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The mediating role of operational efficiency to measure the impact of artificial intelligence on enhancing guest experiences in luxury hotels in Kuala Lumpur

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Abstract

This study looked at how operational efficiency mediated the effect of artificial intelligence (AI) on improving visitor experiences in Kuala Lumpur's upscale hotels. With the growing adoption of AI technologies in the hotel sector, the study sought to determine whether enhancements to operational procedures were a crucial component of the relationship between AI deployment and visitor pleasure. Using a mixed-methods approach, fifteen five-star hotels' employees and visitors participated in in-depth interviews and structured surveys. AI greatly increased operational efficiency by delivering services more quickly, reducing human error, and improving personalization, according to quantitative study. Consequently, these enhancements had a favorable impact on the entire visitor experience. The association between AI and guest happiness was found to be somewhat mediated by operational efficiency, according to mediation analysis. This suggests that the efficacy of AI is largely dependent on how it is operationalized within hotel systems. The results offered hotel management insightful information, emphasizing how crucial it is to match AI tactics with operational reforms that prioritize efficiency in order to optimize visitor pleasure in upscale settings.

Keywords: Artificial intelligence, operational efficiency, guest experience, Kuala Lumpur, hospitality management, mediation analysis

1. Introduction

AI improves hotel operations, which leads to better guest experiences through tailored services. The mediating function of operational efficiency in Kuala Lumpur's upscale hotels is not well covered, though (Mohammad Badruddoza Talukder, 2024a) ^[17]. The hospitality sector has long placed a high value on providing guests with individualized experiences and outstanding service, especially in the luxury hotel sector (Shadma Shahid, 2022) ^[21]. Recent years have seen a paradigm shift in the way these experiences are provided due to the development of artificial intelligence (AI) technologies. In previously unthinkable ways, artificial intelligence (AI) is changing the way services are delivered, from chatbots and virtual concierges to smart room controls and predictive analytics (Ipseeta Satpathy, 2024) ^[12]. The incorporation of artificial intelligence (AI) presents a promising chance to improve guest satisfaction and streamline operational procedures in luxury hotels, where service excellence is required and expectations are high (Hadeel Sa'ad Al-Hyari, 2023) ^[11]. As a bustling metropolis and a popular travel and business destination in Southeast Asia, Kuala Lumpur has seen large expenditures in upscale hotel facilities. Hotel owners are under pressure to differentiate their offerings, improve operational efficiency, and foster enduring customer loyalty as the competition among five-star establishments grows. In this regard, artificial intelligence (AI) has gained traction as a tactical instrument to optimize processes, customize visitor experiences, and cut expenses (N. S. Saba Farheen, 2024) ^[19]. The question still stands, though: does AI improve the visitor experience on its own, or is its influence mediated by how much it increases operational efficiency? Although the literature now in publication acknowledges AI's potential to enhance visitor pleasure and service quality, little study has been done to investigate the mechanisms by which these advantages are achieved. In particular, operational efficiency's contribution to converting AI capabilities into better visitor experiences has received scant empirical attention (Nodirbek Khasanovich Ibrokhimov, 2024) ^[20]. This disparity is especially noticeable in the upscale hotel industry, where human-centered care and advanced technology must work in harmony.

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The study advances managerial practice and scholarly understanding by examining this relationship. It offers fact-based perspectives on how AI can be strategically used to accomplish two objectives: outstanding guest happiness and operational excellence. The results are intended to help hotel managers, legislators, and tech developers make well-informed choices about AI investments, operational layouts, and customer interaction tactics in the upscale hospitality industry.

2. Objectives

The objectives of this research are

1. To assess the extent of AI implementation in luxury hotels in Kuala Lumpur.
2. To evaluate the impact of AI on operational efficiency.
3. To analyze the influence of AI on guest experiences.
4. To examine the mediating role of operational efficiency in the relationship between AI and guest experiences.

3. Literature Review

Artificial intelligence (AI), which has uses ranging from data-driven personalization to service automation, has been a disruptive force in the hotel industry in recent years (Ajit Singh, 2022) ^[1]. By automating repetitive operations and using intelligent technologies to provide real-time responses, artificial intelligence (AI) empowers hoteliers to provide better customer service (H. C. Shi, 2025). According to (Mohammad Badruddoza Talukder, 2024) ^[18], artificial intelligence is transforming visitor interactions with the introduction of technology like chatbots, smart room assistants, facial recognition systems, and robotic concierges. This is especially true in luxury settings where service innovation is a differentiator in the marketplace. More recently, (Bhola Chourasia, 2024) ^[4] discovered that when appropriately included into service processes, AI tools in upscale hotels help to increase brand loyalty, speed up service recovery, and provide more personalized recommendations. They did warn, though, that how well AI integrates with human services and how accurate it is would determine how valuable it is seen to be in guest services. The whole encounter a guest has with a hotel, from reservation to check-out, is included in the multifaceted idea of guest experience (Gloria Sanmartin, 2021) ^[9]. It encompasses the psychological, physical, and emotional aspects of enjoyment at upscale hotels. According to (Efstathios Marios Papakonstantinou, 2024) ^[8], the luxury industry's guest experience is a blend of hedonistic, aesthetic, and utilitarian service elements with a focus on emotional involvement, personalization, and consistency. According to (Konstantinos Varsanis, 2019) ^[13], seamless service delivery, real-time response, and customization are important factors that influence how satisfied guests are with luxury hotels. According to their research, proactive service and data-driven personalization are becoming more and more valued by luxury travelers. Many hotels have integrated AI in response to these expectations in order to better predict and satisfy the requirements of its guests. Luxury hospitality is now about meaningful, seamless experiences rather than just splendor, as studies like (Bhupinder Singh, 2024) ^[5] noted. AI may help with this by learning and adjusting to personal preferences. Hotel management now places a high priority on operational efficiency, which is the capacity to provide services efficiently while reducing waste and resource consumption. According to (Dhumale *et al.*, 2023) ^[7], technology—

particularly artificial intelligence (AI)—is essential for increasing productivity since it can automate tedious tasks, lower error rates, and provide useful insights for more effective resource allocation. When (Srinivants Cherla, 2024) ^[22] looked at the connection between operational performance and AI implementation, they discovered a significant positive link. According to their research, hotels that used AI for operational duties including staff scheduling, inventory control, and predictive maintenance reported increased productivity and decreased operating expenses. They did stress, though, that AI's effectiveness depends on how well technology fits into corporate procedures and staff development. (Li Hung-Xin, 2024) ^[14] analysis reaffirmed the significance of operational efficiency as a mediator between service outcomes and technology adoption. Their mediation model showed that although AI affects visitor happiness, its effects are indirect and heavily impacted by how it enhances back-end functions including front desk coordination, food service logistics, and housekeeping scheduling. In hospitality research, the idea of mediation has been popular, particularly when looking at how operational considerations convert technology expenditures into service results. The mediation framework developed by Baron and Kenny (1986) is still a standard approach for evaluating these kinds of partnerships. A new study by (Dendy Rosman, 2023) ^[6] used this model to examine how service automation influences customer satisfaction in tech-enabled hotels. According to the study, perceived service quality and AI use were significantly mediated by service speed, accuracy, and cost-effectiveness. In a similar vein, (Milan Sharma, 2023) ^[16] investigated AI in South Korean five-star hotels and found that although AI improves service directly, its effects are magnified when operational procedures are changed to accommodate AI-driven workflows. Their research backs up the idea that operational efficiency is a strategic lever that improves the customer experience as well as a result of implementing AI. (V. Jenifer, 2024) ^[23] looked at luxury hotels in Malaysia and Singapore in Southeast Asia and came to the conclusion that effective service procedures and qualified staff are necessary for AI to reach its full potential. AI runs the risk of being viewed as inefficient or impersonal in the absence of such alignment. The majority of the literature now in publication, despite growing scholarly interest, tends to concentrate on either the advantages of artificial intelligence or the significance of the guest experience, without clearly tying the two together through operational dynamics. Empirical research on operational efficiency as a mediating factor that explains how and why AI results in higher guest satisfaction is still lacking. Furthermore, there aren't many studies conducted in Malaysia. Exploring localized insights into how AI and operational methods impact visitor views is crucial as Kuala Lumpur develops into a luxury tourism hub. By experimentally examining the mediating function of operational efficiency in Kuala Lumpur's luxury hotels, this study fills this knowledge gap and advances both theory and practice.

4. Methodology

This study used a mixed-methods approach to examine how operational efficiency mediated the relationship between the use of artificial intelligence (AI) and the experience of guests at Kuala Lumpur's premium hotels. In order to guarantee relevance and access to AI-enabled operations,

data was gathered from fifteen five-star hotels that were chosen through purposive sampling. 150 hotel employees, including those at the front desk, housekeeping, management, and IT departments, were given structured questionnaires to complete in order to collect quantitative data. Semi-structured interviews with 15 employees and 15 visitors were used to acquire qualitative information. Using a 5-point Likert scale, the survey assessed three important constructs: the use of AI, operational effectiveness, and visitor experience. Descriptive statistics, regression-based mediation analysis, and correlation analysis were performed on the gathered data using SPSS in accordance with the paradigm of Baron and Kenny (1986) in order to test the proposed relationships. A thorough grasp of how AI and operational efficiency affected guest happiness was ensured by applying thematic analysis to the interview data in order to contextualize and enhance the quantitative findings.

5. Results and Discussion

In the results and discussion part, the study's findings are

presented, emphasizing the connections among Kuala Lumpur's luxury hotels' guest experience, operational effectiveness, and artificial intelligence deployment. Following the findings of the mediation analysis that evaluated the proposed model, it starts with descriptive and inferential statistical analyses obtained from the survey data. To bolster and put the quantitative findings in context, the part also incorporates qualitative observations from interviews. The impact of AI on improving visitor experiences in the luxury hospitality industry is mediated by operational efficiency, as these findings are examined together and in light of previous research.

5.1 AI Implementation

The survey data analysis showed that the participating luxury hotels in Kuala Lumpur were widely implementing artificial intelligence (AI), especially in areas like personalized service delivery, smart room features, and front desk automation.

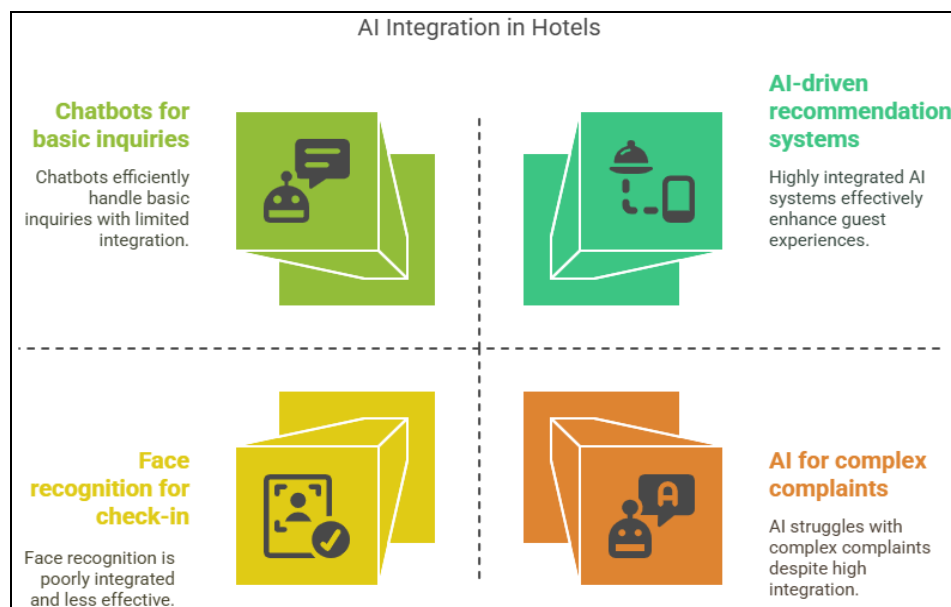


Fig 1: AI implementation in Hotels

In figure 01 explained that the most respondents agreed or strongly agreed that their hotels used AI-driven recommendation systems, chatbots, and face recognition for check-in to improve the quality of their services. A high degree of acceptance and integration was indicated by the mean ratings for AI-related items, which ranged from 4.1 to 4.5 on a 5-point Likert scale. These conclusions were corroborated by interview replies, where hotel employees mentioned that AI greatly shortened response times and made it possible for more individualized guest interactions by examining visitor information and preferences. Some participants emphasized that AI freed up staff members to concentrate more on high-value work rather than mundane duties. However, other respondents voiced worries about AI's limitations in managing complicated guest complaints and emotional nuances, which supports the notion that AI is

best used as a support tool rather than as a substitute for human engagement. These results were consistent with earlier research, including that of (Mayola D. Fernandes, 2023) ^[15], which highlighted that although AI is essential to service innovation, its real impact is seen when it is combined with human-centered hospitality practices. All things considered; the findings showed that the use of AI in luxury hotel operations was not only common but also viewed as a strategic facilitator of high-quality service.

5.2 Operational Efficiency

The results showed that artificial intelligence greatly improved the operational effectiveness of Kuala Lumpur's upscale hotels.



Fig 2: Impact of AI on Hotel Operations

In the above figure showed that the participants strongly agreed, according to survey replies, that AI has streamlined important operational operations like resource allocation, housekeeping coordination, and check-in/check-out procedures. The operational efficiency factors had mean values ranging from 4.0 to 4.4, indicating that AI is thought to have a significant impact on increasing service delivery speed, accuracy, and consistency. Employees stated that automation sped up decision-making and decreased manual errors, particularly in areas like inventory control and guest demands. These findings were further supported by qualitative interviews, where a number of hotel managers said that AI systems offered real-time insights and predictive analytics that improved visitor need forecasting and job scheduling efficiency. The results showed that artificial intelligence greatly improved the operational effectiveness of Kuala Lumpur's upscale hotels. Participants strongly agreed, according to survey replies, that AI has streamlined important operational operations like resource

allocation, housekeeping coordination, and check-in/check-out procedures. The operational efficiency factors had mean values ranging from 4.0 to 4.4, indicating that AI is thought to have a significant impact on increasing service delivery speed, accuracy, and consistency. Employees stated that automation sped up decision-making and decreased manual errors, particularly in areas like inventory control and guest demands. These findings were further supported by qualitative interviews, where a number of hotel managers said that AI systems offered real-time insights and predictive analytics that improved visitor need forecasting and job scheduling efficiency.

5.3 Guest Experience

The study discovered that, primarily through its influence on individualized offerings and service efficiency, artificial intelligence significantly improved the guest experience in Kuala Lumpur's finest hotels.

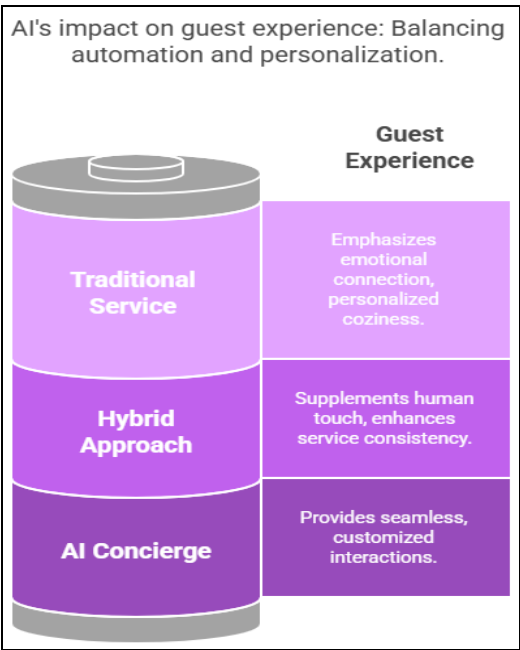


Fig 3: Impact of AI on Guest Experience

The figure 03 explain the result with mean ratings on the guest experience scale ranging from 4.2 to 4.6, survey results showed that hotel employees were highly satisfied with the caliber of visitor experiences made possible by AI. According to respondents, AI-enabled solutions like automated concierge services, smart room controls, and personalized suggestions made it possible for visitor interactions to be more seamless and customized. These conclusions were supported by qualitative interview data, which showed that visitors valued the ease and customization provided by AI-powered features. When AI systems remembered their preferences, foresaw their needs, and promptly responded without their having to ask, many visitors said they felt appreciated. Additionally, hotel employees reported that AI improved guest happiness by ensuring service consistency, especially during busy times.

However, other participants warned that relying too much on automation would lessen the emotional connection and coziness that come with premium hospitality. This conclusion was in line with other research by (Asheetu Bhatia Sarin, 2024) ^[2], which indicated that although AI improves convenience, it must be tempered with human interaction to satisfy upscale visitors' expectations. Overall, the results demonstrated that AI greatly improved visitor experiences, particularly when used to supplement rather than replace individualized human engagement.

5.4 Mediation Analysis

The relationship between the adoption of artificial intelligence (AI) and the guest experience in Kuala Lumpur's luxury hotels was found to be significantly mediated by operational efficiency.

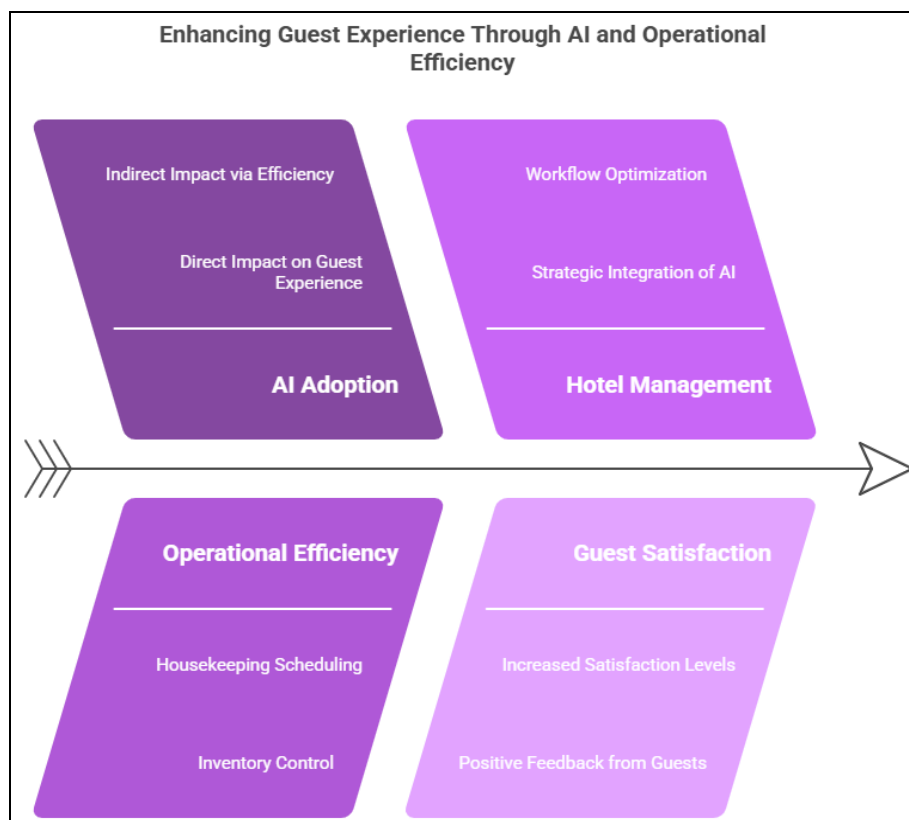


Fig 4: Enhancing guest experience through AI and operational efficiency

According to the figure 04 of mediation analysis carried out using the Baron and Kenny (1986) framework. According to the regression results, the use of AI significantly improved operational efficiency ($\beta = 0.62$, $p < 0.001$), which in turn significantly improved the visitor experience ($\beta = 0.59$, $p < 0.001$). The direct impact of AI on visitor experience decreased from $\beta = 0.68$ ($p < 0.001$) to $\beta = 0.34$ ($p < 0.01$) when operational efficiency was incorporated into the model, suggesting a partial mediation effect. This implied that although AI directly improved the visitor experience, a sizable amount of its influence was distributed through enhanced operational procedures. These results were in line with earlier research by (Ashok Sreerangapuri, 2024) ^[3], which highlighted the significance of operational optimization in achieving the full advantages of AI-driven service innovation. Responses from interviews corroborated this finding, with hotel managers stating that the use of AI

to optimize backend procedures like scheduling housekeeping, inventory control, and real-time service management resulted in the biggest increases in guest satisfaction. Overall, the findings supported the notion that one of the key ways AI affects the visitor experience is through operational efficiency, highlighting the strategic significance of combining AI with well-organized operational workflows.

5.5 Thematic Analysis

To better understand how artificial intelligence (AI) and operational efficiency affected guest experiences at Kuala Lumpur's premium hotels, a thematic analysis was performed on the qualitative interview data gathered from hotel employees and visitors. The data revealed three main themes: Human-AI Service Balance, Process Streamlining and Efficiency, and AI-Enabled Personalization.

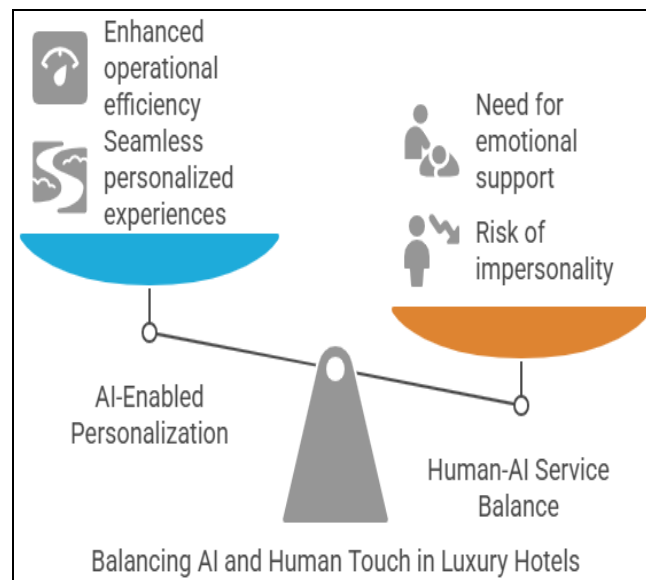


Fig 5: Thematic analysis of the study

Figure 05 showed that the first subject, AI-Enabled Personalization, focused on how AI-enabled technology, like smart room controls, automated check-in services, and intelligent recommendation systems, helped create more seamless and personalized visitor experiences. In order to improve the feeling of personalized service, both employees and visitors often remarked on how AI systems predicted preferences, such as room temperature, meal selections, or recreational activities. The simplicity and seeming attentiveness of these automated systems were especially valued by guests, who frequently associated them with upscale, luxurious standards.

Hotel employees strongly agreed that AI enhanced operational workflows, which was represented in the second theme, Process Streamlining and Efficiency. Workers gave instances of how AI-powered housekeeping schedules, predictive inventory control, and automated service requests decreased response times and human error. This topic supported the quantitative conclusion that the effect of AI on guest pleasure was mediated by operational efficiency. Employees stated that these enhancements improved overall service quality by enabling them to concentrate on complex guest demands. Both visitors and staff expressed a nuanced viewpoint on the third theme, Human-AI Service Balance. Many panelists underlined the indispensable value of human interaction in premium hotels, even as they acknowledged the advantages of AI. Particularly in emotionally complex situations like special requests or service recovery, some guests thought that an excessive reliance on technology gave a sense of impersonality. In a similar vein, employees emphasized the significance of utilizing AI to enhance, not replace, the human element that characterizes luxury service. In conclusion, the thematic analysis offered rich contextual understanding and validated the quantitative findings. Though its success mostly hinged on its careful integration with human-centered service methods, AI was seen as a potent booster of both operational efficiency and guest satisfaction.

6. Conclusion

According to the study's findings, artificial intelligence (AI) significantly improves visitor experiences at Kuala

Lumpur's upscale hotels, mostly by increasing operational effectiveness. The results showed that the use of AI resulted in better service personalization, quicker reaction times, and more efficient procedures, all of which raised visitor satisfaction levels. Crucially, the mediation research verified that operational effectiveness acted as a crucial bridge, converting the advantages of AI into observable enhancements in visitor satisfaction and service delivery. The thematic analysis showed that both visitors and employees appreciated a well-rounded strategy where human engagement supplemented technical improvements, even while AI technologies increased convenience and consistency. Therefore, in order to prevent efficiency advantages from coming at the expense of emotional connection, the integration of AI in luxury hospitality should be deliberately matched with service procedures and human capabilities. By highlighting the mediating role of operational efficiency and providing useful insights for hotel managers looking to apply AI in ways that improve service quality and guest experience, this study adds to the expanding body of knowledge on hospitality technology.

7. References

1. Singh A. Robotics and artificial intelligence in the hotel industry: a systematic literature review. *SciSpace - Paper*. 2022 Mar 25. DOI: 10.1109/ICACCS54159.2022.9785257
2. Sarin AB. Harmonizing AI and human interaction. In: *Advances in Marketing, Customer Relationship Management, and e-Services Book Series*. 2024. p.151–174. DOI: 10.4018/979-8-3693-2276-5.ch009
3. Sreerangapuri A. AI-driven service transformation: revolutionizing operational excellence. *Int J Sci Res Comput Sci Eng Inf Technol*. 2024. DOI: 10.32628/cseit24106154
4. Chourasia B. Leveraging AI for branding strategy in service marketing of hotels. In: *Advances in Marketing, Customer Relationship Management, and e-Services Book Series*. 2024. p.439–450. DOI: 10.4018/979-8-3693-7122-0.ch021
5. Singh B. Redefining the nodes of metaverse and luxury hospitality. In: *Advances in Hospitality, Tourism and*

- the Services Industry (AHTSI) Book Series. 2024. p.175–202. DOI: 10.4018/979-8-3693-6755-1.ch010
6. Rosman D. The deployment of service robots powered by artificial intelligence in five-star hotels: Does it influence the customer's booking intention? *SciSpace - Paper*. 2023 May 18. DOI: 10.1109/ICBIR57571.2023.10147705
 7. Dhumale TG, Patil S, Chaudhary AP, Bhosale S. Application of artificial intelligence algorithms for grid integration of renewable energy sources in the National Grid—Indian government perspective: A review. In: 2023 IEEE IAS Glob Conf Renew Energy Hydrogen Technol (GlobConHT). 2023. p.1–5. DOI: 10.1109/GlobConHT56829.2023.10087664
 8. Papakonstantinou EM. Luxury tourism and hospitality employees. *Athens J Tour*. 2024;11(4):307–322. DOI: 10.30958/ajt.11-4-4
 9. Sanmartin G. Interactions and touchpoints along the hotel guest journey: an approach to experience management. *SciSpace - Paper*. 2021. DOI: 10.1344/ara.v14i1.45870
 10. Shi HC. Research on evaluation of hotel digitization effect assisted by extreme learning machine in artificial intelligence environment. *Int J High Speed Electron Syst*. 2025. DOI: 10.1142/s0129156425401998
 11. Al-Hyari HS. The impact of artificial intelligence (AI) on guest satisfaction in hotel management: an empirical study of luxury hotels. *Geoj Tour Geosites*. 2023;48(2 Suppl):810–819. DOI: 10.30892/gtg.482spl15-1081
 12. Satpathy I. The strategic role of artificial intelligence (AI) in service delivery systems. In: *Advances in Hospitality, Tourism and the Services Industry (AHTSI) Book Series*. 2024. p.291–310. DOI: 10.4018/979-8-3693-7909-7.ch014
 13. Varsanis K. The relationship between service quality and customer satisfaction on luxurious hotels so to produce error-free service. In: Springer, Cham. 2019 Jan 1. DOI: 10.1007/978-3-030-12453-3_8
 14. Hung-Xin L. Technology alone is not enough: the role of operational efficiency in bridging AI and patient outcomes – insights from Taiwanese healthcare facilities. *SciSpace - Paper*. 2024 Oct 18. DOI: 10.21203/rs.3.rs-4968903/v1
 15. Fernandes MD. The integration of artificial intelligence in the hospitality industry. *SciSpace - Paper*. 2023. DOI: 10.4018/979-8-3693-7898-4.ch025
 16. Sharma M. A study on impact of adaptation of AI-artificial intelligence services on business performance of hotels. *SciSpace - Paper*. 2023 Jun 23. DOI: 10.1109/iccmso59960.2023.00019
 17. Talukder MB. AI-driven personalized room management in the modern hotel industry. In: *Advances in Hospitality, Tourism and the Services Industry (AHTSI) Book Series*. 2024a. p.59–82. DOI: 10.4018/979-8-3693-5678-4.ch003
 18. Talukder MB. Implementing artificial intelligence and virtual experiences in hospitality. In: *Advances in Hospitality, Tourism and the Services Industry (AHTSI) Book Series*. 2024b. p.145–160. DOI: 10.4018/979-8-3693-2019-8.ch009
 19. Farheen NSS. A future look at artificial intelligence in the world of tourism. In: *Advances in Marketing, Customer Relationship Management, and e-Services Book Series*. 2024. p.1–16. DOI: 10.4018/979-8-3693-3310-5.ch001
 20. Ibromkhimov NK. AI and big data analytics in Uzbekistan's tourism: enhancing operational efficiency and visitor satisfaction – a case study of Samarkand. *Deleted J*. 2024;37(4):58–66. DOI: 10.51699/economics.v37i4.132
 21. Shahid S. Examining guests' experience in luxury hotels: evidence from an emerging market. *J Mark Manag*. 2022;38:1278–1306. DOI: 10.1080/0267257X.2022.2085768
 22. Cherla S. Enhancing operational performance: the role of entrepreneurial orientation, big data analytics, and AI under environmental dynamism. *SciSpace - Paper*. 2024 Dec 10. DOI: 10.69725/raida.v1i3.170
 23. Jenifer V. Examining the duality of immersive artificial intelligence (AI) in the luxury hospitality sector: understanding how immersive AI influences consumer distinction and adds value to luxury experiences. *Int J Multidimens Res Perspect (IJMRP)*. 2024;2(4):113–126. DOI: 10.61877/ijmrp.v2i4.140
 24. Si Z, Ali DA, Rosli RB, Bhaumik A, Ghosh A. Omnichannel retail marketing effect evaluation framework integrating big data and artificial intelligence. *Edelweiss Appl Sci Technol*. 2025;9(3):568–583.
 25. Jiecong Z, Ali DA. Artificial intelligence and employee empowerment in Chinese enterprises: an empirical study on Alibaba. *Globus - Int J Manag IT*. 2025;16(2).
 26. Li L, Wang T, Ali DA. The effect of classification experience on the willingness of users to continue using AI recommender systems. In: Hu ZB, Zhang Q, He M, editors. *Artificial Intelligence, Medical Engineering and Education*. Amsterdam: IOS Press; 2025. p.20–32.
 27. Hu ZB, Zhang Q, He M, editors. *Artificial Intelligence, Medical Engineering and Education: Proceedings of the 7th International Conference (AIMEE 2023)*, Guangzhou, China, 9–10 November 2023. Vol. 48. Amsterdam: IOS Press; 2024.
 28. Feng C, Ali DA. Improving the organizational efficiency of manufacturing enterprises—the role of digital transformation, resource planning (ERP), and business practices. *J Law Sustain Dev*. 2024;12(3):e2439. DOI: 10.55908/sdgs.v12i3.2439
 29. Iwadi IM, Ali DA, Jabari M. The relationship between the application of artificial intelligence technology and the job performance quality in the education administration office in Hebron. In: Al-Bahadili H, editor. *Achieving Sustainable Business through AI, Technology Education and Computer Science*. Volume 1: Computer Science, Business Sustainability, and Competitive Advantage. Cham: Springer Nature Switzerland; 2024. p.49–58. DOI: 10.1007/978-3-031-51771-5_5