media posts. The table 8 presents the Spearman's correlation results:

Table 8: Spearman's Rank Correlation between Trust in UGC and Perception of Smart Hotels

Variable Pair	Spearman's ρ (rho)	Sig. (2-tailed)	Interpretation
Trust in authenticity of user-generated reviews vs. perception of smart hotels	0.611**	0.000	Strong positive correlation
Reliance on influencer reviews vs. perception of smart hotels	0.606**	0.000	Strong positive correlation
Note: ρ = Spearman's rho; Significance level $p < .01$			

Table 8 indicates that the Spearman's correlation analysis demonstrates a **strong and statistically significant positive relationship** between **trust in user-generated content (UGC)** and **Generation Z's perception of smart hotels**. Trust in the authenticity of UGC reviews was **strongly correlated** with smart hotel perception ($\rho = 0.611, p < 0.001$), suggesting that the more Generation Z trusts online reviews, the more positively they perceive smart hotel experiences.

Similarly, reliance on social media influencers for hotel reviews also showed a **strong correlation** with perception ($\rho = 0.606, p < 0.001$).

These findings indicate that **authentic peer-generated content and influencer endorsements are critical factors** in shaping the image and appeal of smart hotels among young digital-native travellers. The results emphasize the **credibility** that Generation Z attributes to **user opinions over traditional marketing**, reinforcing the need for hospitality brands to focus on **authentic storytelling and influencer collaborations**.

Since all p-values are < 0.01 , we reject the null hypothesis (H_0) and confirm that: Trust in UGC significantly impacts Generation Z's perception of smart hotels.

H1c: Different social media platforms (Instagram, YouTube, and Facebook) vary in their level of influence on Generation Z's perception of smart hotels.

Hypothesis Statements:

- **H₀1c:** Different social media platforms (Instagram, YouTube, and Facebook) do not significantly vary in their level of influence on Generation Z's perception of smart hotels.
- **H_a1c:** Different social media platforms (Instagram, YouTube, and Facebook) significantly vary in their level of influence on Generation Z's perception of smart hotels.

To examine whether different social media platforms (Instagram, YouTube, and Facebook) vary in their level of influence on Generation Z's perception of smart hotels, the Friedman Test was conducted. The Friedman Test is a non-parametric test used to compare three or more related groups.

Table 9: Friedman Test – Differences in Platform Influence on Perception of Smart Hotels

Platform	Mean Rank
YouTube	2.11
Instagram	2.04
Facebook	1.86
Test Statistic	Value
Chi-Square	84.766
Degrees of Freedom (df)	2
Asymp. Sig. (p-value)	.000**

The results as per table 9 revealed a **statistically significant difference** in influence across the platforms ($\chi^2(2) = 84.77, p = .000$). Among the three platforms, **YouTube had the highest mean rank (2.11)**, indicating it is perceived as the most influential. **Instagram followed closely with a mean rank of 2.04**, suggesting it is also highly influential but slightly less than YouTube. **Facebook received the lowest mean rank (1.86)**, indicating it is the least influential platform among the three.

These results confirm that **not all social media platforms impact Gen Z perceptions equally**. The findings reflect a broader digital behavior trend where **visual-first, experience-driven platforms like YouTube and Instagram dominate Gen Z's engagement and trust**, especially in contexts like travel and hospitality.

Facebook, while still used, appears to have **lost relevance among younger users**, possibly due to its older user base, less engaging content formats, and lower integration with influencer marketing.

Since the Friedman Test showed a significant difference, we performed **Wilcoxon Signed-Rank Tests as a post-hoc test** to compare the influence of each pair of social media platforms (Instagram, YouTube, and Facebook) on Generation Z's perception of smart hotels.

Table 10: Wilcoxon Signed-Rank Test – Pairwise Comparison of Platform Influence

Comparison	Z-Value	Asymp. Sig. (2-tailed)	Sig. (2-tailed)	Interpretation
YouTube vs Instagram	-2.8	0.005	$p < 0.01$	Instagram is rated higher than YouTube

Facebook vs Instagram	-6.921	0.000	p < 0.01	Instagram is rated higher than Facebook
Facebook vs YouTube	-8.266	0.000	p < 0.01	YouTube is rated higher than Facebook

Interpretation Direction: Positive Z = First platform is rated higher; Negative Z = Second platform is rated higher. As per table 10, the Wilcoxon Signed-Rank Tests revealed statistically significant differences between the influences of the three platforms. This suggests a final influence hierarchy:

Instagram > YouTube > Facebook

Although the Friedman test showed YouTube with a slightly higher mean rank, the Wilcoxon test’s pairwise sensitivity reveals a statistically stronger preference for Instagram, emphasizing its impact on smart hotel perception among Generation Z.

These findings indicate that **Instagram is the most influential platform** for shaping Generation Z’s perception of smart hotels, followed by **YouTube**, while **Facebook lags significantly** behind. Despite YouTube’s slightly higher mean rank in the Friedman test, pairwise comparisons showed Instagram’s influence to be statistically stronger.

This pattern reflects Gen Z’s strong preference for **visual-first platforms with short-form, authentic, and influencer-driven content**, which Instagram delivers more effectively than YouTube or Facebook.

6.3.2 H2: The Role of UGC in Booking Decisions

Hypothesis Statements:

- **H₀2:** *Negative user-generated reviews on social media platforms and online review sites have no significant impact on Generation Z’s likelihood of booking a smart hotel.*
- **H_a2:** *Negative user-generated reviews on social media platforms and online review sites significantly decrease the likelihood of Generation Z booking a smart hotel.*

Table 11 indicates the variables used for testing of this hypothesis.

Table 11: Variables for hypothesis testing

Type of Variable	Variable	Measure
Independent Variable (IV)	Has a negative review or social media post ever discouraged you from booking a hotel?	Nominal (Yes/No)
Dependent Variable (DV)	Would you book a smart hotel with a 4-5 star rating on TripAdvisor/ Google even if there are a few negative comments?	Nominal (Yes/No)
Dependent Variable (DV)	How likely are you to choose a smart hotel if it has positive reviews but minimal social media presence?	Ordinal (Scale from 1 to 5)

Since both are nominal variables, Chi-Square test was conducted to assess whether past discouragement from negative reviews influences the likelihood of Generation Z booking a smart hotel with a 4-5 star rating despite a few negative comments.

For a nominal independent variable and ordinal dependent variable, Mann-Whitney U test was conducted to examine whether past discouragement from negative reviews affects the likelihood of choosing a smart hotel with positive reviews but minimal social media presence. The results are as follows:

Table 12: Chi-Square test Results for the Role of negative UGC in Booking Decisions

Test Type	Value	df	p-value	Significance
Pearson Chi-Square	1.995	1	0.158	Not Significant
Continuity Correction	1.725	1	0.189	Not Significant
Fisher's Exact Test			0.167	Not Significant

The table 12 indicated the p-value (0.158) is greater than 0.05, indicating that there is no significant association between being discouraged by past negative reviews and the likelihood of booking a highly-rated smart hotel despite a few negative comments.

Table 13: Mann-Whitney U Test Results for the Role of negative UGC in Booking Decisions

Group (Negative UGC Experience)	N	Mean Rank	Z-Value	p-Value	Significance
Yes	639	408.13	-2.015	0.044	Significant
No	194	446.21			

As per table 13, the Mann-Whitney U test indicates a **statistically significant difference** in the likelihood of booking a smart hotel with minimal social media presence. Participants **not discouraged by negative UGC** had **higher booking likelihood** (Mean Rank = 446.21) than those who were discouraged (Mean Rank = 408.13). $\rightarrow p = .044 < .05$, so we **reject the null hypothesis** for this comparison.

The findings of H2 yield **mixed results**. The Chi-Square test suggests that **negative reviews do not significantly affect** Gen Z's booking decisions when hotels have overall high ratings. However, the Mann-Whitney U test reveals that **those who are not discouraged by negative UGC are statistically more likely** to book a smart hotel even if it has **minimal social media presence**.

This implies that while **a few negative comments may not deter bookings** when overall hotel ratings are strong, **negative UGC may still lower trust** in hotels that lack an active digital presence. The results show a nuanced behaviour: Gen Z is cautious, but not overly sensitive to negativity – they evaluate reviews in the **context of the bigger picture**, such as total ratings and visual/verifiable experiences.

7. CONCLUSION

The present study provides a comprehensive analysis of the influence of user-generated content (UGC) on Generation Z's perception and booking behavior related to smart hotels in the Indian context. By integrating a multi-platform evaluation of UGC (including Google Reviews, TripAdvisor, Instagram, YouTube, and Facebook), the study offers valuable insights into how this digital-native cohort interprets, trusts, and acts upon user generated content during the hotel selection process.

The findings reveal that UGC plays a statistically significant role in shaping Gen Z's perception of smart hotels, with visual and influencer-driven platforms such as **YouTube** and **Instagram** exhibiting the strongest influence. While traditional review platforms like **Google Reviews** and **TripAdvisor** maintain moderate credibility and high usage frequency, **Facebook** appears to be less relevant in this context, reflecting its diminishing appeal among younger audiences.

Moreover, **trust in the authenticity of UGC** and **reliance on influencer reviews** were strongly correlated with positive perceptions of smart hotels, reaffirming the importance of peer-based validation in consumer decision-making. The results also indicate that occasional **negative reviews do not significantly deter bookings**, especially when the overall rating and sentiment remain favorable. However, **trust erosion** may occur when negative content coincides with **minimal social media presence**, suggesting that a robust digital footprint remains critical.

From a methodological perspective, the use of non-parametric tests such as **Spearman's correlation**, **Friedman tests**, and **Mann-Whitney U tests** was instrumental in capturing the nuanced, ordinal relationships inherent in Likert-based survey data. The study's statistically validated outcomes enhance the robustness of its conclusions and offer actionable insights for hospitality marketers and smart hotel operators.

In summary, the study underscores the **strategic importance of UGC** in the digital marketing ecosystem of smart hotels targeting Generation Z. Hotels that actively manage their presence on trusted review sites, engage in visual storytelling on high-impact platforms, and collaborate with credible influencers are better positioned to attract and retain Gen Z travelers. The research contributes to the existing literature by empirically validating the cross-platform impact of UGC and highlighting the differentiated roles that content format, platform type, and trust play in consumer perception.

REFERENCES

1. Almana, A.M. and Mirza, A. (2013), "The impact of electronic word of mouth on consumers' purchasing decisions", *International Journal of Computer Applications*, Vol. 82 No. 9, pp. 23-31.

2. Ayele, J., Leung, D., Au, N. and Law, R. (2012), "Perceptions and strategies of hospitality and tourism practitioners on social media: an exploratory study", *Information and Communication Technologies in Tourism*, Springer, Vienna, pp. 1-12.
3. Browning, V.S.K. and Sparks, B.A. (2013), "The influence of online reviews on consumers' attributions of service quality and control for service standards in hotels", *Journal of Travel and Tourism Marketing*, Vol. 30 Nos 1/2, pp. 23-40.
4. Buhalis, D. and Law, R. (2008), "Twenty years on and 10 years after the internet: the state of e-Tourism research", *Tourism Management*, Vol. 29 No. 4, pp. 609-623.
5. Buhalis, D., & Leung, R. (2018). Smart hospitality—Interconnectivity and interoperability towards an ecosystem. *International Journal of Hospitality Management*, 71, 41-50. <https://doi.org/10.1016/j.ijhm.2017.11.011>
6. Chu, R. and Choi, T. (2000), "An importance-performance analysis of hotel selection factors in the Hong Kong hotel industry: a comparison of business and leisure travellers", *Tourism Management*, Vol. 21 No. 4, doi: 10.1016/S0261-5177(99)00070-9.
7. Chung, N. and Koo, C. (2015), "The use of social media in travel information search", *Telematics and Informatics*, Vol. 32 No. 1, pp. 215-229.
8. Constantinides, E. and Fountain, S.J. (2008), "Web 2.0: conceptual foundations and marketing issues", *Journal of Direct, Data and Digital Marketing Practice*, Vol. 9 No. 3, pp. 231-244.
9. Court, D., Elzinga, D., Mulder, S. and Vetvik, O.J. (2009), The Consumer Decision Journey, available at: www.mckinsey.com/insights/marketing_sales/the_consumer_decision_journey (accessed 21 December 2018).
10. Cox, C., Burgess, S., Sellitto, C. and Buultjens, J. (2009), "The role of user-generated content in tourists' travel planning behavior", *Journal of Hospitality Marketing and Management*, Vol. 18 No. 8, pp. 743-764.
11. Del Chiappa, G. (2011), "Trustworthiness of travel 2.0 applications and their influence on tourist behaviour: an empirical investigation in Italy", *Information and Communication Technologies in Tourism*, Springer, Vienna, pp. 331-342.
12. Dwivedi, Y. K., Rana, N. P., Slade, E. L., & Singh, N. (2021). Social media marketing and consumer engagement: The role of video-based content. *Journal of Consumer Behaviour*, 20(4), 987-1002.
13. Engel, J.F., Kollat, D.T. and Blackwell, R.D. (1968), *Consumer Behaviour*, Holt, Rinehart & Winston, New York, NY.
14. Filieri, R. (2014). What makes online reviews helpful? *Journal of Business Research*, 86, 36-45. <https://doi.org/10.1016/j.jbusres.2014.11.006>
15. Fotis, J., Buhalis, D. and Rossides, N. (2012), "Social media use and impact during the holiday travel planning process", in Fuchs, M., Ricci, F. and Cantoni, L. (Eds), *Information and Communication Technologies in Tourism*, Springer, Vienna, pp. 13-24.
16. G. Singh, S. Raheja, and R. Sharma, "Elevating hospitality with smart hotel technologies: A guest-centric perspective," in *Proc. 2023 IEEE Conf. Eng. Informatics (EI)*, Melbourne, Australia, Nov. 22-23, 2023, doi: 10.1109/IEECONF58110.2023.10520539.
17. G. Singh, R. Sharma, and M. Rani, "Embracing the future: Assessing guest perspectives for IoT-driven smart hotel services," in *Proc. 5th Int. Conf. IoT Based Control Netw. Intell. Syst. (ICICNIS)*, Bengaluru, India, Dec. 17-18, 2024, pp. 493-501. doi: 10.1109/ICICNIS64247.2024.10823134.
18. Gohil, N. (2015), "Role and impact of social media in tourism: a case study on the initiatives of Madhya Pradesh state tourism", *International Journal of Research in Economics and Social Sciences*, Vol. 5 No. 4, pp. 8-15.
19. Gretzel, U., Yoo, K. and Purifoy, M. (2007), "Online travel review study: role and impact of online reviews", *Laboratory for Intelligent Systems in Tourism*, TX A and M University.
20. Gupta, V. (2019), "Talent management dimensions and their relationship with retention of Generation-Y employees in the hospitality industry", *International Journal of Contemporary Hospitality Management*, available at: <https://doi.org/10.1108/IJCHM-10-2018-0859>
21. Gupta, V. (2019). The influencing role of social media in the consumer's hotel decision-making process. *Worldwide Hospitality and Tourism Themes*, 11(4), 378-391. <https://doi.org/10.1108/WHATT-04-2019-0019>
22. Howard, B. and Sheth, J. (1969), "A model of industrial buying behaviour", *Journal of Marketing*, Vol. 37 No. 1, pp. 50-56.
23. Hoyer, W.D. and MacInnis, D.J. (2010), *Consumer Behaviour*, 5th ed., South-Western Cengage Learning, London.
24. Hu, F. and Wei, G. (2013), "The impact of the knowledge sharing in social media on consumer behaviour", *The Thirteen International Conference on Electronic Business*, Vol. 1 No. 1, pp. 71-102.
25. Hudson, S. and Thal, K. (2013), "The impact of social media on the consumer decision process: implications for tourism marketing", *Journal of Travel and Tourism Marketing*, Vol. 30 Nos 1/2, pp. 156-160.
26. Jones, R. (2009), "Social media marketing 101, part 1. Search engine watch 16", available at: <http://searchenginewatch.com/sew/opinion/2064413/social-media-marketing-101-part>
27. Kim, W. G., Lim, H., & Brymer, R. A. (2015). The effectiveness of managing social media on hotel performance. *International Journal of Hospitality Management*, 44, 165-171. <https://doi.org/10.1016/j.ijhm.2014.10.014>
28. Kim, W.G., Jeong, O.R. and Lee, S.W. (2010), "On social Web sites", *Information Systems*, Vol. 35 No. 2, pp. 215-236.
29. Kusuma, I. G. W. A., Endayani, F., Budi, A., & Khourouh, U. (2024). Social media marketing impact on Gen Z's brand engagement, awareness, and image. *Jurnal Manajemen dan Bisnis*, 23(2). <https://doi.org/10.24123/mabis.v23i2.803>
30. Litvin, S., Goldsmith, R. and Pan, B. (2008), "Electronic word-of-mouth in hospitality and tourism management", *Tourism Management*, Vol. 29 No. 3, pp. 458-468.
31. McCarthy, L., Stock, D. and Verma, R. (2010), "How travellers use online and social media channels to make hotel-choice decisions", *Cornell Hospitality Report*, Vol. 10 No. 18, pp. 6-18.
32. McKinsey and Company (2010), "A new way to measure word-of-mouth marketing", available at: www.mckinseyquarterly.com/A-new-way-to-measure-word-of-mouth-marketing-2567 (accessed 15 March 2019).

33. Murphy, H.K. and Chen, M. (2014), "The multiple effects of review attributes on hotel choice decisions: a conjoint analysis study", *International Journal of Contemporary Hospitality Management*, available at: http://agrillife.org/ertr/files/2014/02/enter2014_RN_17.pdf (accessed 22 December 2018).
34. Neuhofer, B., Buhalis, D. and Ladkin, A. (2012), "Conceptualising technology enhanced destination experiences", *Journal of Destination Marketing and Management*, Vol. 1 No. 1, pp. 36-46.
35. Park, S., & Nicolau, J. L. (2015). Asymmetric effects of online consumer reviews. *Annals of Tourism Research*, 50, 67-83. <https://doi.org/10.1016/j.annals.2014.10.007>
36. Priporas, C. V., Stylos, N., & Fotiadis, A. K. (2017). Generation Z consumers' expectations of interactions in smart retailing: A future agenda. *Computers in Human Behavior*, 77, 374-381. <https://doi.org/10.1016/j.chb.2017.01.058>
37. Sharma, R., & Singh, G. (2023). *Unveiling the buying behaviour of Gen Z for hospitality products: Insights for smart hotels*. In *Sustainable Development Goal Advancement through Digital Innovation in the Service Sector* (pp. 19). <https://doi.org/10.4018/979-8-3693-0650-5.ch008>
38. Sharma, Rakesh & Uniyal, Mahesh & Sharma, Neha. (2020). Guest Attitude towards Introducing Automation Using Service Robots in Hotels of Delhi. *International Journal of Advanced Science and Technology*. 29. 2930-2937.
39. Sigala, M., Gretzel, U. and Christou, E. (2012), *Social Media in Travel, Tourism and Hospitality: Theory, Practice and Cases*, Ashgate Publishing, Farnham, Surrey, Burlington, VT.
40. Singh, D. and Torres, E. (2015), "Hotel online reviews and their impact on booking transaction value", XVI Annual Conference Proceedings, *New Delhi*, pp. 992-999.
41. Verma, R., Stock, D. and McCarthy, L. (2012), "Customer preferences for online, social media, and mobile innovations in the hospitality industry", *Cornell Hospitality Quarterly*, Vol. 53 No. 3, pp. 183-186.
42. Vermeulen, I.E. and Seegers, D. (2009), "Tried and tested: the impact of online hotel reviews on consumer consideration", *Tourism Management*, Vol. 30 No. 1, pp. 123-127.
43. Williams, K. C., & Page, R. A. (2011). Marketing to the generations. *Journal of Behavioral Studies in Business*, 3, 1-17.
44. Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism Management*, 31(2), 179-188. <https://doi.org/10.1016/j.tourman.2009.02.016>
45. Yusoff, F. and Abdullah, F. (2010), "What really matter while choosing a hotel? The case of Middle east tourists in Kuala Lumpur, Malaysia", *Journal of Tourism, Hospitality and Culinary Arts*, Vol. 5, pp. 53-62.
46. Zeng, B. (2013), "Social media in tourism", *Journal of Tourism and Hospitality*, Vol. 2 No. 1, pp. 1-2.
47. Zeng, B. and Gerritsen, R. (2014), "What do we know about social media in tourism? A review", *Tourism Management Perspectives*, Vol. 10 No. 1, pp. 27-36.