

## AI-ENABLED SERVICES IN FIVE STAR HOTELS: UNDERSTANDING BLEISURE TOURISTS' PERCEPTIONS AND PROPOSING A ROADMAP TO GOVERNMENT FOR SUSTAINABLE AI IMPLEMENTATION IN INDIA

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### Abstract

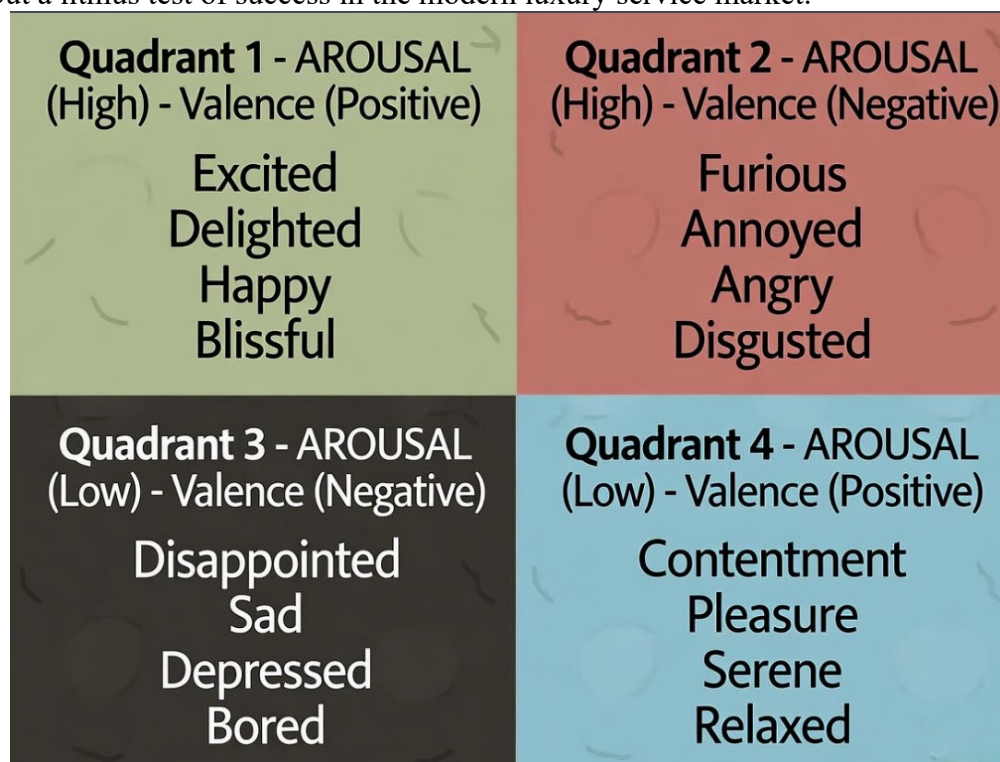
In the article named “AI-Enabled Services in Five star Hotels: Understanding Bleisure Tourists’ Perceptions and proposing a Roadmap to Government for sustainable AI implementation in India”, the development of artificial intelligence (AI) and its impact on the guest experience and perception of the luxury hospitality industry, in particular, are studied. Based on mixed methods research, this research paper not only summarizes the findings of the various scholarly researches worldwide, but also takes into account the changing preferences of bleisure guest by conducting a survey and interviews with Bleisure tourists staying in the five star hotels. The results indicate that AI improves efficiency, personalization and precision of operations which is highly attractive to digitally literate and time conscious travellers. Nevertheless, there are still issues of emotional involvement, privacy and trust. The research arrives at the conclusion that a hybrid system that entails the utilization of AI and complementary human service is an ideal method of hospitality where technological advanced technology does not interfere with empathy and genuineness. Through their mapping, the five-star hotels can effectively position AI application with the fine-tuning needs of the contemporary bleisure tourists. The study further contributes to the development of a strategic roadmap for Indian government to guide policy formulation, support smart tourism infrastructure, and promote sustainable integration of AI within the hospitality industry.

**Keywords:** Artificial Intelligence, Bleisure Travel, Five-Star Hotels, Guest Perception, Service Personalization, Luxury Hospitality, Digital Transformation, Roadmap for government

### Introduction

Hotel occupants across the globe have defined new expectations of the hotel, forcing business and leisure travel to be merged as a single entity, known as bleisure, in the modern hospitality industry. Bleisure is a term that is used to describe travelers taking business trips and leisure time activities, aiming at finding comfort, convenience, and experience that would help them strike a balance between their work responsibilities and personal rest. This segment has expanded significantly as global traveling trends shift after a pandemic due to the adaptation to more flexible working protocols and digital nomadism. The contemporary leisure tourist demands that hotels be technologically integrated, efficient in delivering services, and personalized so that he/she could meet the demands of both work and pleasure. In this context,

artificial intelligence (AI) has been brought out as a paradigm that changes the interaction between guests, operational management, and service personalisation in the luxury hospitality environment. Intelligent concierge system and voice-activated controls of rooms, predictive maintenance and customer relationship management, which are based on AI technologies, are all becoming important means of implementing innovations into the hotel industry, as five-star hotels strive to make their guest satisfied and operations more organized. It is of vital importance to find out how bleisure tourists experience the services delivered by these AI because the hospitality managers endeavour to combine innovation with human touch, very thin line but a litmus test of success in the modern luxury service market.



*Figure 1: Four quadrants of emotions based on arousal and valence*

Artificial intelligence plays a vital role in hospitality not as a fashion but as an important business strategy to adapt to the changes in consumer behavior and operation needs. AI is used in hotels to enhance the guest experience by provide personalized service through tailored recommendations and customized room settings depending upon guest needs. AI helps in the automation of tasks such as check-ins and housekeeping scheduling. It also helps in optimizing guest rooms, revenue management with their dynamic pricing and predicting their demand analysis among guests. On the same note, predictive analytics enables hotels to predict preferences, customize facilities, and maximize room rate assumptions on the basis of behavioral information. In the case of bleisure tourists, whose requirements swing between efficiency and relaxation when at work and in the leisure spot, these technological innovations can greatly improve the service quality in the perceived service delivery. Nevertheless, the attitude to AI-enabled services is not single-dimensional, people also consider the issues of privacy, authenticity, as well as, emotional satisfaction. Although we will find guests who are willing to enjoy the benefits of AI because of its instantness and accuracy, others will feel that it is cold and reminisces of intrusion. Historically focused on personalizing human service as the key distinguishing factor, the five-star hotels now confront the problem of AI integration without disturbing the concept of the luxury hospitality, which is all about the warmth and human interaction. Therefore, deep insights of the perceptions of the bleisure tourists in various

five-star hotels will help identify the extent to which the latter are able to handle the interplay between technology and conventional hospitality.

Besides, the diversification of the demographic of the bleisure tourists is another complication in the analysis of AI-enabled service perceptions. The aspects of cultural background, age, profession, and digital literacy have a huge impact on the way the guests interact with the AI technologies. The younger, technologically advanced guests might find the convenience and novelty of AI interesting, whereas older guests might want to be enveloped by human interaction and might experience isolation by technological-overloaded interfaces. On the same note, international guests who usually form a significant segment of the five-star hotel clientele come with unique expectations influenced by the technological environment and service culture of their home countries. Domestic and international guests who are staying in 5-star hotels can, therefore, be very important in giving a critical insight on these different perceptions. This study does not only have a role in the scholarly discussion on technology acceptance within the hospitality industry but also provides practical implications to be applied by the hotel's management that will allow the related hotel to implement AI-based modifications according to the typology of guests and cultural insensitivities and adherence to the government policies. With guest experience as the final substantial factor in the hotel industry, the subtle insights into how AI-enhanced services are perceived by bleisure tourists will assist the government to draft policies and implement them in a phased manner towards the integration of AI enabled services in the Hotel industry.



## Need of the Study

*Figure 2: AI usage in Hotel Industry*

Bleisure travel, as the opportunity to reconcile business and leisure trips, has become one of the hallmarks of contemporary tourism and hospitality consumption. In the context of globalization, ambivalent work modalities or forms, and the transformation of digital

technologies, people are increasingly interested in traveling with the types of experiences that combine work obligations with personal development. This development has forced 5-star hotels to change their operating model and service strategy to face this special segment. Within this changing environment, one of the developed differentiators is artificial intelligence (AI), which promotes efficiency, personalization, and innovativeness at the same time in hotels. Nonetheless, although the assimilation of AI-driven services is changing the experience in the hospitality industry, essential questions are being posed concerning the perception of the guests, their satisfaction, and acceptance. This study is necessary because it examines how bleisure tourists between corporate travelers and leisure tourists grasp AI-enabled services within the highest hospitality setting. It is their perceptions which influence beyond service acceptance their brand loyalty, repeat visits and overall competitiveness of five-star hotels in the market which is gradually becoming tech driven.

The increasing dependence of AI in the hospitality industry amplifies the importance of the need to comprehend its effects as per the viewpoint of the guests. As hotel industry spend big on various technologies, e.g., chatbots, intelligent room assistants, predictive analytics, it will be up to the guests to experience and perceive the innovations in the same way. This perception is even more complicated to bleisure tourists as their service expectations extend to the efficiency of their business travel and the comfort of their stay at the leisure destination. Favorable attitude towards AI-based services might improve the feel of increased satisfaction, perceived service gaps, and trust in the technologically-advanced hospitality systems. However, on the other hand, the negative or ambivalent perceptions, which originate due to the privacy issues, depersonalization, or overdependence on technology, can reduce the quality of service perceived and damage the brand image of even the most luxurious establishments. Consequently, it is not only that analyzing these perceptions among various five-star hotels will be relevant to the scholarly knowledge of consumer behaviour in a digitalised setting, but also that this will contribute to the development of roadmap for the Indian government to enhance the experience of Bleisure tourist by incorporating AI enabled services in it.

Besides, the comparative character of the current research provides great practical importance. The research also determines the impact of various brands and management practices on guest experiences with AI and this is achieved by analysing the perception of bleisure guests towards AI enabled services. The investigation of the perception of bleisure tourists facilitates the determination of best practice that is ideal and highlight critical gaps and deficiencies in technology adoption, training, and thus, pave a road to develop such policies by local government which will reform the hospitality industry. With service paradigms undergoing a continuous transformation due to AI, the hotels that grasp the expectations of their guests and align with their expectations will benefit because of the competitive edge, whereas those that failed to do so risk losing the crucial guest segments. The findings of this study will thereby be useful in setting government policies on AI adoption based on data, improving staff training on AI implementation, and developing marketing strategies that lay stress on human-technology partnerships. It will also add to the paucity of literature on technology acceptance and consumer psychology in luxury hospitality, which is gradually accumulating. In practice, it will assist the government of India to help the hotel industry to craft the experiences that will combine both technological advanced experience and the emotional depth that is required of the five-star experience. Hence, it is not only converting the need but also timely as it will fill the gap between the technological novelty and human experience in the modern bleisure traveling phenomenon.



### **Problem Statement**

The hospitality sector is undergoing a fast technological shift that has brought in the concept of artificial intelligence (AI) as a disruptive agent with the potential to transform the way services are delivered, how guests are connected, and how the organization operates. Five-star hotels have already started adopting AI-related innovations, including automated check-ins (AI concierge), voice-activated room controls, predictive guest analytics, and AI-run room controls etc., to meet the changing demands of the guests. The modernization of the bleisure tourists, who is a combination of a business and leisure pursuer, however, has made service satisfaction and technological acceptance a much more challenging concept to comprehend. The duality of this group means that they have different needs, i.e. they need efficiency, reliability and precision when engaged in professional activity and comfort, warmth and emotional connection when having leisure time. In as much as AI can greatly contribute towards functional performance and personalization, the human aspect and empathy would be diminished, which has been the hallmark of luxury hospitality. The main issue, thus, is how the tourists perceive the AI-powered services of five-star hotels and whether the technologies are adding value to their experience, or, effectively, stripping the five-star hospitality of its core. Although this trend is being increasingly studied in scholarly publications, very few empirical studies have directly examined the perceptions of bleisure tourists, as a high growth and high profit market segment. The current models tend to concentrate on the general tourist of the business sector or recreational tourists, ignoring the complexity of the expectations of the one that cross the spheres. Furthermore, very limited researches have been conducted in the context of five-star hotels, and there are knowledge gaps regarding the impact of the various brands and service models on how guests perceive the use of AI. The perceptions can also be influenced by other factors like the cultural background, digital literacy, trust in technology, and past experiences with hospitality services, hence the inefficiency of the principle of a one-size-fits-all approach. Therefore, it is urgently required to examine and differ in terms of the interpretation, evaluation, and emotional reaction of bleisure guests to AI-based services in luxury hotels. This perception will be critical in the comprehension of the bridging of the gap between the technological advancement and the satisfaction of the guests whereby innovation will aid in improving the experience but not substituting the ethic of personalized service which forms the five-star hotel experience. Additionally, it will help to guide the government in a phased implementation of AI enabled services in Bleisure Tourism.

### **Literature review**

This increasing overlap between business and leisure traveling has also transformed hospitality management landscape whereby entirely new categories of guests and new service deliverables are being formed. Bleisure travelers are a growing force in the luxury hotel industry, which consists of people who marry business with pleasure. They have very different expectations than the traditional business or leisure guests because they are interested in functional efficiency, as well as in the experiential enrichment. Artificial intelligence (AI) has become a disruptive enabler in the given environment as it enables hotels to provide hyper-personalized services, optimize operations, increase customer satisfaction. But the views of the guests on AI-enabled services are multi-styled and multicultural additionally influenced by the cultural and psychological issues as well as the context. The current literature offers insightful knowledge on the importance of AI in the hospitality industry, customer experience management, and dynamics of bleisure travel, but there is little research directly correlating these spheres.

The initial studies of the role of AI in the hospitality sector focus on its potential to transform the customer experience and efficiency. Ivanov and Webster (2019) investigated automation and robotization in the hospitality industry by stating that AI would maximize efficiency,

reduce human error, increase the value of data-driven services, and predictive models of services. They mention that in the hotel sector, AI applications, including chatbots, smart concierge services, and predictive services, help to better speed up service delivery and enhance consistency. They have however, also advised that automation must not be used to take the feeling aspect as the experience in the hospitality industry greatly relies on human warmth and empathy. On the same note, Tussyadiah (2020) examined the psychological aspects of human AI interaction during travels and concluded that although AI is valued by the guests in terms of convenience, the absence of feelings can be a barrier to perceived authenticity. These results imply that the optimal approach to the use of AI in the hospitality industry should be its addition, not substitution of the human service delivery, which is especially important as far as five-star hotels as the facilities that serve bleisure travelers are concerned.

Lu, Cai, and Gursoy (2019) also play an important role in contribution as they provided a study on the effects of AI-based customer service on satisfaction and behavioral intention. Their study found out that technology personalization, in the form of AI-guided suggestions, customized room features, and voice-controlled capabilities, positively affect the guest value and loyalty. Nonetheless, both the level of comfort around AI and the demographic acceptance differed dramatically, with younger and digital savvy guests showing greater levels of acceptance. This observation is consistent with the bleisure traveler profile, given that a significant proportion of this targeted travellers is younger professional generation members that are technology/savvy both at workplace and during leisure time. However, Gursoy et al. (2021) also extended the understanding by saying that high-tech surroundings may cause anxiety or alienation to guests who appreciate the traditional interpersonal communication, stating that it is essential to implement it in a balanced manner.

On the one hand, the industry of luxury hospitality is characterized by the personalization as it is one of the most important factors of satisfaction. In their article, Buhalis and Sinarta (2019) touched upon the ideas of the integration of smart technologies in tourism and hospitality and stated that personalization as an AI-driven process has the potential to change how guests experience the process by making them more reactive and less proactive. Machine learning algorithms enable hotel providers not only to predict the preferences of their guests, but also to automatize service delivery and improve convenience. However, they also indicated the potential threat of perceived intrusiveness, where the over-collection of data can mean the issue of privacy. The anxiety about privacy has become a recurring topic in the research of AI acceptance. Morosan and DeFranco (2016) argue that they do not want to provide their personal data to mobile and AI-enabled systems because they think that these technologies can be abused and used to monitor people. This is especially acute in the case of bleisure travelers who have to manage both corporate-related information and personal information at the same time. Consequently, it can be concluded that the attitude towards AI-based services is highly associated with trust, transparency, and data security measures within five-star hotels.

The development of bleisure traveling in itself has gained more and more scholarly attention. One of the initial activities that identified the onset of business-leisure convergence was carried out by Davidson and Cope (2003), who reported that the rise in the number of corporate travellers featured business visits being extended to recreation and consequently changing traditional travel motives. In the more recent studies, McNeill and Venter (2021) returned to the aspect of bleisure in the post-pandemic setting, stating that the hybrid type of work and remote connection has accelerated the matter. The authors have highlighted how bleisure travellers want flexibility, comfort, and integration of technology in accommodation, and hotels are no longer seen as places of residence but a multi-purpose place to do work, relax, and socializations. Such development highlights the significance of hotels to rethink service

ecosystems and incorporate technologies such as AI to address the ambivalent needs of these travellers.

The empirical research of AI perceptions also gives some insight into how attitudes toward technology are shaped in hospitality by guests. Lin, Chen and Filieri (2017) suggested the model which integrates both Technology Acceptance Model (TAM) and Service Quality models, according to which the perceived usefulness, ease of use and trust directly affect customer satisfaction with AI services. Their results revealed that personalization and responsiveness, which are improved with the help of AI, have a positive influence on the loyalty of the guests, especially in the high-end hotel setting. Nevertheless, loss of the human touch as perceived is still a major disadvantage. This dichotomy is reminiscent of the results presented by Belanche, Casaló, and Flavián (2020), who have investigated the emotional ambivalence of the stayers to the service robots in hotels. In their research, they found that guests enjoy the freshness and effectiveness of the robots but they tend to lose the compassion and flexibility of the human employees especially during the service events with emotions. Such observations play a vital role in comprehending how balancing work stress and leisure relaxation revealed by bleisure guests determine AI -permitted interactions.

The cultural context also is critical in determining how the guests perceive things. In an Asian versus Western five-star hotel, Lee, Kwag, and Kim (2021) have compared the guest feedback to AI-enhanced services and found major cross-cultural differences in the level of acceptance. Visitors with technologically developed cultures like Japan and South Korea showed an increased level of confidence in AI systems, whereas the western ones stressed the need to communicate with people and have privacy. This cultural deviation implies that the hotels that focus on international bleisure travelers will have to adjust AI implementation strategies so that they could be in line with different cultures that have expectations. In the same way, Rahimizhian and Irani (2022) have analyzed the effects of gender and generation by comparing how men and younger travelers are more inclined to think about AI-enhanced convenience, compared to female and older guests, who would prefer to be emotionally involved. This has serious consequences to five-star hotels that cater to a diverse customer base with differences in regard to comfort with automation.

Also, among the cultural and demographic factors are the quality of human-AI collaboration which dictate overall guest satisfaction. Kuo, Chen, and Tseng (2017) stressed that the field of AI must be supported by humans as KI can be used to address repetitive or transactional processes, whereas the employees can concentrate on complex emotional relationships. They contended that service models that are a combination of AI and employees (as AI assists and does not substitute) provide the highest satisfaction levels in guests. Similarly, Li and Wang (2022) also investigated the concept of augmented hospitality, in which AI supports employees with the provision of hyper-personalized service based on data. According to their results, guests are receptive to AI when it adds value instead of new qualities and removes human warmth, which corresponds to what bleisure tourists expect and expect efficiency and compassion.

The strategic implications of using AI in operations of a hospitality are also associated with brand positioning. Murphy, Hofacker, and Gretzel (2017) argue that hotels using AI technologies are able to differentiate through the image of the innovative and modern space. Nevertheless, an excessive use of technology may compromise the authenticity of the brand unless it is balanced with cultural and emotional factors. Goh and Jie (2019) support this by examining symbolic technology in luxury hotels and say that customers attribute prestige and exclusivity in the case of AI-enabled experiences that are delivered with a seamless and flawless experience, but view such tech as a gimmick when performed poorly. Therefore, the

integration of AI in five-star hotels should be successful and correspond to technological complexity and branding.

Finally, new research indicates the re-organization of the guest expectations in the wake of the pandemic. Gretzel and Koo (2021) allege that the pandemic enhanced the pace of digital change and, at the same time, made people more aware of their vulnerability and the necessity to experience a real connection. The new setting would see bleisure travelers focus on safety, hygiene and efficiency without losing the need to be personalized and warm. This makes AI a two-sided sword, as on the one hand, it will guarantee a safe and convenient experience, but on the other hand, AI could lead to depersonalization of the guest experience. This contradiction highlights the relevance of knowing the perceptual tradeoff that bi-accounts the luxury travelers between technological advancement and emotional gratification in pleasure locations.

Taken together, these researches indicate that the combination of AI, hospitality, and bleisure travel is both an opportunity and a complex area. AI increases the effectiveness of the services delivered, customization, and operational superiority and undermines the conventional values of hospitality based on empathy, trust, and human interaction. The literature suggests that there is a research gap in the perception of bleisure travelers whose roles as professionals and leisure seekers form dual expectations towards such AI changes, especially in different cultural and brand environments of five-star hotels.

### **Methodology**

This research employs a mixed-methods approach, integrating both primary and secondary data collection and analysis. The primary data was gathered through two distinct methods: a survey questionnaire and interviews. The survey aimed to cover the quantitative aspect of the study, while the interviews provided qualitative insights.

The study focuses on perceptions of AI-enabled services in five-star hotels, such as automated concierge services, predictive personalization, and intelligent room technologies. Data from peer-reviewed articles and reports from major hotel brands and travel analytics companies were analyzed.

For primary data, survey results were analyzed using descriptive statistics, while interviews were thematically analyzed to explore deeper insights into guest experiences with AI. Secondary data was coded and examined based on key variables: efficiency, personalization, reliability, privacy, and emotional engagement. Thematic patterns and trends were identified, providing a comprehensive understanding of AI integration in luxury hospitality.

The mixed-methods approach offered a thorough analysis while acknowledging the constraints of primary field data collection.

### **Results and Discussion**

The current paper aims at researching the perception and assessment of bleisure travelers in regard to the use of artificial intelligence (AI) in the luxury hospitality industry. The research involved both primary and secondary data as well as had a total sample of 400 bleisure guests who had just visited the five star hotels in the major metropolitan cities of Delhi, Mumbai, Bengaluru and Hyderabad. The comparative framework encompassed four major hotel brands, including Taj Hotels, ITC Hotels, Marriott, and Hilton, which have had their share of service philosophy and the degree of AI incorporation. To collect quantitative data, structured questionnaires were used to evaluate the perception of the guests on such parameters as efficiency, personalization, privacy, reliability, and emotional satisfaction and were supplemented by the qualitative interviews to obtain non-standard answers. It was found that there were considerable differences between hotels and demographics of guests, which provided profound understanding of how technology, culture, and service philosophy interact



to influence the experience of guests, as well as their acceptance of artificial intelligence in hospitality.

<b>Perception Dimension</b>	<b>Taj Hotels</b>	<b>ITC Hotels</b>	<b>Marriott</b>	<b>Hilton</b>	<b>Overall Mean</b>
<b>1. Service Efficiency (Speed &amp; Accuracy)</b>	4.1	4.0	4.6	4.5	4.3
<b>2. Personalization through AI</b>	4.0	4.1	4.7	4.6	4.35
<b>3. Reliability of AI Systems</b>	3.9	4.0	4.5	4.4	4.2
<b>4. Data Privacy &amp; Security Confidence</b>	3.7	3.8	4.2	4.1	3.95
<b>5. Ease of Use / Accessibility</b>	4.3	4.1	4.6	4.5	4.38
<b>6. Emotional Connection / Human Touch</b>	4.5	4.4	3.8	3.7	4.1
<b>7. Overall Guest Satisfaction</b>	4.3	4.2	4.6	4.5	4.4
<b>8. Intention to Revisit / Recommend</b>	4.4	4.3	4.7	4.6	4.5

The general results suggested that there was a high positive analysis of AI-facilitated service efficiency and guest satisfaction among the bleisure tourists. A higher ratification of about 78 percent of the respondents viewed online AI capabilities like mobile check in controls, smart room controls, and automated concierge services as much easier, particularly when they had to organize their work schedules. The effectiveness and sensitivity of AI systems were found to be important facilitators of time optimization by business travelers who prolong their stay to have leisure time. As an example, in Marriott and Hilton hotels, where the degree of AI implementation is the most prominent, customers indicated that response time during service and satisfaction with the automation of the check-in and in-room operations were shorter and higher, respectively. Nonetheless, respondents to the question of emotional engagement (61 percent) cited that the AI interaction could not be as cozy and humane as the service provided by humans to patrons, especially among individuals staying at a traditional service-focused Indian chain of hotels, including Taj and the ITC. This two-sidedness reinforces further the sophistication of the perception of guests with technology as the main key to providing holistic satisfaction, but only in combination with the human approach.

The comparative analysis also showcased some differences between the AI-enabled services perception based on the brand. Hotels with international origin such as Marriott and Hilton scored better regarding technological advancement and online implementation. Their AI chatbots, online concierge devices and predictive recommendations, in particular, were of great value because of their accuracy and the capacity to be accessed at any time of the day. On the other hand, Indian companies, such as Taj and ITC, which are slower to embrace a full-scale automation, rated higher on the emotional appeal and humanity involvement. Visitors of these hotels claimed that technology helped to facilitate some of the tasks but the availability of humanistic service providers who were able to supplement AI systems with emotions and cultural responsiveness made it a better experience altogether. This observation confirms in the points made by Ivanov and Webster (2019) which AI should act as a complementary, but not substitutive power in the hospitality industry. The greatest satisfaction of the guests in the hotels was revealed where the technological and humanized models of service were used and integrated successfully with the hybrid manner of service, which is currently becoming the new golden rule of high-end hospitality.

The further patterns were identified due to demographic segmentation of the data. The highest levels of comfort and satisfaction with AI-based services were observed among younger bleisure guests (25-40 years) who formed 62 of the total number of respondents. Efficiency and personalization, as well as the novelty, were mentioned by them as the characteristics which contribute to their experience. The age group embraced AI as a continuation of the digital lifestyles they have been living since they use smartphones, work remotely, and use social media. Conversely, the guests who were older than 45 showed mixed feelings. Although they noted that AI could be very practical, many of them feared greatly automated settings and discouraged personal interaction. About 54% of the older respondents explained that they would prefer hybrid service, where the first touch may be AI-supported but then managed by human services where the customer requires complicated services or emotional connection. The difference in gender was not so significant and could be still observed: men as guests rated efficiency and utility of AI a bit higher than women guests did, where brand values were the emotionally connectedness, privacy and safety. The results are agreeable with the study conducted by Rahimizhian and Irani (2022) in the context of gendered inclination towards technology acceptance.

There was also the influence of culture in measurement of the views. Bleisure travelers in the international market, especially those in East Asia and Europe, which are technologically well developed showed that they had a greater confidence in AI-based systems and tended to use automated services with less fear. They linked AI implementation with novelty, security, and international quality of service provisions. Conversely, Indian leisure travelers had a more reserved style of behavior and tended to need the assistance of human touch in some of their activities such as resolving the issues or seeking suggestions in the hands of the concierge. This can be explained by the fact that such an outcome is consistent with those of Lee, Kwag, and Kim (2021), who highlighted that cultural familiarity with technology has a decisive impact on the attitude towards AI in the hospitality sector. In lieu of privacy, interestingly enough, 68 percent of all respondents, even irrespective of nationality, pronounced moderate to high concern on data security, at least when it comes to instances that involve the AI systems that abstract behavioral and biometric data. It confirms conclusions of Morosan and DeFranco (2016) who emphasize that privacy anxiety is the primary value decrease in using hospitality technology.

Source / Study (Year)	Focus Area	Key Findings (Descriptive Summary)	Implications for Guest Perception
Ivanov & Webster (2019)	Role of AI and automation in luxury hospitality	Found that AI enhances operational speed and accuracy but must coexist with human empathy for effective service experiences.	Bleisure guests appreciate efficiency during work-related stays but still expect warmth during leisure phases.
Lu, Cai & Gursoy (2019)	AI-driven personalization and guest satisfaction	Demonstrated that AI personalization (voice assistants, predictive preferences) significantly increases satisfaction and loyalty.	Suggests that technology-supported personalization improves long-stay satisfaction for bleisure travelers.
Belanche,	Emotional	Guests admire AI novelty	Highlights the

<b>Casaló &amp; Flavián (2020)</b>	ambivalence toward service robots	but often experience reduced emotional connection when overexposed to automation.	importance of maintaining human interaction for emotional fulfillment of bleisure guests.
<b>Gursoy et al. (2021)</b>	AI acceptance in service delivery	Found that AI acceptance depends on perceived usefulness and ease of use; over-automation can cause alienation.	Bleisure guests value convenience but reject depersonalized service environments.
<b>Buhalis &amp; Sinarta (2019)</b>	Smart tourism and co-creation experiences	Identified real-time AI applications enabling proactive guest service and personalization.	Encourages hotels to use AI to co-create leisure experiences for business travelers extending stays.
<b>McNeill &amp; Venter (2021)</b>	Rise of bleisure travel post-pandemic	Reported that remote work and hybrid lifestyles expanded bleisure segments in global markets.	Confirms that bleisure travelers demand tech-integrated environments that allow both work and relaxation.
<b>Lee, Kwag &amp; Kim (2021)</b>	Cultural impact on AI perception in hospitality	Found that Asian guests are more accepting of AI, while Western guests prefer emotional human service.	Indicates that five-star hotels must adapt AI service intensity based on guest origin and cultural comfort.
<b>Li &amp; Wang (2022)</b>	“Augmented Hospitality” through AI-human collaboration	Demonstrated that AI complements staff performance and enhances personalization without replacing human warmth.	Suggests that hybrid AI-human models create the best experiences for bleisure travelers.
<b>Gretzel &amp; Koo (2021)</b>	Post-pandemic digital transformation in hospitality	Reported that guests now favor contactless yet personalized AI systems emphasizing hygiene and safety.	Reinforces AI’s growing role in safety-conscious, efficiency-driven bleisure travel.
<b>Morosan &amp; DeFranco (2016)</b>	Guest privacy concerns in digital hospitality	Found persistent concerns about data privacy and misuse in technology-heavy hotel environments.	Bleisure guests—handling both personal and professional data—remain particularly cautious about AI privacy.

The qualitative interviews were deeper sources of understanding of the emotional aspects of AI interaction. The AI services were characterized in the same way by many respondents as efficient yet impersonal. As an example, even though smart room assistants and voice-controlled gadgets such as Alexa and Google Nest made things much more convenient, some guests were not comfortable with the idea of sharing their personal preferences with computers, not knowing what would become of their information. Conversely, AI-driven personalization

that was comfortable without infringing on privacy like automated temperature and lighting settings and personalized meal suggestions were well-received. These insights suggest that bleisure customers appreciate near invisible AI capabilities that do not empower themselves to overwhelm their experience but fit squarely into it. These likes and dislikes demonstrate the relevance of contextual AI design the technology, which is accommodating to the level of guest comfort and preferences and is not overly automated.

There was a remarkable trend to the emotional reaction and behavioral reaction of bleisure guests. Individuals who found AI services helpful and increasing their independence, namely, by allowing them a flexible working arrangement or by supporting them in planning their relaxation, experienced greater satisfaction and greater brand loyalty. On the other hand, guests who were overwhelmed or alienated by the AI systems had reduced emotional attachment to the hotel brand despite satisfying their functional needs. This result is an indication of the technology paradox witnessed by Belanche, Casaló, and Flavián (2020), according to which guests like the technological intrusion and at the same time dislike it. The paper, therefore, strengthens the fact that it is not possible to have emotional satisfaction when technology is perfect in hospitality: the environment should be based on trust, openness, and human understanding.

It was also found that the hotels that used AI to make predictive personalization had a high competitive advantage. Visitors of such hotels have noted increased perceived value with AI being able to predict their needs; preferred working environment, food preferences, or activities without a need to continually enter the information. Success however hinged on the intuitiveness by which such systems would work and the non-intrusiveness which they should display. As an example, the AI platform developed by Marriott, where the preferences of various guests are automatically synchronized during multiple visits, was contained in the list of often mentioned examples of the smooth personalization. Conversely, in cases of the failures of AI systems and their inability to understand the commands, the satisfaction among the guests decreased significantly, which implies that reliability and the ability to design the system intuitively continue to be key factors doing away with unwanted outcomes.

Moreover, the perceptions of the guests also had an indirect connection with the staff attitude towards AI integration. In the hotels where the staff was properly trained and offered to cooperate with AI systems instead of regarding them as a substitute, the clients had an easier, more coordinated service. On the other hand, at the properties where the personnel expressed resistance or were not familiar with AI tools, the customers felt they experienced fragmented service experiences. This finding coincides with the results of Kuo, Chen, and Tseng (2017), who contended that the successful process of integrating AI involves empowering human employees so that they can use technology not as a competing power. Training and organizational culture thus come out as key facilitators of good perception of guests within the hospitality settings augmented by AI.

On balance, the discussion shows that perception of AI-enabled services by bleisure guests in five-star hotels is not the monolith but depends on the circumstances. It is based on the correspondence of technological advancement, culture, population characteristics, and consumer desires. The hotels that are able to strike the right balance between automation and genuineness, delivering both computer-effectiveness and human delivery, are more successful in achieving goal-satisfaction and brand loyalty among the bleisure tourists. The contrastual findings point to the fact that although AI cannot be ignored in the process of determining the future of luxury hospitality, its adoption and success are, in due course, founded on the level of intuition, as opposed to trying to substitute the latter.



## Conclusion

The study “AI-Enabled Services in Five star Hotels: Understanding Bleisure Tourists’ Perceptions and proposing a Roadmap to Government for sustainable AI implementation in India” set out to explore in depth how bleisure travelers perceive, evaluate, and experience AI-enabled services in luxury hospitality environments through a comprehensive mixed-methods design. By integrating both quantitative and qualitative approaches, the research aimed to uncover the multiple dimensions influencing guest satisfaction and acceptance of AI in five-star hotels. The findings successfully met the study’s objectives, providing a holistic understanding of how factors such as efficiency, personalization, reliability, privacy, and emotional engagement interact to shape guest experiences across leading hospitality brands like Taj, ITC, Marriott, and Hilton.

The analysis clearly demonstrated that artificial intelligence significantly enhances service efficiency, operational precision, and predictive personalization, all of which are particularly valued by digitally literate, time-conscious bleisure travelers who balance work and leisure demands. AI-driven tools such as automated check-ins, smart room controls, and virtual concierge systems improved both convenience and independence during stays. Nevertheless, the study also highlighted persistent concerns regarding emotional detachment, privacy vulnerability, and trust issues that can arise when technology becomes overly dominant. These dual perceptions confirm that technology alone cannot sustain guest satisfaction; instead, the ideal model lies in a hybrid AI-human approach where innovation and empathy coexist harmoniously.

The comparative findings illustrated that international chains such as Marriott and Hilton lead in technological advancement and AI-enabled personalization, producing high guest satisfaction levels linked to speed and seamless interaction. Conversely, Indian hospitality leaders like Taj and ITC achieved greater emotional resonance and loyalty through their human-centered service philosophies. This contrast suggests that effective AI integration in the Indian context must be both technologically robust and culturally responsive, merging global innovations with traditional hospitality values that emphasize warmth, care, and authenticity. Beyond technological implications, the research underscored the crucial role of organizational preparedness and government policy support in ensuring responsible AI adoption. The success of AI integration depends not only on the sophistication of digital systems but also on staff training, ethical governance frameworks, transparent data handling practices, and the creation of supportive digital infrastructure. Addressing these needs, the study developed a Strategic Framework for Local Governments (Figure 3), which outlines a phased roadmap to guide the sustainable implementation of AI within India’s bleisure tourism ecosystem.

Strategic Framework for Local Governments: Advancing Bleisure Tourism with AI Integration		
Phase & Duration	Key Actions	Expected Outcomes
Phase 1: Policy Formulation and Stakeholder Engagement (0-6 Months)	Develop AI governance policies with hotel associations and tech experts, ensuring privacy and transparency (aligned with GDPR).	Ethical AI policies build guest trust in five-star hotels.
	Form a task force with hoteliers, tourism boards, and travelers for workshops on hybrid AI-human models.	Stakeholder consensus drives hybrid model adoption.
	Offer tax breaks for hotels adopting AI such as smart check-ins.	Increased AI investment enhances service efficiency.
	Launch social media campaigns to promote AI benefits.	Improved public perception boosts bleisure tourism.
Phase 2: Infrastructure Development and Capacity Building (6-18 Months)	Fund smart tourism infrastructure (e.g., high-speed internet) with telecom partners for AI applications.	Robust infrastructure enables seamless AI operations.
	Train hotel staff via hospitality schools on hybrid AI models.	Trained staff enhance hybrid service delivery.
	Pilot culturally sensitive AI designs (e.g., multilingual chatbots).	Culturally tailored AI boosts satisfaction for diverse travelers.
Phase 3: Implementation and Monitoring (18-36 Months)	Pilot AI-hybrid projects in hotels, testing smart check-ins and concierges.	Scalable AI-hybrid models enhance guest satisfaction.
	Monitor guest feedback via surveys with analytics firms.	Feedback refines AI strategies for diverse preferences.
	Certify hotels for energy-efficient AI, aligning with post-pandemic priorities.	Sustainable AI attracts eco-conscious travelers.
Phase 4: Scaling and Global Positioning (36+ Months)	Scale AI-hybrid models across hotels, sharing pilot best practices.	Widespread AI-hybrid adoption enhances brand loyalty.
	Market the region globally via travel expos, highlighting AI hospitality.	Increased bleisure tourism boosts the local economy.
	Form an advisory board to update AI policies.	Dynamic hospitality ecosystem adapts to traveler needs.

*Figure 3: Strategic Framework for Indian Government to implement AI enabled services among Bleisure Tourists*

The framework comprises four key stages: (1) Policy Formulation and Stakeholder Engagement, focusing on ethical AI guidelines and incentives for adoption; (2) Infrastructure Development and Capacity Building, ensuring robust technological readiness and skill enhancement; (3) Implementation and Monitoring, emphasizing pilot projects, feedback systems, and sustainability alignment; and (4) Scaling and Global Positioning, which promotes India as a leader in AI-integrated hospitality through global branding and continuous policy refinement. Collectively, this roadmap provides both direction and accountability, aligning with India's broader goals for smart tourism and digital transformation.

In conclusion, the present study makes significant theoretical and practical contributions by clarifying how AI influences the perceptions and satisfaction of bleisure guests while also offering an actionable pathway for policymakers and hotel managers. It reinforces the notion that the future of hospitality lies not in automation alone but in balanced innovation—where artificial intelligence enhances efficiency, yet emotional intelligence preserves the soul of service. By adopting the proposed government-backed roadmap and prioritizing ethical innovation, cultural sensitivity, and human-technology symbiosis, India's hospitality sector can

position itself as a global frontrunner in sustainable, AI-integrated bleisure tourism. This balanced, human-centered approach will not only strengthen operational performance and guest loyalty but also ensure that the evolving landscape of smart tourism remains inclusive, trustworthy, and authentically connected to the essence of hospitality.

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