Artificial Intelligence-Driven Strategic Planning for Enhancing Sustainable Competitive Advantage in the Hospitality Industry: A Systematic Literature Review

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Abstract: The rapid advancement of Artificial Intelligence (AI) has fundamentally transformed the way organizations formulate strategies, make decisions, and achieve sustainable competitive advantage. In the hospitality industry, increasing market competition, changing customer expectations, and accelerated digital transformation have encouraged organizations to integrate AI into strategic planning processes to improve organizational agility, service innovation, and long-term competitiveness. Although previous studies have extensively examined AI applications in operational efficiency, customer experience, and service automation, limited research has comprehensively synthesized AI as a strategic capability that links strategic planning with sustainable competitive advantage in the hospitality context. Therefore, this study aims to systematically review the existing literature to analyze the role of Artificial Intelligence-driven strategic planning in enhancing sustainable competitive advantage within the hospitality industry. This study adopts a qualitative approach using the Systematic Literature Review (SLR) method, following a structured process of literature identification, screening, eligibility assessment, and thematic synthesis of peer-reviewed articles retrieved from reputable academic databases. The findings indicate that AI supports strategic planning by strengthening environmental scanning, improving strategic decision-making, enabling predictive analytics, enhancing customer personalization, optimizing operational efficiency, and fostering organizational adaptability. Furthermore, the integration of AI with Dynamic Capabilities facilitates continuous innovation and value creation, enabling hospitality organizations to maintain long-term competitive advantage in an increasingly dynamic business environment. This study contributes to the strategic management literature by providing a comprehensive conceptual synthesis of AI-driven strategic planning and offers practical insights for hospitality managers seeking to leverage AI as a strategic capability for sustainable organizational performance.

Keywords: Artificial Intelligence, Strategic Planning, Sustainable Competitive Advantage, Hospitality Industry, Systematic Literature Review.

Introduction

The rapid development of Artificial Intelligence (AI) has become one of the primary drivers of digital transformation across various industries. Recent advances in machine learning, deep learning, predictive analytics, and generative AI have enabled organizations to process vast amounts of data efficiently and generate actionable insights for strategic decision-making. As a result, AI has evolved from being merely an automation technology into a strategic capability that enhances organizational effectiveness and responsiveness in increasingly dynamic and competitive business environments. According to (Zahidi et al., 2024), AI provides organizations with opportunities to improve productivity, innovation, and the quality of data-driven decision-making, thereby becoming a source of long-term competitive advantage.

The hospitality industry is one of the sectors experiencing accelerated digital transformation as a result of increasing global competition, changes in traveler behavior, and the advancement of digital technology within the tourism ecosystem. Hotels no longer compete solely on the quality of their facilities and services, but also on their ability to manage information, understand customer preferences, and design business strategies that adapt to market changes. In addition to meeting the demand for personalized service, the hospitality industry also faces challenges related to operational efficiency, enhancing the customer experience, and implementing sustainable business practices. Consequently, hospitality organizations are increasingly integrating AI into various business activities as part of their digital transformation strategies to maintain competitiveness (Jerez-Jerez, 2025).

In this context, the use of AI has expanded beyond operational functions to include strategic planning processes. Various AI technologies are utilized to support business environment analysis (environmental scanning), predict

market demand, optimize pricing strategies (dynamic pricing), analyze customer behavior, and assist management in making faster and more accurate strategic decisions. With its ability to analyze data in real time and generate more precise predictions, AI enables organizations to identify business opportunities while anticipating risks arising from changes in the external environment. Consequently, AI is no longer viewed merely as an operational support tool but as an integral part of an organization's capabilities to create value and enhance sustainable competitive advantage (Tajeddini et al., 2026).

Previous studies have extensively examined the relationship between Artificial Intelligence and organizational performance. Dwivedi et al. (2023) argue that AI has transformed business processes by improving decision-making quality, organizational innovation, and strategic performance. Likewise, Buhalis et al. (2023) demonstrate that AI significantly enhances operational efficiency, service personalization, customer engagement, and digital transformation within the hospitality industry. Furthermore, (Abdou et al., 2023)emphasize that AI is becoming a fundamental driver of transformation in the service sector by strengthening organizations' capabilities to create customer value and improve business performance. Collectively, these studies suggest that AI contributes not only to operational excellence but also to broader organizational transformation.

Despite these advances, existing research within the hospitality industry has primarily focused on service automation, robotics, chatbots, recommendation systems, and customer experience enhancement. Comparatively fewer studies have examined how AI is strategically integrated into organizational strategic planning to achieve sustainable competitive advantage. Moreover, previous research has generally investigated AI adoption and organizational performance separately, with limited attention given to the Dynamic Capabilities perspective, which explains how organizations utilize AI to sense environmental changes, seize emerging opportunities, and reconfigure organizational resources in response to market dynamics. This limitation reveals an important research gap that requires a comprehensive synthesis of the existing literature.

To address this gap, the present study employs a Systematic Literature Review (SLR) approach to synthesize previous research concerning the implementation of Artificial Intelligence in strategic planning within the hospitality industry. Specifically, this study aims to identify patterns of AI adoption, examine its strategic benefits and implementation challenges, and analyze its contribution to achieving sustainable competitive advantage. Through an integrative review of empirical studies, this research seeks to provide a comprehensive understanding of how AI supports strategic planning in responding to the rapidly evolving hospitality business environment.

This study offers two important contributions to the growing literature on Artificial Intelligence and strategic management. First, it extends previous research by shifting the analytical focus from the operational application of AI toward its role as a strategic capability within organizational strategic planning in the hospitality industry. Second, it integrates the concepts of Artificial Intelligence, Dynamic Capabilities, Strategic Planning, and Sustainable Competitive Advantage into a unified conceptual framework using a Systematic Literature Review approach, thereby providing a more comprehensive understanding of how AI contributes to long-term organizational competitiveness. Based on these objectives, this study addresses the following research question: How does Artificial Intelligence contribute to the strategic planning process to enhance sustainable competitive advantage in the hospitality industry based on the existing literature?

Literature Review

Artificial Intelligence in Strategic Planning

Artificial Intelligence (AI) is a technology that enables computer systems to mimic human cognitive abilities such as learning, reasoning, prediction, and decision-making through complex data analysis. In the context of strategic management, AI has evolved from merely an automation technology into a source of organizational capabilities that support the strategic planning process. AI's ability to process data in real time, identify patterns, and generate predictions enables organizations to understand changes in the business environment more quickly and accurately than conventional approaches. Therefore, AI is no longer viewed merely as an operational tool but as a strategic asset that helps organizations formulate business direction, reduce uncertainty, and improve the quality of strategic decisions (Pitakaso et al., 2025).

Various previous studies have shown that AI makes a significant contribution to an organization's strategic planning process. Davenport and Ronanki (2018) explain that the implementation of AI can improve the effectiveness of decision-making through faster and more accurate data analysis. Meanwhile, Huang and Rust

(2021) argue that AI plays a role in creating strategic value through the integration of artificial intelligence with an organization's managerial capabilities. Research by (Prester, 2023) also shows that AI is increasingly being used to support market analysis, business trend forecasting, and the development of more adaptive organizational strategies. Overall, these studies confirm that AI not only improves operational efficiency but also strengthens an organization's ability to develop data-driven business strategies.

Nevertheless, most research still focuses on the implementation of AI in operational, marketing, or data analysis functions, while studies on how AI is systematically integrated into the strategic planning process remain relatively limited. Most studies evaluate the success of AI based on improvements in productivity or organizational performance without explaining how AI supports the process of identifying opportunities, formulating strategies, implementing them, and evaluating them. These limitations indicate that understanding AI as a strategic capability in the organizational planning process still requires a more comprehensive literature review, particularly in the hospitality industry.

Dynamic Capabilities and Sustainable Competitive Advantage

In a dynamic business environment, organizations must be able to adapt quickly to changes in technology, markets, and consumer behavior. The Dynamic Capabilities Theory, developed by (Kero & Bogale, 2023), explains that sustainable competitive advantage is built through an organization's ability to sense, seize, and reconfigure its resources. These capabilities enable organizations to identify business opportunities, make strategic decisions, and adjust their resources to remain relevant in the face of environmental changes. In the context of digital transformation, AI is one of the technologies capable of strengthening an organization's dynamic capabilities by providing strategic information quickly and accurately.

Various studies have shown a close relationship between dynamic capabilities and the creation of sustainable competitive advantage. Teece (2018) asserts that organizations capable of integrating new technologies into their business processes have a greater chance of maintaining a competitive advantage compared to organizations that rely solely on physical resources. Research by (Tamirat & Amentie, 2023) also shows that digital transformation supported by dynamic capabilities enhances an organization's ability to respond to market changes more adaptively. In the hospitality industry, the ability to leverage AI to understand customer needs, optimize operations, and develop service innovations is one way dynamic capabilities are implemented to create sustainable value.

Nevertheless, previous research still tends to treat dynamic capabilities and AI as two separate concepts. Studies that integrate these two concepts to explain the process of building sustainable competitive advantage in the hospitality industry remain relatively limited. Therefore, research is needed that can synthesize various research findings to provide a more comprehensive understanding of how AI strengthens dynamic capabilities as the foundation of an organization's competitive advantage.

Artificial Intelligence in the Hospitality Industry

The hospitality industry is one of the service sectors that has been quickest to adopt artificial intelligence in various business activities. AI has been used to support personalized customer service, reservation systems, chatbots, customer sentiment analysis, market demand forecasting, dynamic pricing, and hotel operations management. The use of this technology enables organizations to improve operational efficiency while creating a more personalized and responsive customer experience. Given that the hospitality industry relies heavily on service quality, AI has become a key factor in enhancing the value delivered to customers.

Research by (Dwivedi et al., 2023) shows that digital transformation has changed the hospitality industry's business model through the use of data-driven technologies to improve service quality and the customer experience. Ivanov and Webster (2019) also explain that AI contributes to increased operational efficiency and improved managerial decision-making in the hospitality industry. A recent study by Mariani et al. (2023) found that the implementation of AI not only increases customer satisfaction but also strengthens an organization's ability to develop sustainability-oriented service innovations.

Although the implementation of AI in the hospitality industry is growing rapidly, most research still focuses on operational, marketing, or customer experience aspects. Research examining AI as part of strategic planning to build a sustainable competitive advantage remains relatively scarce. Furthermore, there is a lack of research

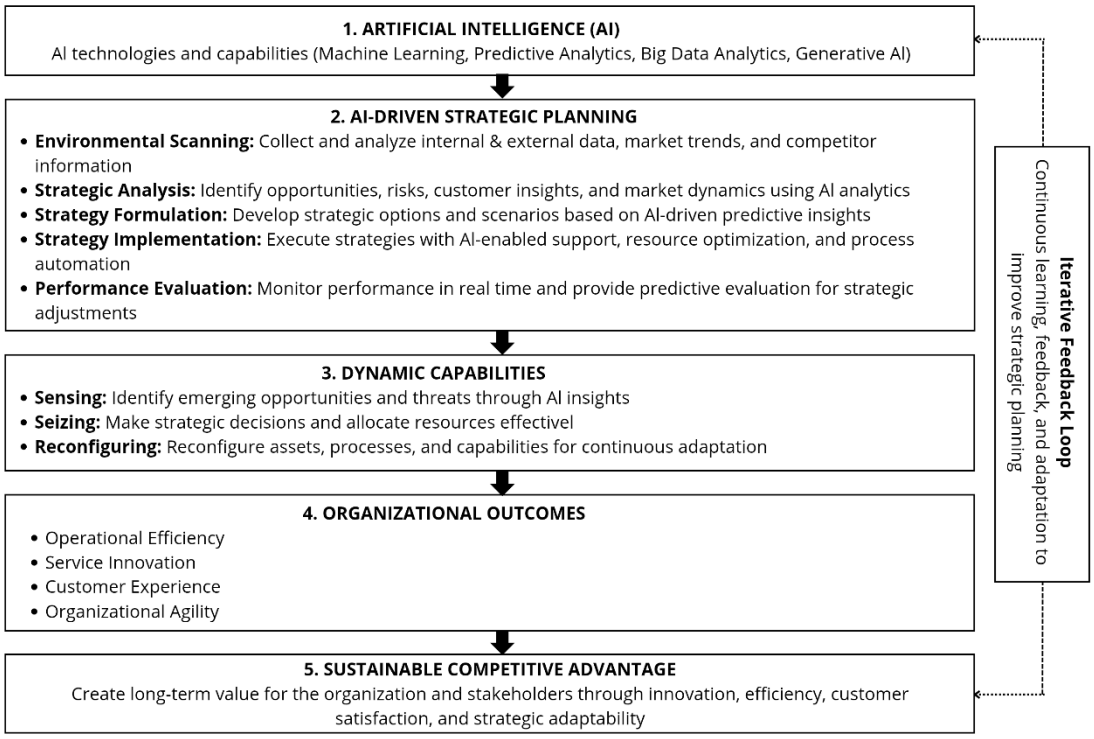
providing a comprehensive synthesis of AI implementation patterns in the hospitality industry from a strategic management perspective. This situation highlights the need for a study that integrates various research findings to gain a more holistic understanding of AI's contribution to organizational sustainability.

Conceptual Framework

Based on a literature review, this study views Artificial Intelligence as a strategic capability that supports the strategic planning process in the hospitality industry. AI plays a role in enhancing an organization's ability to conduct environmental scanning, analyze customer data, predict market trends, and support strategic decision-making. These capabilities strengthen an organization's dynamic capabilities through the processes of sensing, seizing, and reconfiguring, thereby enabling the organization to respond to changes in the business environment more quickly and effectively.

From this perspective, this study proposes that the implementation of AI in strategic planning results in a series of organizational processes, ranging from data collection and analysis, the formulation of data-driven strategies, and strategy implementation, to the ongoing evaluation of organizational performance. The integration of Artificial Intelligence, Strategic Planning, and Dynamic Capabilities is expected to enhance operational efficiency, the quality of decision-making, service innovation, the customer experience, and the creation of a sustainable competitive advantage. This conceptual framework serves as the basis for analyzing and synthesizing various studies that discuss the implementation of AI in the hospitality industry.

Figure 1.Conceptual Framework
AI-Driven Strategic Planning for Enhancing Sustainable Competitive Advantage in the Hospitality Industry



As illustrated in Figure 1, the conceptual framework proposed in this study conceptualizes Artificial Intelligence (AI) as a strategic capability that supports the strategic planning process in the hospitality industry. AI assists organizations in conducting environmental scanning, analyzing market and customer data, generating predictive insights, and supporting strategic decision-making. However, AI does not replace managerial judgment; instead, AI-generated insights are evaluated and integrated by management to ensure alignment with organizational objectives and business strategies. Through a continuous feedback loop, organizations continuously refine their strategic planning based on operational performance, customer feedback, and changes in the business environment. Accordingly, the framework demonstrates that the integration of AI, managerial capabilities, and

continuous organizational learning strengthens dynamic capabilities and ultimately enhances sustainable competitive advantage in the hospitality industry.

Method

Research Design

This study employs a qualitative approach using the Systematic Literature Review (SLR) method to analyze how Artificial Intelligence (AI) is utilized in the strategic planning process to enhance sustainable competitive advantage in the hospitality industry. This approach was chosen because it allows the researcher to systematically synthesize various previous studies, thereby providing a comprehensive understanding of the development of concepts, implementation, and the contribution of AI to an organization's strategic planning. Unlike empirical research that focuses on a specific organization, this study aims to identify patterns, relationships between concepts, and key findings from various published studies to produce a more comprehensive conceptual framework regarding the application of AI in strategic planning within the hospitality industry.

The Systematic Literature Review method was chosen because it provides a transparent, structured, and replicable process for identifying, evaluating, and synthesizing relevant scientific evidence. This approach allows researchers to gain a comprehensive overview of developments in research on AI, strategic planning, dynamic capabilities, and sustainable competitive advantage, thereby enabling them to identify research gaps and determine the direction of future research.

Literature Search Strategy

The literature search was conducted systematically using several reputable scientific databases, namely Scopus, Web of Science, ScienceDirect, SpringerLink, Emerald Insight, Taylor & Francis, and Google Scholar as a supplementary source. The search was conducted using a combination of keywords such as Artificial Intelligence, AI-driven Strategic Planning, Strategic Planning, Hospitality Industry, Hotel Industry, Dynamic Capabilities, Strategic Decision-Making, and Sustainable Competitive Advantage. These keyword combinations were arranged using Boolean operators (AND and OR) to identify the articles most relevant to the research objectives.

The literature reviewed was limited to English-language scientific articles published between 2019 and 2025 to ensure that the studies analyzed reflect the latest developments regarding the implementation of artificial intelligence in strategic planning. In addition, all selected articles were published in reputable international journals that had undergone a peer-review process, ensuring their high scientific quality.

Study Selection

The article selection process was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines. The first stage began with the identification of all articles retrieved from various databases. Next, duplicate articles were removed before proceeding to the screening stage based on titles and abstracts. Articles that passed this stage were then evaluated through a full-text review to ensure their relevance to the research focus.

The inclusion criteria for this study include articles that discuss the implementation of artificial intelligence in strategic planning, strategic decision-making, dynamic capabilities, or sustainable competitive advantage in the hospitality industry or service sector. Conversely, articles not related to strategic planning—such as short conference proceedings, editorials, books, or articles not available in full text—were excluded from the analysis.

Data Extraction

Information from each article that met the inclusion criteria was systematically extracted using a pre-designed data extraction form. The information collected included the authors' names, year of publication, country of study, research objectives, research methods, theories used, industry context, forms of AI implementation, key findings, and the research implications for strategic planning and sustainable competitive advantage. The data extraction process was conducted consistently so that each article could be compared based on the same characteristics, thereby facilitating the synthesis of research results.

Data Analysis

Data analysis was conducted using a thematic synthesis approach based on the method developed by (Thomas & Harden, 2008). The first stage began with open coding of all key findings obtained from the selected articles. This was followed by axial coding to group related codes, thereby forming broader categories regarding the implementation of AI in strategic planning.

The final stage is selective coding, which involves identifying the main themes that explain the relationship between Artificial Intelligence, strategic planning, dynamic capabilities, and sustainable competitive advantage in the hospitality industry. This synthesis process yielded several main themes: AI-enabled environmental scanning, AI-supported strategic decision-making, AI-driven operational efficiency, AI-enabled customer value creation, dynamic capabilities, and sustainable competitive advantage. These themes were then used as the basis for organizing the research findings and discussion.

Research Trustworthiness

To ensure the quality of the research, the Systematic Literature Review process was conducted in a transparent, systematic, and replicable manner. All stages from literature search and article selection to data extraction and synthesis—were documented in detail to produce research with high levels of credibility, dependability, confirmability, and transferability. Furthermore, the use of several reputable scientific databases and adherence to the PRISMA 2020 guidelines further enhance the validity and reliability of the research findings.

Ethical Considerations

This study did not involve human participants or the collection of primary data; therefore, it did not require ethical approval. All data used were derived from scientific articles that have been officially published. The researchers ensured that all literature sources were properly cited in accordance with academic standards to maintain scientific integrity and avoid plagiarism.

Results

This section presents the key findings derived from the thematic synthesis of the selected studies. The review identifies five interrelated themes explaining how Artificial Intelligence (AI) supports strategic planning to enhance sustainable competitive advantage in the hospitality industry. Rather than functioning solely as an operational technology, AI has evolved into a strategic capability that assists hospitality organizations in analyzing business environments, supporting strategic decision-making, improving operational efficiency, creating customer value, and strengthening organizational dynamic capabilities. Collectively, these themes demonstrate that AI contributes to competitive advantage through the integration of data-driven insights with managerial decision-making and organizational capabilities.

Environmental Scanning

The reviewed studies consistently indicate that AI enhances environmental scanning by collecting and analyzing large volumes of internal and external data, including customer reviews, online travel platforms, competitor activities, market trends, and industry developments. AI enables hospitality organizations to identify opportunities and potential threats more rapidly, thereby supporting proactive strategic planning.

Strategic Decision-Making

The literature further reveals that AI improves strategic decision-making through predictive analytics, demand forecasting, dynamic pricing, and scenario simulation. These capabilities provide managers with data-driven insights for evaluating strategic alternatives. However, strategic decisions continue to rely on managerial judgment, organizational objectives, and business experience, indicating that AI serves primarily as a decision support system.

Operational Efficiency

Another recurring theme is the contribution of AI to operational efficiency. AI applications optimize resource allocation, workforce scheduling, inventory management, occupancy forecasting, and predictive maintenance. These improvements reduce operational costs while increasing organizational productivity and responsiveness to changing market conditions.

Customer Value Creation

The reviewed studies also highlight AI's role in enhancing customer value creation through service personalization. Technologies such as recommendation systems, intelligent chatbots, virtual assistants, and customer analytics enable hotels to deliver personalized experiences throughout the customer journey. As a result, customer satisfaction, engagement, and loyalty are strengthened, supporting long-term competitive positioning.

Dynamic Capabilities and Sustainable Competitive Advantage

Finally, the literature demonstrates that AI strengthens organizational dynamic capabilities by supporting sensing, seizing, and reconfiguring activities. AI enables organizations to continuously monitor environmental changes, respond rapidly to emerging opportunities, and adapt strategic resources accordingly. The synthesis indicates that sustainable competitive advantage is achieved not merely through AI adoption itself but through its integration into strategic planning processes supported by effective managerial capabilities.

Table 1. Summary of AI Integration in Strategic Planning for Sustainable Competitive Advantage

Strategic Planning Stage	Key Strategic Focus	AI Technologies	Managerial Role
Environmental Scanning	Market intelligence and environmental analysis	Big Data Analytics, Machine Learning, Predictive Analytics	Interpreting strategic information and identifying opportunities
Strategic Decision-Making	Data-driven strategic planning	Predictive Analytics, Decision Support Systems, Dynamic Pricing	Evaluating alternatives and determining strategic priorities
Operational Efficiency	Process optimization and resource management	AI Automation, Forecasting Systems, Predictive Maintenance	Implementing and monitoring operational strategies
Customer Value Creation	Service personalization and customer experience	Chatbots, Recommendation Systems, Customer Analytics	Designing customer experience and service innovation
Dynamic Capabilities	Organizational adaptability and continuous innovation	AI-driven Business Intelligence, Learning Algorithms	Developing strategic capabilities and sustaining competitive advantage

Discussion

Artificial Intelligence as a Strategic Capability

The findings of this systematic literature review indicate that Artificial Intelligence (AI) has evolved from being merely an operational technology into a strategic capability that supports the strategic planning process within the hospitality industry. The reviewed studies consistently demonstrate that AI assists organizations in conducting environmental scanning, analyzing large volumes of data, identifying market trends, predicting changes in

customer behavior, and generating faster and more accurate strategic recommendations. Consequently, AI should no longer be viewed solely as an automation tool but rather as a decision support system that enhances data-driven strategic planning and organizational competitiveness.

These findings are consistent with the arguments of Brynjolfsson and McAfee (2017), who suggest that AI creates strategic value by improving organizational data analytics and decision-making capabilities. Likewise, Kaplan and Haenlein (2020) argue that AI enables organizations to enhance business decision quality through intelligent systems. However, this review extends previous perspectives by demonstrating that the strategic value of AI does not stem solely from its technological capabilities, but also from its integration throughout the strategic planning process, enabling organizations to formulate more adaptive strategies in response to rapidly changing business environments.

Unlike previous studies that primarily focused on AI adoption or operational implementation, this review highlights AI as an integral component of organizational strategic planning. Therefore, AI should be understood as a strategic capability that enables hospitality organizations to identify opportunities, anticipate environmental changes, and improve the quality of strategic formulation to sustain long-term competitiveness.

AI-Driven Strategic Planning and Dynamic Capabilities

The findings further reveal that AI strengthens organizational strategic planning by enhancing dynamic capabilities, particularly the organization's ability to sense, seize, and reconfigure resources. The reviewed studies indicate that AI enables hospitality organizations to identify environmental changes through real-time data analysis, seize market opportunities using predictive analytics, and reconfigure organizational resources to respond more effectively to evolving customer needs and industry dynamics.

These findings support the Dynamic Capabilities Theory proposed by Teece et al. (1997), which emphasizes that an organization's ability to integrate, build, and reconfigure resources is essential for sustaining competitive advantage. This review extends the theory by demonstrating that AI serves as a strategic enabler that strengthens the three dimensions of dynamic capabilities through accurate information, predictive analysis, and data-driven strategic recommendations.

Artificial Intelligence for Sustainable Competitive Advantage

The findings also demonstrate that AI contributes significantly to achieving sustainable competitive advantage by improving operational efficiency, fostering service innovation, and enhancing customer value creation. The reviewed studies show that AI supports resource optimization, demand forecasting, dynamic pricing strategies, and personalized services through customer behavior analysis, enabling hospitality organizations to improve both operational performance and customer experience.

These findings are consistent with Porter and Heppelmann (2014), who argue that digital technologies create new sources of competitive advantage through operational efficiency and customer value creation. Similarly, Verhoef et al. (2021) emphasize that digital transformation enhances customer experience, which has become a critical determinant of competitiveness within the hospitality industry.

Theoretical and Practical Implications

From a theoretical perspective, this study contributes to the growing literature on Artificial Intelligence, strategic planning, dynamic capabilities, and sustainable competitive advantage within the hospitality industry. Unlike previous studies that primarily emphasized AI adoption or operational applications, this systematic literature review positions AI as a strategic capability embedded throughout the organizational strategic planning process. The findings therefore provide a broader understanding of how AI supports organizational adaptability and strengthens sustainable competitive advantage through strategic decision-making.

From a practical perspective, the findings suggest that hospitality organizations should systematically integrate AI into every stage of strategic planning, including environmental scanning, strategic analysis, decision-making, strategy implementation, and organizational performance evaluation. In addition to investing in AI technologies, organizations should develop employees' digital competencies, establish effective AI governance mechanisms, and foster a data-driven organizational culture. Through this integrated approach, AI can evolve beyond an operational support tool into a strategic organizational asset capable of enhancing long-term competitiveness and sustainable business performance.

Conclusion

Research Conclusions

This study aimed to examine how Artificial Intelligence (AI) supports strategic planning in enhancing sustainable competitive advantage within the hospitality industry through a Systematic Literature Review (SLR). Based on the synthesis of the selected literature, the findings indicate that AI has evolved beyond an operational technology into a strategic capability that supports environmental scanning, strategic decision-making, operational efficiency, customer value creation, and the development of dynamic capabilities. The reviewed studies consistently demonstrate that AI enables hospitality organizations to process large volumes of data, predict market trends, improve decision quality, optimize resource utilization, personalize customer experiences, and respond more effectively to rapidly changing business environments.

The findings further suggest that sustainable competitive advantage is achieved not merely through AI adoption but through the effective integration of AI into the strategic planning process. AI functions primarily as a decision support system that strengthens managerial decision-making rather than replacing human judgment. Successful implementation depends on complementary organizational factors, including leadership commitment, organizational capabilities, data governance, digital competencies, and an innovation-oriented culture. From a theoretical perspective, this study contributes to the literature by integrating the concepts of Artificial Intelligence, Strategic Planning, Dynamic Capabilities, and Sustainable Competitive Advantage into a comprehensive conceptual framework that explains AI's strategic role in the hospitality industry. From a practical perspective, the findings suggest that hospitality organizations should adopt AI as a strategic organizational capability that supports data-driven planning, organizational agility, continuous innovation, and long-term competitiveness.

Limitations and Future Research

This study has several limitations. First, the research employed a Systematic Literature Review approach; therefore, the findings are derived from the synthesis of previous empirical studies rather than primary data collected directly from hospitality organizations. Second, the scope of the review focused specifically on the role of Artificial Intelligence in strategic planning and sustainable competitive advantage within the hospitality industry, which may not fully capture the influence of other emerging digital technologies on organizational transformation. In addition, variations in research contexts, methodologies, and geographical settings across the reviewed studies may influence the generalizability of the synthesized findings.

Future research is encouraged to validate the proposed conceptual framework through empirical studies using quantitative, qualitative, or mixed-method approaches across different hospitality sectors, including hotels, resorts, restaurants, and tourism businesses. Comparative and longitudinal studies are also recommended to examine how AI influences strategic planning over time and across different organizational contexts. Furthermore, future studies may investigate the relationships among AI implementation, dynamic capabilities, organizational agility, innovation capability, customer experience, organizational performance, and sustainable competitive advantage to provide a more comprehensive understanding of AI-driven strategic management in the hospitality industry.

Recommendations

Based on the findings of this systematic literature review, several strategic recommendations can be proposed for hospitality organizations seeking to enhance sustainable competitive advantage through Artificial Intelligence (AI):

1. Strengthen the integration of AI technologies into strategic planning processes, including environmental scanning, predictive analytics, strategic decision-making, revenue management, and customer relationship management, to improve organizational agility and data-driven decision-making.
2. Increase investment in digital capabilities and human capital development by providing continuous training in AI, data analytics, and digital leadership, enabling employees and managers to effectively utilize AI in strategic and operational activities.
3. Develop integrated digital ecosystems that combine AI-powered customer analytics, personalized services, intelligent booking systems, and operational management platforms to improve customer experience and organizational performance.
4. Promote organizational innovation and cross-sector collaboration by partnering with technology

providers, research institutions, and industry stakeholders to accelerate AI adoption and support continuous innovation within the hospitality industry.

5. Establish effective AI governance frameworks that ensure data quality, cybersecurity, transparency, ethical AI implementation, and managerial oversight, allowing organizations to maximize AI benefits while maintaining sustainable business performance and competitive advantage.

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References

Abdou, A. H., Al Abdulathim, M. A., Hussni Hasan, N. R., Salah, M. H. A., Ali, H. S. A. M., & Kamel, N. J. (2023). From Green Inclusive Leadership to Green Organizational Citizenship: Exploring the Mediating Role of Green Work Engagement and Green Organizational Identification in the Hotel Industry Context. *Sustainability (Switzerland)* , *15*(20). https://doi.org/10.3390/su152014979

Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koohang, A., Raghavan, V., Ahuja, M., Albanna, H., Albashrawi, M. A., Al-Busaidi, A. S., Balakrishnan, J., Barlette, Y., Basu, S., Bose, I., Brooks, L., Buhalis, D., … Wright, R. (2023). "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, *71*(March). https://doi.org/10.1016/j.ijinfomgt.2023.102642

Jerez-Jerez, M. J. (2025). A study of employee attitudes towards AI, its effect on sustainable development goals and non-financial performance in independent hotels. *International Journal of Hospitality Management*, *124*, 103987. https://doi.org/10.1016/j.ijhm.2024.103987

Kero, C. A., & Bogale, A. T. (2023). A Systematic Review of Resource-Based View and Dynamic Capabilities of Firms and Future Research Avenues. *International Journal of Sustainable Development and Planning*, *18*(10), 3137–3154. https://doi.org/10.18280/ijsdp.181016

Pitakaso, R., Golinska-Dawson, P., Luesak, P., Srichok, T., & Khonjun, S. (2025). Embracing open innovation in hospitality management: Leveraging AI-driven dynamic scheduling systems for complex resource optimization and enhanced guest satisfaction. *Journal of Open Innovation: Technology, Market, and Complexity*, *11*(1), 100487. https://doi.org/10.1016/j.joitmc.2025.100487

Prester, J. (2023). Operating and Dynamic Capabilities and Their Impact on Operating and Business Performance. *Sustainability (Switzerland)*, *15*(20). https://doi.org/10.3390/su152015181

Tajeddini, O., Tajeddini, K., Gamage, T. C., & Hameed, W. U. (2026). Smart insights, stronger performance: Leveraging business intelligence and dynamic capabilities in tourism and hospitality. *International Journal of Hospitality Management*, *133*(July 2025). https://doi.org/10.1016/j.ijhm.2025.104410

Tamirat, S., & Amentie, C. (2023). Advances in knowledge-based dynamic capabilities: A systematic review of foundations and determinants in recent literature. *Cogent Business and Management*, *10*(3). https://doi.org/10.1080/23311975.2023.2257866

Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, *8*, 1–10. https://doi.org/10.1186/1471-2288-8-45

Zahidi, F., Kaluvilla, B. B., & Mulla, T. (2024). Embracing the new era: Artificial intelligence and its multifaceted impact on the hospitality industry. *Journal of Open Innovation: Technology, Market, and Complexity*, *10*(4), 100390. https://doi.org/10.1016/j.joitmc.2024.100390