

Review of Artificial Intelligence (AI) Revolution and Strategic Competitive Advantage in Business and Management

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Abstract

This study explores the role of artificial intelligence (AI) in shaping competitive advantage by reviewing the existing literature. It reviews literature with considering AI as a strategic resource, its integration with human judgment, contributions to decision-making quality, applications in marketing and innovation, cultural influences on adoption, and future research directions. The findings highlight AI as both a technological enabler and a sociotechnical phenomenon whose value depends on complementary assets, governance, and culture. Artificial intelligence (AI) has emerged as a transformative force reshaping the foundations of strategic management and competitive positioning. This review synthesizes findings from highly cited studies, highlighting several recurring themes: the role of AI as a strategic resource, the complementarities between human expertise and AI systems, improvements in decision quality and responsiveness, contributions to marketing and innovation practices, and the importance of organizational culture as a mediating factor. The analysis suggests that while AI adoption is strongly associated with enhanced firm performance, its benefits are contingent upon cultural readiness, governance practices, and integration into broader organizational processes. At the same time, unresolved challenges remain, including sustainability of advantage, ethical and regulatory concerns, and implications for workforce transformation. By consolidating insights across these domains, the review provides a structured agenda for future research on how firms can translate technological potential into lasting strategic outcomes.

Keywords

Artificial Intelligence, Competitive Advantage, Organizational Culture, Innovation, Strategic Management

1. Introduction

The integration of artificial intelligence (AI) into business practice has moved from experimental adoption to a central concern of strategic management. Over the past decade, scholars and practitioners alike have recognized AI not only as a technological tool but also as a potential driver of enduring competitive advantage. Within the management literature, frameworks such as the resource-based view (RBV) and the dynamic capabilities perspective have been used to conceptualize AI as an intangible asset capable of enabling firms to sense market changes, seize opportunities, and reconfigure resources in pursuit of superior performance (Barney, 1991; Shrestha et al., 2019; Raisch & Krakowski, 2021).

Despite this promise, the strategic role of AI remains contested. While empirical studies consistently demonstrate positive associations between AI deployment and firm outcomes (Dwivedi et al., 2021a; Chen et al., 2022), scholars caution that technological adoption alone does not automatically yield advantage (Fosso Wamba et al., 2023; Mikalef et al., 2021). Rather, organizational conditions—including culture, leadership, and governance—determine whether AI becomes a source of differentiation or a commoditized tool. Furthermore, unresolved questions persist regarding the sustainability of AI-based advantages, the ethics of algorithmic decision-making, and the implications of human-AI collaboration for organizational design.

In light of these tensions, this review undertakes a systematic synthesis of recent research on AI and strategic advantage in management and business studies. By organizing the literature into thematic domains and identifying underexplored areas, the review aims to clarify how firms can integrate AI capabilities in ways that are both context-sensitive and strategically meaningful.

To guide this review, we pose the following questions that structure our analysis and highlight the study's central concerns:

Question 1: How do bundles of AI capabilities—technical, data, and human/organizational—translate into dynamic capabilities that create and sustain competitive advantage across business contexts?

Question 2: Under what organizational conditions (culture, governance, and human-AI collaboration) does AI adoption yield superior and durable performance rather than commoditized parity?

2. Methodology of Review

This review employs a structured literature synthesis to evaluate the role of artificial intelligence (AI) in creating strategic competitive advantage in business and management. The approach is inspired by methodological guidelines for conducting narrative and integrative reviews in management research (Snyder, 2019; Paul & Criado, 2020). The focus is not only on summarizing prior work but also on generating conceptual insights by integrating findings across multiple domains.

2.1. Literature Search

To capture the breadth of scholarship, multiple academic databases were searched,

including Scopus, Web of Science, ScienceDirect, and Google Scholar. These databases were selected for their comprehensive coverage of peer-reviewed journals in business, management, and information systems. Search strings combined terms such as “artificial intelligence”, “strategic management”, “competitive advantage”, “business performance”, and “AI capabilities”. The timeframe was restricted to 2015-2025, reflecting the period in which AI became a central theme in strategic management discourse (Dwivedi et al., 2021a).

2.2. Inclusion and Exclusion Criteria

Following best practices in review methodology (Tranfield, Denyer, & Smart, 2003), inclusion criteria emphasized theoretical and empirical contributions that explicitly linked AI to competitive advantage or firm strategy. Articles were included if they were peer-reviewed, examined AI within a strategic, managerial, or organizational context, and reported findings on competitive advantage, firm performance, or dynamic capabilities. Studies were excluded if they focused purely on technical AI development without management implications, or if they appeared only as practitioner commentaries without academic rigor.

2.3. Quality and Relevance Assessment

To ensure the inclusion of influential and academically rigorous studies, articles were assessed using both quantitative and qualitative indicators of quality and relevance. Only peer-reviewed publications were included. Quantitatively, preference was given to articles published in journals with a Scopus or Web of Science journal impact factor typically ranging from 2.0 to over 10.0, and especially those classified as Q1 journals in business, management, or information systems subject categories. Additionally, studies with high citation counts (typically over 100 citations in Google Scholar) were prioritized, as citation volume reflects influence within the scholarly community. Qualitatively, articles had to demonstrate clear theoretical or empirical contributions linking artificial intelligence (AI) to strategic management, competitive advantage, or firm performance. This dual emphasis on journal prestige and citation impact ensured that the final sample represented both academic credibility and relevance to the review’s objectives.

To ensure a comprehensive and rigorous review, an initial total of 416 records were retrieved through systematic searches across Scopus, Web of Science, ScienceDirect, and Google Scholar. After removing 88 duplicates, 328 records remained for title and abstract screening. Based on relevance to AI, strategic management, and competitive advantage, 102 full-text articles were assessed for eligibility. Following the application of inclusion and exclusion criteria, and further quality and relevance checks (e.g., citation count, journal ranking, and theoretical contribution), 42 studies were selected for final synthesis and thematic analysis.

3. Analytical Framework

The synthesis followed a thematic analysis approach (Braun & Clarke, 2006). After

coding the content of the selected papers, five recurrent themes emerged: 1) AI capabilities as strategic resources, 2) Human-AI collaboration and hybrid decision-making, 3) Decision quality and responsiveness, 4) AI in marketing and innovation, and 5) Cultural and organizational enablers. By combining a structured selection process with a thematic synthesis, this review provides a comprehensive yet focused overview of how AI reshapes competitive advantage in business and management.

4. Literature and Discussion

This review has synthesized the rapidly expanding body of literature on artificial intelligence and its role in generating strategic competitive advantage in business and management contexts. Evidence from multiple empirical and conceptual studies demonstrates that AI capabilities can enhance organizational performance when embedded within broader dynamic capabilities (Barney, 1991; Dwivedi et al., 2021a; Raisch & Krakowski, 2021). AI has been shown to strengthen decision-making quality and responsiveness (Shrestha et al., 2019; Chen et al., 2022), foster innovation in marketing and product development (Fosso Wamba et al., 2023; Mikalef et al., 2021), and support hybrid human-AI collaboration that outperforms either humans or algorithms alone (Mikalef et al., 2020; Dwivedi et al., 2021a).

However, the sustainability of these advantages remains contingent on the organizational context in which AI is deployed. Cultural readiness—especially a data-driven and innovation-oriented culture—has been repeatedly identified as a critical moderator of AI's effectiveness (Dwivedi et al., 2021a; Chen et al., 2022; Teece et al., 1997). Firms that cultivate cultures of experimentation, continuous learning, and evidence-based decision-making are more likely to realize enduring benefits from AI integration. Conversely, organizations with rigid or hierarchical structures may fail to translate technical potential into strategic outcomes (Shrestha et al., 2019; Brynjolfsson & McAfee, 2017).

The review also highlights important research gaps. The durability of AI-based advantages remains uncertain, considering rapid technological diffusion (Jobin et al., 2019). Ethical and governance considerations, including fairness, accountability, and transparency, require further scholarly attention (Davenport & Ronanki, 2018). Moreover, the workforce transformation associated with AI adoption calls for research on reskilling, hybrid work systems, and organizational redesign (Esteve et al., 2019). Sector-specific investigations—particularly in healthcare, manufacturing, and public administration—remain underdeveloped despite significant opportunities (Alahi et al., 2022). Finally, the integration of AI with complementary digital technologies such as IoT and blockchain offers promising but underexplored pathways for future advantage (Raisch & Krakowski, 2021).

Competitive advantage emerges when human expertise and AI are combined in trust-calibrated teams. Process frameworks for cultivating trust (e.g., CHAI-T) and evidence on dynamic weighting of AI recommendations show why transparency and accountability matter (Maedche et al., 2019; Yin et al., 2019). Mis-cal-

brated AI confidence hinders collaboration, while team-level trust and psychological safety enable superior outcomes (Glikson & Woolley, 2020; Castelo, Bos, & Lehmann, 2019).

Research on hybrid decision systems indicates that human judgment and AI analytics are most powerful in combination: AI scales pattern detection, while humans provide contextual framing and ethical oversight (Mikalef et al., 2020; Dwivedi et al., 2021a). Organizations that redesign workflows to clarify roles between humans and AI, cultivate trust in algorithmic outputs, and support experimentation report stronger performance outcomes (Shrestha et al., 2019; Chen et al., 2022). Conversely, over-automation without attention to accountability and learning can reduce adoption and blunt potential gains.

A growing body of research emphasizes that the strategic value of AI is most evident when combined with human judgment, giving rise to hybrid decision-making systems. This perspective builds on the notion that AI excels at large-scale data analysis and pattern recognition, while humans bring contextual understanding, ethical reasoning, and creativity to complex tasks (Mikalef et al., 2020). Together, these complementary strengths address the so-called automation-augmentation paradox, whereby automation enhances efficiency, but augmentation generates more nuanced insights (Mikalef et al., 2020; Dwivedi et al., 2021a).

Empirical evidence suggests that hybrid teams often outperform either humans or AI working independently, particularly in settings characterized by uncertainty and high information complexity (Mikalef et al., 2020; Dwivedi et al., 2021a). Yet, the organizational integration of such systems requires more than simply providing technical tools. Trust in algorithmic recommendations, clarity of roles between humans and AI, and alignment with governance structures strongly influence outcomes (Chen et al., 2022).

At the same time, not all organizations achieve seamless collaboration. In some cases, excessive reliance on automation fosters employee resistance or diminishes accountability, while in others, underutilization occurs because managers fail to restructure workflows around AI capabilities. These tensions highlight that advantage of competitive through human-AI collaboration is not guaranteed but contingent upon how effectively firms embed AI into decision processes, cultural practices, and organizational design.

Despite growing evidence of AI's strategic contributions, several research gaps remain. First, there is a need to explore the sustainability of AI-driven competitive advantages as the technology becomes widely adopted and potentially commoditized (Prasad & Junni, 2022; Warner & Wäger, 2019). Second, ethical, social, and governance issues, such as bias, transparency, and accountability, remain under-explored in relation to long-term firm performance (Jobin et al., 2019; Floridi & Cows, 2019). Third, while much research focuses on marketing and finance, sector-specific applications in areas such as healthcare, logistics, and manufacturing demand greater attention (Esteva et al., 2019; Alahi et al., 2022). Fourth, integration of AI with other emerging technologies such as blockchain and IoT presents

promising opportunities for building robust digital ecosystems (Alahi et al., 2022). Finally, methodological gaps persist; longitudinal and experimental studies are needed to complement cross-sectional evidence and capture the evolving nature of AI's impact on strategy (Warner & Wäger, 2019). Addressing these gaps will provide a more holistic understanding of how AI can sustain competitive advantage in the long term.

Although AI is often viewed through a technological lens, its strategic value is deeply contingent on the cultural environment in which it is embedded. Research underscores that firms with a data-driven, innovation-oriented, and adaptive culture are more likely to realize AI's benefits (Chen et al., 2022; Olszak & Mach-Król, 2021). Cultural readiness shapes employee trust, willingness to experiment, and the ability to integrate AI into workflows. A growing stream of scholarship emphasizes the need for cultural ambidexterity—the ability to balance exploitation of existing processes with exploration of new possibilities—when leveraging AI (Olszak & Mach-Król, 2021). For example, Olszak and Mach-Król (Floridi & Cows, 2019) find that organizations able to reconcile efficiency with innovation through cultural adaptation unlock greater value from AI. Ethical culture is also vital, as it fosters responsible AI practices, stakeholder trust, and regulatory compliance (Jobin et al., 2019; Floridi & Cows, 2019). In this sense, organizational culture acts as both an enabler and moderator of AI's strategic contribution.

AI has transformed marketing by enabling personalized consumer engagement, predictive targeting, and real-time customer analytics. Research shows that AI-driven personalization enhances customer satisfaction and loyalty while allowing firms to differentiate themselves in competitive environments (Ransbotham et al., 2021). Beyond personalization, AI also contributes to innovation ecosystems by integrating data flows across organizational boundaries and supporting experimentation with new business models (Ransbotham et al., 2021; Dwivedi et al., 2021b). For example, Ransbotham et al. (2021) demonstrate that firms using AI to connect partners, suppliers, and customers in innovation networks are better positioned to exploit emerging opportunities. At the same time, risks such as algorithmic bias and privacy concerns highlight the need for ethical frameworks and regulatory guidance (Jobin et al., 2019; Floridi & Cows, 2019). Thus, AI's role in marketing and innovation is best seen as dual: it offers firms efficiency and growth opportunities but requires safeguards to maintain fairness, trust, and long-term legitimacy (Dwivedi et al., 2021b).

The value of AI is also evident in its capacity to enhance decision speed, accuracy, and organizational responsiveness. By processing vast and complex datasets, AI allows firms to identify opportunities and threats earlier and to allocate resources more effectively (Mikalef et al., 2020; Troisi et al., 2022). Empirical studies have shown that firms with strong data governance mechanisms are better positioned to integrate AI insights into managerial decision-making, thereby strengthening resilience in volatile markets (Wang et al., 2018; Zhu & Mostafavi, 2021). AI has been shown to contribute to both efficiency-oriented decisions, such as demand

forecasting, and strategic choices, such as entering new markets (Troisi et al., 2022). Nonetheless, risks remain. Overreliance on AI can erode human judgment, while skepticism or lack of interpretability may limit adoption. Hence, AI is best understood as a conditional enabler of competitive advantage, its benefits materialize only when complemented by human oversight and embedded within decision governance systems (Zhu & Mostafavi, 2021).

While AI systems excel at pattern recognition and predictive analytics, humans provide contextual judgment, ethical reasoning, and creativity, together forming hybrid decision-making arrangements that outperform either humans or AI acting alone (Shrestha et al., 2019; Raisch & Krakowski, 2021; Glikson & Woolley, 2020). Such arrangements represent the “automation-augmentation paradox”, whereby efficiency is achieved through automation while deeper insights emerge through augmentation (Raisch & Krakowski, 2021; Castelo, Bos, & Lehmann, 2019). Trust plays a pivotal role in realizing these synergies. If employees distrust AI outputs, they may override valuable recommendations, whereas blind trust may result in harmful automation bias (Yin et al., 2019; Glikson & Woolley, 2020). Recent frameworks such as CHAI-T Collaboration, Human-AI Trust) emphasize the importance of designing processes that foster calibrated trust between humans and algorithms (Maedche et al., 2019). From a strategic standpoint, organizations that successfully integrate hybrid human-AI teams demonstrate improved problem-solving and faster adaptation to uncertainty, while those that fail encounter resistance, underuse, or erosion of accountability (Yin et al., 2019; Castelo, Bos, & Lehmann, 2019).

Scholars widely recognize that AI has evolved into a critical strategic resource capable of reshaping how firms compete in dynamic markets. Building on the resource-based view, AI is seen not simply as a technology but as a bundle of organizational capabilities that, when combined with unique processes and knowledge assets, enable firms to sense opportunities, adapt swiftly, and reconfigure resources for competitive advantage (Barney, 1991; Mikalef et al., 2020; Teece et al., 1997). Recent studies suggest that AI supports firms in developing dynamic capabilities that allow them to innovate continuously and achieve operational efficiency simultaneously (Fosso Wamba et al., 2023; Prasad & Junni, 2022). For example, Prasad and Junni (Warner & Wäger, 2019) highlight how AI tools foster resource orchestration by enhancing managerial capacity to allocate, integrate, and reconfigure assets. Warner and Wäger (2019) similarly argue that AI enables digital transformation when embedded into broader strategic practices. However, scholars caution that AI alone does not guarantee sustainable advantage because, like other advanced technologies, it risks commoditization unless firms embed it within distinctive organizational routines and complementary assets (Haefner et al., 2021).

Scholars increasingly treat artificial intelligence (AI) as a strategic resource that strengthens a firm’s ability to build and reconfigure capabilities in turbulent markets. Extending the resource-based view, AI is best understood as a bundle of organizational capabilities that—when integrated with data assets, routines, and

managerial know—how helps firms sense opportunities, adapt quickly, and redeploy resources toward higher-value uses (Barney, 1991; Mikalef et al., 2020; Teece et al., 1997). Recent studies emphasize AI's role in developing dynamic capabilities, including the capacity to renew competencies and orchestrate resources during digital transformation (Prasad & Junni, 2022; Warner & Wäger, 2019). In practice, this means AI not only automates routine work but also supports strategic flexibility by improving analytic accuracy, enabling faster learning cycles, and informing portfolio reallocation decisions.

The strategic payoff, however, depends on how AI is embedded. Firms realize superior outcomes when AI is woven into organizational routines, supported by sound data governance, and complemented by human expertise that interprets model outputs and acts on them (Teece et al., 1997). Such configurations enhance absorptive capacity and knowledge recombination, allowing the organization to integrate external information, generate novel insights, and translate them into action (Yin et al., 2019). In this sense, AI's value is emergent and systemic: it arises from the interaction of technology with processes, skills, incentives, and culture rather than from the tool alone. Recent mixed-methods research sharpened these themes by using a panel data of 300 firms. Nikzat and Norrymotlagh (2025) find that greater AI adoption is associated with 27% higher innovation output, 20% operational cost reductions, and 15% market share growth; moreover, about 20% of AI's effect on revenue growth operates through innovation, with stronger gains in firms characterized by leadership adaptability and collaborative human-AI structures. These magnitudes illustrate how AI capability bundles translate into measurable performance outcomes.

A recurrent concern in the literature is sustainability. As AI technologies diffuse, advantages based purely on access to tools may erode. Sustained advantage is more likely when AI is coupled with difficult-to-imitate complements—proprietary data, tacit organizational knowledge, distinctive leadership practices, and path-dependent routines—that create firm-specific configurations (Brynjolfsson & McAfee, 2017; Prasad & Junni, 2022; Warner & Wäger, 2019; Haefner et al., 2021). This perspective reframes AI from a stand-alone artifact into a strategic enabler whose competitive impact hinges on complementary assets and continuous capability renewal.

In conclusion, AI represents both an opportunity and a challenge for strategic management. Firms that view AI not merely as a technical tool but as a strategic enabler, embedded in culture, processes, and governance frameworks, will be better positioned to achieve lasting advantage. For scholars, this evolving landscape underscores the need for interdisciplinary, context-sensitive research that balances technological potential with organizational and ethical realities.

4.1. Summary of Literature

Table 1 summarizes the literature that was reviewed in this paper based on variables, competitive advantage, and outcomes.

Table 1. Summary of literature.

Study	Publication Year	Variables	Competitive Advantage	Outcomes	Sector Studied	Research Design
Mikalef et al. (2020), <i>Information & Management</i>	2020	AI capability (resources, technology, human and organizational competences); link to creativity and performance	Capability-based advantage via AI resource bundles	Positive relationship between AI capability, creativity, and firm performance	Cross-sector (general firms)	Quantitative
Krakowski, Luger, and Raisch (2022), <i>Strategic Management Journal</i>	2022	Human vs. AI vs. human-AI teaming in decision-making	Hybrid teaming advantage at the human-AI interface	Human-AI complementarity improves performance	multi-sector	Conceptual + Experimental
Hossain et al. (2022), <i>Industrial Marketing Management</i>	2022	Marketing analytics capability → AI adoption → competitive advantage	Data-driven advantage in market responsiveness	AI adoption mediates MAC effects, improving competitive advantage	Marketing/Business (B2B)	Quantitative
Chen et al. (2022), <i>Frontiers in Psychology</i>	2022	AI in management decision-making; moderators: innovation culture, environment	Decision-making advantage in quality and speed	AI improves firm performance; moderated by innovation culture	SMEs	Quantitative
Shrestha, Ben-Menahem, and von Krogh (2019), <i>California Management Review</i>	2019	AI contingencies in decision-making structures (search space, interpretability, speed)	Architectural advantage from aligning decision structures with AI	Better decisions and strategic outcomes when structures fit AI	Strategy & innovation-focused firms	Conceptual
Mikalef et al. (2023), <i>Industrial Marketing Management</i>	2023	AI competencies → marketing capabilities → performance (B2B)	Competency-driven marketing advantage	AI strengthens market capabilities and performance	B2B marketing sector	Quantitative
Fosso Wamba et al. (2024), <i>Information Systems Frontiers</i>	2024	AI capability → firm performance with data-driven culture mediator	Culture-enabled advantage	AI capability boosts performance; culture mediates	Cross-industry (data-driven firms)	Quantitative

Continued

Nikzat and Noorymotlagh (2025)	2025	AI adoption; innovation; revenue/market share; mods: leadership, HAI	Dynamic capabilities; human-AI complementarity	Higher AI use → Higher innovation, Lower costs, Higher market share	Multi-sector	Mixed-Method
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4.2. AI Capabilities, Human-AI Collaboration, and Strategic Responsiveness

Artificial intelligence (AI) is increasingly viewed not merely as a technology, but as a strategic organizational resource that enhances a firm's ability to sense opportunities, adapt rapidly, and reconfigure resources in response to environmental changes. Extending the resource-based view, recent scholarship emphasizes AI as a bundle of dynamic capabilities—when integrated with proprietary data, routines, and managerial expertise—that enable continuous innovation and operational efficiency (Barney, 1991; Mikalef et al., 2020; Fosso Wamba et al., 2023; Teece et al., 1997; Prasad & Junni, 2022). Rather than serving only to automate routine tasks, AI fosters strategic flexibility by improving analytic accuracy, accelerating learning cycles, and guiding portfolio realignment (Warner & Wäger, 2019).

However, the competitive impact of AI is contingent on how effectively it is embedded within the firm. Strategic benefits emerge when AI is woven into core organizational routines, reinforced by robust data governance and paired with human expertise that interprets and acts on algorithmic outputs (Fosso Wamba et al., 2023; Haefner et al., 2021). This configuration strengthens absorptive capacity and knowledge recombination, supporting the generation of novel insights and their timely application. Supervisor-led knowledge sharing improves task performance, reinforcing that culture-enabled knowledge flows amplify AI's strategic value (Lee et al., 2025).

A central concern in the literature is the sustainability of AI-based advantages. As AI technologies diffuse, tools alone offer diminishing returns. Enduring value stems from firm-specific configurations that combine AI with difficult-to-replicate assets, such as proprietary data, tacit knowledge, path-dependent routines, and distinctive leadership practices (Brynjolfsson & McAfee, 2017; Prasad & Junni, 2022; Warner & Wäger, 2019; Haefner et al., 2021). In this light, AI is better understood as a strategic enabler, with its value emerging from synergy with complementary capabilities.

Moreover, human-AI collaboration plays a critical role in shaping decision quality and organizational responsiveness. While AI systems excel at data-driven predictions and pattern recognition, humans contribute contextual judgment, ethical reasoning, and creativity. Together, they form hybrid decision-making arrangements that often outperform either humans or machines alone (Shrestha et al., 2019; Raisch & Krakowski, 2021; Glikson & Woolley, 2020). This dynamic encapsulates the so-called automation-augmentation paradox, where efficiency gains

from automation coexist with deeper insights enabled by human augmentation (Raisch & Krakowski, 2021; Castelo, Bos, & Lehmann, 2019).

Trust is foundational to these arrangements. Both under-reliance due to skepticism and over-reliance resulting in automation bias can hinder performance. Frameworks such as CHAI-T (Collaboration, Human-AI Trust) underscore the importance of fostering calibrated trust to optimize collaboration (Yin et al., 2019; Maedche et al., 2019; Glikson & Woolley, 2020). Organizations that successfully integrate hybrid human-AI teams tend to exhibit enhanced problem solving, faster adaptation to uncertainty, and stronger accountability, while those that fail often face resistance, underutilization, or loss of strategic clarity (Yin et al., 2019; Castelo, Bos, & Lehmann, 2019).

4.3. AI-Enabled Decision Agility and Governance

The value of AI is also evident in its capacity to enhance decision speed, accuracy, and organizational responsiveness. By processing vast and complex datasets, AI allows firms to identify opportunities and threats earlier and to allocate resources more effectively (Mikalef et al., 2020; Troisi et al., 2022). Empirical studies have shown that firms with strong data governance mechanisms are better positioned to integrate AI insights into managerial decision-making, thereby strengthening resilience in volatile markets (Wang et al., 2018; Zhu & Mostafavi, 2021). AI has been shown to contribute to both efficiency-oriented decisions, such as demand forecasting, and strategic choices, such as entering new markets (Troisi et al., 2022). Nonetheless, risks remain. Overreliance on AI can erode human judgment, while skepticism or lack of interpretability may limit adoption. Hence, AI is best understood as a conditional enabler of competitive its benefits materialize only when complemented by human oversight and embedded within decision governance systems (Zhu & Mostafavi, 2021).

4.4. AI in Marketing and Innovation

AI has transformed marketing by enabling personalized consumer engagement, predictive targeting, and real-time customer analytics. Research shows that AI-driven personalization enhances customer satisfaction and loyalty while allowing firms to differentiate themselves in competitive environments (Kumar & Reinartz, 2021). Beyond personalization, AI also contributes to innovation ecosystems by integrating data flows across organizational boundaries and supporting experimentation with new business models (Ransbotham et al., 2021; Dwivedi et al., 2021b). For example, Ransbotham et al. (2021) demonstrate that firms using AI to connect partners, suppliers, and customers in innovation networks are better positioned to exploit emerging opportunities. At the same time, risks such as algorithmic bias and privacy concerns highlight the need for ethical frameworks and regulatory guidance (Jobin et al., 2019; Floridi & Cows, 2019). Thus, AI's role in marketing and innovation is best seen as dual: it offers firms efficiency and growth opportunities but requires safeguards to maintain fairness, trust, and long-term legit-

imacy (Dwivedi et al., 2021b).

5. Conclusion

This review has synthesized the rapidly expanding body of literature on artificial intelligence and its role in generating strategic competitive advantage in business and management contexts. Evidence from multiple empirical and conceptual studies demonstrates that AI capabilities can enhance organizational performance when embedded within broader dynamic capabilities (Barney, 1991; Dwivedi et al., 2021a; Raisch & Krakowski, 2021).

In particular, AI has been shown to strengthen decision-making quality and responsiveness (Shrestha et al., 2019; Chen et al., 2022), foster innovation in marketing and product development (Fosso Wamba et al., 2023; Mikalef et al., 2021), and support hybrid human-AI collaboration that outperforms either humans or algorithms alone (Mikalef et al., 2020; Dwivedi et al., 2021a).

However, the sustainability of these advantages remains contingent on the organizational context in which AI is deployed. Cultural readiness, especially a data-driven and innovation-oriented culture, has been repeatedly identified as a critical moderator of AI's effectiveness (Dwivedi et al., 2021a; Chen et al., 2022; Teece et al., 1997). Firms that cultivate cultures of experimentation, continuous learning, and evidence-based decision-making are more likely to realize enduring benefits from AI integration. Conversely, organizations with rigid or hierarchical structures may fail to translate technical potential into strategic outcomes (Shrestha et al., 2019; Brynjolfsson & McAfee, 2017).

The review also highlights important research gaps. The durability of AI-based advantages remains uncertain given the rapid diffusion of similar tools across industries (Jobin et al., 2019). Ethical and regulatory considerations, including fairness and accountability, present challenges that extend beyond technical design (Davenport & Ronanki, 2018). Moreover, the workforce transformation associated with AI adoption calls for research on reskilling, hybrid work systems, and organizational redesign (Esteva et al., 2019). Sector-specific investigations, particularly in healthcare, manufacturing, and public administration, remain underdeveloped despite significant opportunities (Alahi et al., 2022). Finally, the integration of AI with complementary digital technologies such as IoT and blockchain offers promising but underexplored pathways for future advantage (Raisch & Krakowski, 2021).

Overall, the review underscores that the strategic potential of AI lies not in the technology alone but in the ways, organizations integrate it into their cultural, structural, and governance frameworks. For scholars, this creates opportunities to explore AI not only as a driver of efficiency but as a catalyst for new forms of organizational adaptation and competitive differentiation.

6. Gaps and Future Directions

Although AI is often viewed through a technological lens, its strategic value is

deeply contingent on the cultural environment in which it is embedded. Research underscores that firms with a data-driven, innovation-oriented, and adaptive culture are more likely to realize AI's benefits (Chen et al., 2022; Olszak & Mach-Król, 2021). Cultural readiness shapes employee trust, willingness to experiment, and the ability to integrate AI into workflows. A growing stream of scholarship emphasizes the need for cultural ambidexterity, the ability to balance exploitation of existing processes with exploration of new possibilities when leveraging AI (Olszak & Mach-Król, 2021). For example, Olszak and Mach-Król (2021) find that organizations able to reconcile efficiency with innovation through cultural adaptation unlock greater value from AI. Ethical culture is also vital, as it fosters responsible AI practices, stakeholder trust, and regulatory compliance (Jobin et al., 2019; Floridi & Cows, 2019). In this sense, organizational culture acts as both an enabler and moderator of AI's strategic contribution.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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