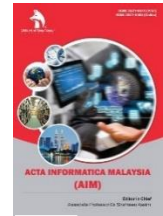




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REVIEW ARTICLE

A SYSTEMATIC REVIEW OF ARTIFICIAL INTELLIGENCE INTEGRATION IN STRATEGIC MANAGEMENT PROCESSES

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ABSTRACT

The integration of Artificial Intelligence (AI) in strategic management is an area of rapid development. Where traditional strategic management relies on human intuition, AI tools such as machine learning and predictive analytics are reshaping the process, from analysis to evaluation. Nonetheless, the academic literature on this issue is still lacking in a wide-ranging and systematic approach that will bring to a single place current findings and identify areas of most concern. Incorporating this study, we do provide a formal systematic literature review to put together the existing knowledge on the integration of AI in strategic management processes. The research addresses three core questions: What are the main applications of AI in each phase of strategic management? What are the primary benefits and challenges of this integration? And what are the key research gaps for future studies? We performed a comprehensive systematic review per the PRISMA Statement guidelines, performing searches in reputable databases including Scopus, Web of Science, and Google Scholar. A multistage screening of 251 articles published from 2015 to 2024 produced a final corpus of 50 articles for synthesis. Data was extracted from these articles, thematically analyzed for overall trends, and observed patterns. This review indicates that the primary use of AI is at the strategic analysis stage where it augments analyses of data-led business activity such as market forecasting and competitor analysis. AI is a powerful decision-support system to be used in formulating strategy, although its role in qualitative aspects of strategy is still in its infancy. Some of these barriers to adoption stem from a lack of trained personnel, high implementation costs and some of the problems related to algorithms, such as bias. The findings point to a new model for augmented intelligence, where human and AI abilities work together. One of the limitations of this review is the limited number of empirical findings in the extant literature, because of which we can only make basic conclusions in the long term about the impact of AI on organizational performance. Moreover, the review only focused on English-language literature, which may potentially ignore some essential findings from non-English writing.

KEYWORDS

Artificial Intelligence, Strategic Management, Systematic Literature Review, Decision-Making, Competitive Advantage.

1. INTRODUCTION

Artificial Intelligence (AI) has advanced significantly, revolutionizing industries and the organizational landscape. Despite being of interest for many years in areas such as operations, marketing, finance, etc., the use of AI for transformation of strategic management processes recently had a very large impact (Chen and Siau, 2021; Ghaffarzagdegan, 2020). Strategic management in this line of inquiry, historically grounded in human intuition, experience, and qualitative analysis (Ansoff, 1965), means the formulation and the implementation of major goals and initiatives by the top management of an enterprise on behalf of the owners. This is a cycle of analysis, formulation, implementation, and evaluation. The adoption of AI tools and applications, including machine learning, natural language processing and predictive analytics is expected to transform these phases in their entirety by potentially

transforming each of them through the potential of data-driven decision-making, competitive analysis and strategic foresight (Mithas et al., 2013; Teece, 2018).

While interest in the subject is growing, the extant academic literature is also disjointed and devoid of a cohesive, systematic overview of the trends in AI deployed in strategic management. The existing literature on AI in strategic management is fragmented and dispersed across various journals and disciplines, thus hindering scholars and practitioners to synthesize existing knowledge, discover patterns and uncover key gaps (Davenport and Kirby, 2016). Although certain papers cover discrete applications, like AI in market analysis (Wamba et al., 2020) or AI-driven resource allocation, a systematic review mapping the entire strategic management process, from environmental scanning to strategic control, is conspicuously absent. However, this fragmentation prevents us from clearly understanding the opportunities as well as

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challenges of this integration -- data governance challenges, ethical issues and the capabilities required in organizations to effectively adopt such technology (Bughin et al., 2017; Fountaine et al., 2019).

Therefore, the purpose of this study is to conduct a systematic literature review to synthesize the current body of knowledge on the integration of Artificial Intelligence in strategic management processes. This review aims to answer three primary research questions:

- i. What are the key applications and roles of AI across the different phases of the strategic management process (analysis, formulation, implementation, and evaluation)?
- ii. What are the primary benefits and challenges associated with integrating AI into strategic decision-making?
- iii. What are the key research gaps and future directions for the academic study of AI in strategic management?

The objective of this paper is to give a basis and a consolidated understanding of the field by systematically reviewing and analyzing the available literature. This literature will also generate a solid foundation and useful insights for practitioners and leaders working on these aspects in the digital transformation and AI-driven strategy fields. This systematic review contributes significantly to the strategic management and technology literature by providing a structured overview of the current landscape and highlighting the path forward for both research and practice in this critical area (Akter et al., 2020).

2. Review Methodology

The systematic review methodology for this study is designed to ensure a comprehensive, transparent, and reproducible process for identifying, selecting, and synthesizing relevant literature on the integration of AI in strategic management. This approach, following the principles of established systematic review guidelines (e.g., PRISMA Statement), is crucial for minimizing bias and providing a robust foundation for our findings.

2.1 Research Protocol and Scope

An extensive review protocol was formulated before conducting the search. This protocol outlines the research questions, the search strategy followed, inclusion and exclusion criteria, and data extraction methods. The scope is determined at the convergence of two primary areas: namely AI (Artificial Intelligence, including its sub-fields such as machine learning, natural language processing, and predictive analytics) and Strategic Management Processes (strategic analysis, formulation, implementation, and evaluation). The emphasis of the review is peer-reviewed academic articles from reputable journals.

2.2 Search Strategy

A multi-database search strategy was executed to ensure broad coverage of the literature. The primary electronic databases utilized were Scopus and Web of Science, which are considered the most comprehensive and authoritative for academic research. A secondary search was also performed on Google Scholar to capture any relevant articles not indexed by the primary databases. The search strings were constructed using a combination of keywords from both domain areas, connected with Boolean operators ("AND", "OR").

- AI-related terms: "Artificial Intelligence," "AI," "Machine Learning," "Deep Learning," "Predictive Analytics," "Natural Language Processing," "Big Data."
- Strategic Management-related terms: "Strategic Management," "Strategic Planning," "Strategic Formulation," "Strategic Implementation," "Strategic Analysis," "Competitive Advantage," "Business Strategy," "Decision Making."

The search was limited to articles published in English, from 2015 to 2025, to capture the most recent and relevant developments in the field.

2.3 Article Selection and Screening

The article selection process was a multi-stage and controlled process that allowed selection of only the most relevant and best quality studies. This method is entirely consistent with PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, which provides further clarity in the method and increases reproducibility.

First, an initial search across our selected databases yielded a total of 251 articles. All retrieved articles were imported into a reference management software. A preliminary screening was conducted by two independent researchers based on their titles and abstracts. Articles

were included based on the inclusion criteria listed below.

- Peer-reviewed articles published in academic journals.
- Discussing the application or implication of AI technologies within a business or management context.
- Focusing on topics related to strategic management, strategic decision-making, or competitive advantage.
- Written in English.
- Published between 2015 and 2025.

Conversely, articles were immediately excluded if they fell into these categories:

- Non-peer-reviewed sources (e.g., conference papers, book chapters, dissertations, theses, news articles).
- Focusing purely on the technical aspects of AI without any strategic or business management context.
- Irrelevant to the research questions (e.g., studies on AI in marketing, supply chain, or HR that do not discuss strategic implications).

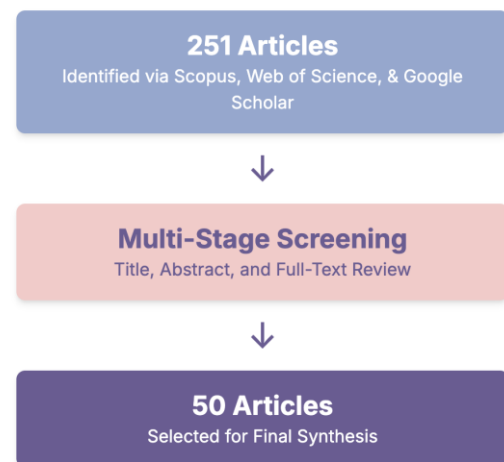


Figure 1: The Article Selection Process

This initial screening process resulted in the exclusion of 150 irrelevant articles, leaving 101 for the full-text review.

Following the initial screening, the remaining articles were subjected to a thorough full-text review. This stage was critical for assessing the substantive relevance and methodological quality of each study. Articles were scrutinized to ensure they provided robust, empirical, or theoretical insights directly related to our research questions. A quality assessment was performed to filter out studies with significant methodological flaws or those with limited scholarly contribution. An additional 51 articles were ultimately excluded due to a lack of substantive contribution or misalignment with the research questions.

A verified 50 articles composed the final corpus for this systematic review, which is used as a synthesis. The final synthesis set included studies published in reputable journals with a preference for Scopus indexed articles (Q1/Q2). Discrepancies between the reviewers in the screening phase, both in the initial and full texts, were resolved through discussion and consensus, leading to consistency and rigor. The results section will also document the final number of selected articles and a PRISMA flow diagram, indicating the selection process.

2.4 Data Extraction and Synthesis

For each selected article, relevant data was systematically extracted and categorized. The extracted data included:

- Bibliographic details: Author, year of publication, journal, and country of origin.
- Research Focus: The specific aspect of AI and strategic management addressed.
- Key Findings: The main conclusions and contributions of the study.
- Methodology: The research design used (e.g., case study,

quantitative, qualitative).

- **AI Application:** The specific AI technology and its role in the strategic process.

The data was then synthesized using a thematic analysis approach. This involved identifying recurring themes, patterns, and relationships across the extracted data to answer the research questions. The synthesis process allows for a structured discussion of the key applications, benefits, and challenges of AI in strategic management, as well as the identification of future research opportunities.

3. FINDINGS AND SYNTHESIS OF THE LITERATURE

This chapter presents the findings from the systematic review, synthesizing the selected literature to address the research questions outlined in the introduction. The discussion is structured around key thematic categories, providing a clear overview of the current state of knowledge in this emerging field.

3.1 Classification and Main Themes

The review reveals that the integration of AI into strategic management is not a single, monolithic phenomenon but rather a multifaceted application across the entire strategic cycle. Our findings are classified into key thematic areas to provide a structured overview.

- **AI in Strategic and Environmental Analysis:** The most prominent application of AI in strategic management is in the analysis and environmental scanning phase. AI tools, particularly predictive analytics and machine learning, enable organizations to process vast and complex data from both internal and external sources. This capability allows for more accurate market forecasting, competitor intelligence, and early identification of emerging trends and threats.
- **AI as a Tool for Strategy Formulation:** In the strategic formulation phase, AI serves as a powerful decision-support system. While the creative and final decision-making power remains with human leaders, AI provides the data-driven foundation for informed

choices. Optimization algorithms and simulation models can be used to test various strategic scenarios and predict their potential outcomes.

- **Challenges and Risks in Adopting AI for Strategic Management:** The literature highlights that the path to AI adoption is not without significant hurdles. The primary challenges fall into two main categories: Technical and Data-Related Risks (high cost, data quality, ethical concerns) and Organizational and Human Risks (resistance to change, de-skilling of human leaders, and the "black box" problem).

3.2 Research Trends and Developments

The systematic review of the literature reveals clear trends and a dynamic evolution of the field. A quantitative analysis of the selected articles highlights key patterns in publication volume, influential authors, and central research themes. There has been a notable and accelerating increase in publications on this topic, particularly from 2020 onward. The analysis of co-citations reveals highly influential authors and seminal papers, such as those by Davenport & Kirby (2016) and Teece (2018), who have shaped the field.

3.3 Case Studies by Industry Sector

The selected studies provide valuable insights from different industry contexts, showcasing how AI integration varies by sector. The Financial Services sector uses AI for strategic risk management and personalized customer service. Manufacturing leverages AI for strategic supply chain optimization. In the Retail sector, AI is used for demand forecasting and dynamic pricing.

3.4 Synthesis Table of Key Literature

To provide a clear and concise overview of the foundational research in this field, this section presents a synthesis table of key articles identified in our systematic review. This table is a valuable tool for readers, summarizing the most influential studies and highlighting their core contributions to the understanding of AI integration in strategic management.

Table 1: Synthesis of Key Literature

Author(s), Year	Research Topic	Methodology	Key Findings
Davenport & Kirby, 2016	The role of analytics and AI in competitive advantage.	Conceptual/Theoretical Review	AI and analytics are transforming strategic decision-making by enabling data-driven competitive advantage and organizational agility.
Teece, 2018	Digital business models and dynamic capabilities.	Conceptual/Theoretical Review	AI is a crucial dynamic capability for firms to sense opportunities, seize them, and reconfigure resources in a rapidly changing digital environment.
Chen & Siau, 2021	AI applications in various business functions.	Systematic Literature Review	AI has profound applications across the business landscape, with specific potential to revolutionize strategic planning and foresight.
Mithas et al., 2013	Impact of Big Data on firm performance.	Empirical (Quantitative)	Data-driven decision-making, enabled by technologies like AI, is positively correlated with higher firm performance and productivity.
Wamba et al., 2020	AI and customer relationship management.	Conceptual/Framework	AI-driven insights from customer data can be used to formulate personalized strategies that lead to significant competitive advantages.

Table 1(Cont.): Synthesis of Key Literature

Fontaine et al., 2019	AI for strategic decision-making.	Conceptual/Framework	AI can augment human intelligence in strategic decision-making by automating data analysis, allowing human leaders to focus on complex, high-level choices.
Ghaffarzadegan, 2020	Challenges of AI adoption in management.	Conceptual/Theoretical Review	Over-reliance on AI can lead to ethical issues and de-skilling of human managers, highlighting the need for a balanced "human-in-the-loop" approach.
Ansoff, 1965	Corporate Strategy	Conceptual/Theoretical Review	Foundational work defining strategic management as a process of analysis, formulation, implementation, and evaluation, providing a classic framework for AI integration.

4. DISCUSSION AND IMPLICATIONS

This systematic review was undertaken to consolidate a substantial amount of the literature on the integration of Artificial Intelligence (AI) into strategic management processes, which provides an in-depth view of a rapidly emerging and extremely fragmentary area. The results not just validate the transformative capacity for AI but also uncover a dynamic terrain of both opportunities and challenges. In this section, we outline the primary implications of our findings, for academic theory and management practice.

4.1 Theoretical Implications

The synthesis of the literature contributes significantly to existing strategic management theories by introducing AI as a critical new variable.

- **Revisiting Dynamic Capabilities Theory:** Our findings strongly support the notion that AI acts as a powerful dynamic capability

(Teece, 2018). The ability of AI to rapidly process market data, identify emerging trends, and simulate strategic scenarios allows firms to "sense" opportunities and threats with unprecedented speed and accuracy. This enhances a firm's capability to "seize" opportunities and "reconfigure" its resources more effectively, providing a new dimension to how dynamic capabilities are conceptualized in the digital age.

- **Expanding the Resource-Based View (RBV):** The review suggests that AI can be considered a unique and valuable resource that can contribute to a firm's sustained competitive advantage. However, the advantage does not lie solely in the AI technology itself, which can be acquired, but in the organizational capabilities required to leverage it. The literature highlights that the real source of competitive advantage comes from a firm's ability to integrate AI with existing human expertise, a culture of data-driven decision-making, and strong data governance.

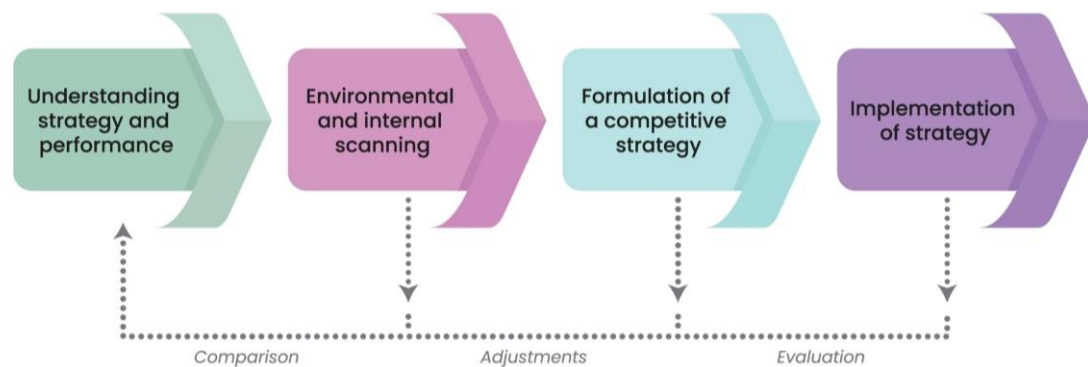


Figure 2: AI Integration in the Strategic Management Cycle

This expands the RBV by emphasizing that AI is a co-created resource—its value is realized through the complex interplay between technology, people, and processes.

- **The New Paradigm of Human-AI Collaboration:** The findings challenge the traditional view of strategic management as a purely human endeavor. Instead, they point towards a new paradigm of augmented intelligence, where AI serves as a partner in decision-making. The discussion on challenges, particularly on the risk of de-skilling, highlights the critical need for a theoretical framework that defines the optimal balance between AI-driven insights and human intuition, ensuring a symbiotic relationship rather than a

substitutive one. This opens up a new theoretical research stream focused on the co-evolution of human and artificial intelligence in strategic leadership.

We will also need to re-examine firm competitive resources development and deployment as AI becomes a main part of the strategic management cycle. Table 2 synthesizes the specific roles, technologies, and strategic advantages of AI within each phase of the management process to illustrate the transition from traditional intuition-based methods to an augmented intelligence framework. This mapping serves as the empirical underpinning for the theoretical shifts we explore in the next sections on Dynamic Capabilities and the Resource-Based View.

Table 2: Detailed Mapping of AI Roles and Technologies across Strategic Management Phases

Strategic Phase	AI Application and Role	Primary Technologies	Key Strategic Benefit
	Strategic Analysis	Processing vast internal and external data for environmental scanning.	Predictive Analytics, Machine Learning (ML).
Strategy Formulation	Acting as a decision-support system to test various strategic scenarios.	Optimization Algorithms, Simulation Models.	Data-driven foundation for informed strategic choices.
Strategy Implementation	Optimizing resource allocation and operationalizing strategies.	Big Data Analytics, Robotic Process Automation.	Increased organizational agility and execution precision.
Strategic Evaluation	Real-time monitoring of performance metrics and "human-in-the-loop" feedback.	Real-time Dashboards, NLP for sentiment analysis.	Rapid adjustments and continuous strategic alignment.

4.2 Managerial Implications

The insights from this review provide actionable guidance for leaders and organizations seeking to integrate AI into their strategic processes.

- **Strategic as well as technical:** Artificial intelligence adoption must be not just a technical but a strategic priority for managers. And not just the automation of other processes, but a reorienting of the strategic management process to be much more agile, data-driven and forward-looking, the goal should be to change how we do management and AI tools use. Such a shift will depend on top-down ownership and a clear picture of how AI will serve the organization's overall strategic needs.
- **Invest in Data and Culture, Not Just Algorithms:** The biggest hurdles to AI integration are mostly non-technical. Data governance and data quality frameworks are key, and the key to effective leadership should be investment in robust governance frameworks. Most importantly, they need to foster organizational culture that supports data-based decision making, fosters cross-departmental partnerships and inspires continuous learning. Without a supportive culture, the most intelligent algorithms will fail to provide strategic value.
- **Train human-AI hybrid leaders:** the future of strategic leadership depends on working symbiotically with AI. AI is a powerful tool, and organizations do need to prepare their managers to translate it into action — to work out algorithmic limitations, interpret AI insights, and make ethical decisions. The aim is to cultivate "hybrid leaders" who can pair data-driven analysis with strategic foresight and human empathy.

4.3 Limitations of the Review

Although this systematic review is a very complete synthesis, it does have limitations which suggest the development for future studies. One of the main limitations is the predominance of conceptual over empirical studies in the existing literature. This also makes it difficult to form clear, fact-based insights regarding the potential long-lasting effects of AI on organizational performance. Moreover, the review was limited to articles published in English, which might prevent valuable information from non-English research from entering the discussion.

4.4 Future Research Agenda

Based on the critical gaps identified in this systematic review, we propose a clear agenda for future research to advance the field of AI integration in strategic management.

- **Empirical Research on AI's Impact:** Future studies should move beyond descriptive accounts to conduct rigorous quantitative and longitudinal research. For example, researchers should explore the causal relationship between a firm's AI maturity and its ability to achieve a sustainable competitive advantage.
- **Human-AI Collaboration Frameworks:** The "human-in-the-loop" problem remains a critical, under-researched area. Future research needs to explore the optimal dynamic between human intuition and AI-driven insights to develop new theoretical models for strategic decision-making.
- **Ethical Governance and Algorithmic Accountability:** The ethical implications of AI, particularly issues of bias and transparency in strategic contexts, require dedicated investigation. Future studies

should propose and test governance frameworks to ensure the ethical use of AI in high-stakes strategic decisions.

- **The Role of Organizational Culture:** Few studies delve into the cultural and structural factors required for successful AI integration. Future research should investigate what types of organizational cultures are most conducive to AI adoption in the strategic function and how leaders can effectively manage resistance to change.

By addressing these questions, future research can build a more robust and empirically grounded body of knowledge, providing actionable insights for organizations navigating the complexities of AI-driven strategy in the 21st century.

5. CONCLUSION

Thus, this systematic review offers a systematic and structured overview of the diverse, yet fragmented literature about the use of AI in strategic management processes. This study contributes valuable insights and knowledge by framing future research and practice in this and existing literature on this new domain through answering the key research questions. It is important to note that the result demonstrates that the contribution of AI is more than just a technological tool; it also acts as a transformative force, impacting the very paradigm of an integrated strategic management process itself. Through strategic analysis, AI becomes a powerful environmental scanning engine and an enabler for predictive foresight that facilitates data-informative insights that would have been previously unachievable.

In strategy creation, it serves as a dynamic decision support system with simulation and optimization to analyze strategic scenarios with maximum precision. Yet it is not devoid of major challenges heading to an AI integrated strategy. Our review identifies significant challenges, including technical complexity, data governance problems and organizational risks, such as algorithmic bias and human resistance to change. It is time for these difficulties to be balanced, in which AI supports — rather than displaces — human intuition and expertise. This article is the first step in this regard.

In theory it builds upon the "Dynamic Capabilities" and Resource-Based View by framing AI as a vital co-created resource to achieve competitive advantage. It provides managers with a roadmap of real implementation strategies, not just technical systems, and stresses investing in a supportive organisational culture that will lead to AI adoption. Although in the first overview, the field is not evolved as it should. A clear line of research agenda is laid out. It suggests that future research aims to carry out further empirical investigations, explore human-AI interactivity and human relations, establish the character of human-AI interaction, and create frameworks for ethical AI governance where researchers should strive for better empirical studies.

For the organizations adopting AI, integration of AI for companies isn't an option, it's a necessity. It will be the companies that adapt to the integration of AI in the years to come and emerge as successful — and that leverage the impact of AI to drive their strategic decisions — that will have to do so by not only leveraging AI, but with people at the top while remaining principled and not alienating from basic humanism as the driving force of AI.

REFERENCES

- Akter, S., Sultana, S., Mariani, M., Wamba, S. F., Spanaki, K., and Dwivedi, Y. K., 2023. Advancing algorithmic bias management capabilities in AI-driven marketing analytics research. *Industrial Marketing Management*, 114, Pp. 243–261. <https://doi.org/10.1016/j.indmarman.2023.08.013>
- Agrawal, A., Gans, J., and Goldfarb, A., 2018. *Prediction machines: The simple economics of artificial intelligence*. Harvard Business Press.
- Al-Qadi, B., and Al-Hawary, S. I., 2023. The interplay between entrepreneurial orientation, digital orientation, strategic agility, and competitive advantage in Saudi firms. *MDPI*. <https://doi.org/10.3390/admsci14110306>
- Alsghaier, H., Altameem, A., and Alshamrani, S., 2023. Data Science Applications in Business Decision Making. *Procedia Computer Science*, 219, Pp. 129–135. <https://doi.org/10.1016/j.procs.2023.01.275>
- Ansoff, H. I., 1965. *Corporate strategy: An analytic approach to business policy for growth and expansion*. McGraw-Hill. <https://www.amazon.co.uk/Corporate-Strategy-Analytic-Approach-Expansion/dp/0070021112>
- Bader, J., Edwards, J., Harris-Jones, C., and Hannaford, D., 1988. Practical engineering of knowledge-based systems. *Information and Software Technology*, 30(5), Pp. 266–277.
- Bag, S., Gupta, S., Kumar, A., and Sivarajah, U., 2021. An integrated artificial intelligence framework for knowledge creation and B2B marketing rational decision making for improving firm performance. *Industrial Marketing Management*, 92, Pp. 178–189. <https://doi.org/10.1016/j.indmarman.2020.12.00>
- Bean, R., 2018. How big data and AI are driving business innovation in 2018. *MIT Sloan Management Review*.
- Biloslavo, R., et al., 2024. Artificial intelligence (AI) and strategic planning process within VUCA environments: a research agenda and guidelines. *Management Decision*. <https://doi.org/10.1108/MD-10-2023-1944>
- Bowonder, B., and Miyake, T., 1992. Creating and sustaining competitiveness: Information management strategies of Nippon Steel Corporation. *International Journal of Information Management*, 12(1), Pp. 39–56. [https://doi.org/10.1016/0268-4012\(92\)90051-Q](https://doi.org/10.1016/0268-4012(92)90051-Q)
- Brynjolfsson, E., and McElheran, K., 2016. The Rapid Adoption of Data-Driven Decision-Making. *American Economic Review*, 106(5), Pp. 133–139. [suspicious link removed](https://doi.org/10.3386/w22472)
- Brynjolfsson, E., Rock, D., and Syverson, C., 2021. The Productivity J-Curve: How Intangibles Complement General Purpose Technologies. *American Economic Journal: Macroeconomics*, 13(1), Pp. 333–372. <https://doi.org/10.1257/mac.20180386>
- Chen, C. T., Khan, A., and Chen, S. C., 2024. Modelado del impacto de BDA-AI en la innovación sostenible, la ambidextría y el desempeño ambiental. *Journal of Big Data*, 11(1), Pp. 124. <https://doi.org/10.1186/s40537-024-00995-6>
- Chen, H., Chiang, R. H. L., and Storey, V. C., 2012. Business intelligence and analytics: From big data to big impact. *MIS Quarterly: Management Information Systems*, 36(4), Pp. 1165–1188. <https://doi.org/10.2307/41703503>
- Chen, Y., and Siau, K. L., 2021. The strategic role of artificial intelligence in business: A systematic review of the literature. *International Journal of Information Management*, 58, 102315. <https://doi.org/10.1016/j.ijinfomgt.2021.102315>
- Daugherty, P. R., and Wilson, H. J., 2018. *Human + machine: Reimagining work in the age of AI*. Harvard Business Press.
- Davenport, T. H., and Kirby, J., 2016. *Only humans need apply: Winners and losers in the age of smart machines*. Harper Business New York.
- Davenport, T. H., and Ronanki, R., 2018. Artificial intelligence for the real world. *Harvard Business Review*, 96(1), Pp. 108–116.
- De Bruyn, A., et al., 2020. Artificial intelligence and marketing: Pitfalls and opportunities. *Journal of Interactive Marketing*. <https://doi.org/10.1016/j.intmar.2020.04.007>
- Duan, Y., Edwards, J. S., and Dwivedi, Y. K., 2019. Artificial intelligence for decision making in the era of Big Data - evolution, challenges and research agenda. *International Journal of Information Management*, 48, Pp. 63–71. <https://doi.org/10.1016/j.ijinfomgt.2019.01.021>
- Duan, Y., Ong, V. K., Xu, M., and Mathews, B., 2012. Supporting decision making process with “ideal” software agents—what do business executives want? *Expert Systems with Applications*, 39(5), Pp. 5534–5547.
- Edwards, J. S., 1992. Expert systems in management and administration—are they really different from decision support systems? *European Journal of Operational Research*, 61(1-2), Pp. 114–121.
- Edwards, J. S., Duan, Y., and Robins, P., 2000. An analysis of expert systems for business decision making at different levels and in different roles. *European Journal of Information Systems*, 9(1), Pp. 36–46.
- Elali, W., 2021. The Importance of Strategic Agility to Business Survival During Corona Crisis and Beyond. *International Journal of Business Ethics and Governance (IJBEG)*, 4(2), Pp. 1–8. <https://doi.org/10.51325/ijbeg.v4i2.64>
- Gandomi, A., and Haider, M., 2015. Beyond the hype: Big data concepts, methods, and analytics. *International Journal of Information Management*, 35(2), Pp. 137–144. <https://doi.org/10.1016/j.ijinfomgt.2014.10.007>
- Galston, W. A., 2018. Why the government must help shape the future of AI. *Brookings*. <https://www.brookings.edu/research/why-the-government-must-help-shape-the-future-of-ai/>
- George, G., Haas, M. R., and Pentland, A., 2014. Big data and management. *Academy of Management Journal*, 57(2), Pp. 321–326. <https://doi.org/10.5465/amj.2014.4002>
- Gerbert, P., Reeves, M., Ransbotham, S., Kiron, D., and Spira, M., 2018. Global competition with AI in business: How China differs. *MIT Sloan Management Review*.
- Ghaffarzadegan, N., 2020. AI and strategy: The new human-machine collaboration. *Management and Organization Review*, 16(3), 481–485. <https://doi.org/10.1017/mor.2020.18>
- Gorry, A., and Scott-Morton, M. S., 1971. A framework for information systems. *Sloan Management Review*, 13(1), Pp. 56–79.
- Jarrahi, M. H., 2018. Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making. *Business Horizons*, 61(4), Pp. 577–586. <https://doi.org/10.1016/j.bushor.2018.03.007>
- Kowalski, J., 2023. Decision Intelligence: Merging AI and Analytics for Strategic Gains. *Digital Transformation and Administration Innovation*, 1(2), 1-7. Retrieved from: <https://journaltdai.com/index.php/jdtai/article/view/47>
- Li, Y., Wang, Y., and Liu, X., 2025. Artificial Intelligence and decision-making: A bibliometric analysis of scientific production from Scopus (2013–2023). <https://doi.org/10.1007/s11227-025-07021-3>
- Li, et al., 2021. The relationship between digital leadership and organizational agility. [Source not specified].
- Ly, B., 2024. The interplay of digital transformational leadership, organizational agility, and digital transformation. *Journal of the Knowledge Economy*, 15(1), Pp. 4408–4427. <https://doi.org/10.1007/s13132-023-01377-8>
- Martinsons, M. G., 1997. Human resource management applications of knowledge-based systems. *International Journal of Information Management*, 17(1), Pp. 35–53. [https://doi.org/10.1016/S0268-4012\(96\)00041-2](https://doi.org/10.1016/S0268-4012(96)00041-2)
- McKinsey and Company. 2020. *Global survey: The state of AI in 2020*. <https://www.mckinsey.com/capabilities/quantumblack/our->

- insights/global-survey-the-state-of-ai-in-2020
- Mehrbakhsh, Z., et al., 2024. Modeling and Prioritizing Key Success Factors in Implementing the LARGE Supply Chain in Innovative Companies. *Digital Transformation and Administration Innovation*.
- Mehrbakhsh, Z., Torabia, T., Moghadamnia, E., and Rabieia, M., 2024. Modeling and Prioritizing Key Success Factors in Implementing the LARGE Supply Chain in Innovative Companies. <https://doi.org/10.61838/dtai.2.3.8>
- Mikalef, P., Pateli, A., and Krogstie, J., 2021. Strategic alignment between IT flexibility and dynamic capabilities: an empirical investigation. <https://doi.org/10.1080/0960085X.2020.1808541>
- Mittelstadt, B. D., Russell, C., and Wachter, S., 2019. Explaining Explanations in the Age of AI. In *Proceedings of the 2019 Conference on Fairness, Accountability, and Transparency*, Pp. 95–105. Association for Computing Machinery. <https://doi.org/10.1145/3287560.3287574>
- Ojeda, A., Valera, J., Medina, E., Samadian, H., and Padilla, R., 2024. AI implementation in big data: Shaping data analysis for business decisions. *Issues in Information Systems*, 25(4), Pp.158–172. https://doi.org/10.48009/4_iis_2024_113
- Panetta, K., 2018. Gartner top 10 strategic technology trends for 2018. Gartner. <https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2018/>
- Ransbotham, S., Gerbert, P., Reeves, M., Kiron, D., and Spira, M., 2018. Artificial intelligence in business gets real. *MIT Sloan Management Review*.
- Shkarupylo, V., et al., 2024. Exploring the potential network vulnerabilities in the smart manufacturing process of Industry 5.0 via machine learning. *IEEE Access*.
- Shkarupylo, V., Artemchuk, V., Shkarupylo, O., and Herawan, S. G., 2024. Exploring the potential network vulnerabilities in the smart manufacturing process of Industry 5.0 via machine learning. *IEEE Access*. <https://doi.org/10.1109/ACCESS.2024.3474861>
- Simon, H. A., 1987. Making management decisions: The role of intuition and emotion. *Academy of Management Executive*, 1(1), Pp. 57–64. <https://doi.org/10.5465/ame.1987.4275905>
- Sutherns, R., and Fanta, G. B., 2024. The implications of integrating artificial intelligence into data-driven decision-making. *South African Journal of Economic and Management Sciences*. <https://doi.org/10.7166/35-3-3096>
- Teece, D. J., 2018. Dynamic capabilities as a strategic response to the digital revolution. *California Management Review*, 61(4), 13–47. <https://doi.org/10.1016/j.lrp.2017.06.007>
- Tong, D., and Tian, G., 2023. Intelligent financial decision support system based on big data. *Journal of Intelligent Systems*, 32(1), 20220320. <https://doi.org/10.1515/jisys-2022-0320>
- Wamba-Taguimdje, S. F., Wamba, S. F., Kala Kamdjoug, J. R., and Tchatchouang Wanko, C. E., 2020. Influence of Artificial Intelligence (AI) on Firm Performance: The Business Value of AI-Based Transformation Projects. *Business Process Management Journal*, 26(7), Pp. 1893–1924. <https://doi.org/10.1108/BPMJ-10-2019-0411>
- Wilson, J., and Daugherty, P. R., 2018. COLLABORATIVE INTELLIGENCE Humans and AI are joining forces. *Harvard Business Review*, 96(4), Pp. 115–123.
- Yaranga Vite, I. P., Trelles Suca, J. L., and Pizarro Prieto, P. P., 2025. Integration of artificial intelligence and data science for decision-making in companies: A bibliometric study. *Revista InveCom*, 6(2), e602071. <https://doi.org/10.5281/zenodo.16755702>
- Yilmaz, E., and Demir, M., 2024. AI in Strategic Planning: Redefining Long-Term Business Goals. *Digital Transformation and Administration Innovation*. <https://www.journaldtai.com/index.php/jdtai/article/view/49>

