eISSN 3047-4914

JURNAL MBISKU: MANAJEMEN BISNIS DAN KEUANGAN

ARTIFICIAL INTELLIGENCE IN CONTEMPORARY BUSINESS MANAGEMENT AND ITS IMPLICATIONS FOR DECISION-MAKING AND ORGANIZATIONAL PERFORMANCE

Hafni Juniyanti Hsb
Universitas Islam Negeri Imam Bonjol Padang
Padang, Indonesia
E-mail: hafni.juniyanti.hsb@uinib.ac.id

Erizal Candra Efendi
Universitas Islam Negeri Imam Bonjol Padang ,
Padang, Indonesia
E-mail: 2420030001@uinib.ac.id

Ruri Mustika
Universitas islam negeri imam bonjol padang
Padang, indonesia
E-mail: 2420030025@uinib.ac.id

Wildan Hadi
Universitas islam negeri imam bonjol padang
Padang, indonesia
E-mail: 2420030010@uinib.ac.id

ABSTRACT. The development of Artificial Intelligence (AI) has brought significant changes in contemporary business management practices, particularly in the decision-making process and improvement of organizational performance. This article aims to conceptually examine the role of Artificial Intelligence (AI) in business management by emphasizing its implications for the quality of managerial decision-making and organizational performance. The research method used is a literature study by analyzing reputable national and international journals as well as academic books relevant to the topics of Artificial Intelligence (AI), decision-making, and organizational performance. Data analysis techniques are carried out through content analysis and thematic analysis to identify patterns, themes, and conceptual relationships between key concepts. The results of the study show that Artificial Intelligence (AI) plays a role as an enabler of data-based decision-making that is able to improve the accuracy, speed, and adaptability of managerial decisions. In addition, Artificial Intelligence (AI) contributes to improving organizational performance, both from operational and strategic aspects, when integrated in harmony with the organization's strategy and capabilities. The article also affirms that Artificial Intelligence (AI) can be understood as a strategic resource and dynamic capability that supports the creation of a sustainable competitive advantage. Theoretically, this study enriches the business management literature through the integration of AI with strategic decision-making and management theory, and provides practical implications for managers in designing effective Artificial Intelligence (AI) implementation strategies.

Received: January, 2026
Accepted: February, 2026

DOI:
10.56633/mbisku.v3i1.1325

Keywords: Artificial intelligence; Business management; decision-making; organizational performance.

Introduction

The development of Artificial Intelligence (AI) has become one of the main drivers of contemporary business management transformation in the midst of an increasingly complex, dynamic, and digital-based business environment [1]. Rapid advances in computing technology, the availability of big data, and the capabilities of machine learning algorithms allow organizations to process information at scale quickly and accurately. This condition is driving a shift in managerial practices from an intuition-based approach to more systematic and data-driven decision-making. In the context of increasingly fierce global competition, organizations are required to have the capability to utilize intelligent technology to improve operational efficiency, strategic planning accuracy, and responsiveness to market changes.[2] Artificial Intelligence (AI) is no longer seen as just a technical tool, but rather as a strategic resource that can strengthen managerial capabilities and support long-term value creation for organizations.

The contemporary business environment is also characterized by a high level of uncertainty due to globalization, digitalization, and rapid changes in consumer behavior [3]. In this situation, the limitation of human rationality in processing information becomes a serious challenge for managerial decision-making. Artificial Intelligence (AI) comes as a solution that allows organizations to perform predictive analysis, business scenario simulation, and automation of empirical evidence-based decision-making processes. Various management functions, such as marketing, finance, human resources, and operations, have leveraged Artificial Intelligence (AI) to improve the quality of decisions and overall organizational performance. However, the success of Artificial Intelligence (AI) utilization is highly dependent on the organization's ability to integrate the technology into management systems and decision-making culture. Therefore, a comprehensive literature review is essential to understand the strategic role of Artificial Intelligence (AI) in contemporary business management and its implications for decision-making and organizational performance.

The conventional business management paradigm generally relies on the manager's experience, intuition, and subjective judgment in the planning and decision-making process [4]. This approach is relatively effective in a stable and predictable business environment, but it becomes inadequate when organizations are faced with market complexity, accelerating technological change, and ever-increasing volumes of information. The development of digital technology and management information systems has changed the way organizations manage and utilize data as a primary source in managerial processes. Data no longer functions simply as a reporting tool, but rather as a strategic asset used to support the analysis, planning, and control of organizational performance. This change marks a paradigm shift in business management towards a data-driven approach.

In the data-driven management paradigm, managerial decisions are made through a systematic, objective, and evidence-based data analysis process. Organizations leverage internal and external data to identify patterns, predict trends, and evaluate alternative strategies more accurately. This approach allows managers to reduce uncertainty and cognitive bias in decision-making, while improving the consistency and transparency of managerial processes.[5]

[1] Belinda Belinda and Diah Nofitasari, "Peran Artificial Intelligence Dalam Digital Marketing Dan Dampaknya Terhadap Perilaku Konsumen Tahun 2025," *Jurnal GICI Jurnal Keuangan Dan Bisnis* 17, no. 1 (2025): 100–108.

[2] Suprapto Estede et al., *Manajemen Dinamis: Adaptasi Dan Strategi Global* (PENERBIT KBM INDONESIA, 2025).

[3] S Pd Kusnanto et al., *Transformasi Era Digitalisasi Masyarakat Kontemporer* (Uwais Inspirasi Indonesia, 2024).

[4] Bambang Septiawan and Aris Sunandes, "Implementasi Intuisi Dalam Manajemen Bisnis (Sebuah Studi Literatur)," *Jurnal Penelitian Manajemen Terapan (PENATARAN)* 9, no. 2 (2024): 199–209.

[5] S E Febrianty et al., *Manajemen Pengambilan Keputusan* (Perkumpulan Rumah Cemerlang Indonesia, 2023).

As data complexity increases and the need for rapid analysis increases, the role of smart technologies is becoming increasingly important in supporting the implementation of this paradigm. Therefore, the shift towards data-driven management reflects not only technical changes, but also fundamental changes in the way organizations understand, formulate, and execute business decisions.

Managerial decision-making is at the core of business management practices, as the decisions made will determine the strategic direction and performance of the organization. However, in a contemporary business environment characterized by uncertainty and complexity of information, managers are often faced with the limitations of rationality in processing data optimally [6]. Artificial Intelligence is present as a technology that can help managers overcome these limitations through the ability to analyze large-scale data, predictive modeling, and provide real-time decision recommendations. By leveraging Artificial Intelligence (AI), organizations can improve the accuracy, speed, and quality of decision-making, both at the operational and strategic levels.

The urgency of using Artificial Intelligence (AI) in managerial decision-making is increasing in line with the demands of organizations to adapt quickly to changing business environments. Artificial Intelligence (AI) allows managers to evaluate various decision scenarios based on historical data and future projections, so the risk of decision errors can be minimized.[7] In addition, Artificial Intelligence (AI) contributes to improving the objectivity of decisions by reducing the influence of subjective biases and emotional pressures that often arise in conventional decision-making processes. Nonetheless, the effectiveness of Artificial Intelligence (AI) is highly dependent on data quality, organizational readiness, and managers' ability to make appropriate use of the technology. Therefore, a conceptual study of the urgency of Artificial Intelligence (AI) in improving the quality of managerial decision-making is important to provide a comprehensive understanding for the development of contemporary business management practices.

The study of Artificial Intelligence (AI) in the context of business management has grown rapidly in recent years, especially in research that highlights the technical and implementable aspects of Artificial Intelligence (AI) technology. Most previous studies have focused on the application of AI to specific business functions, such as marketing, finance, or operations management, with an empirical approach that emphasizes performance measurement in part. However, there are still limitations in studies that comprehensively integrate the role of Artificial Intelligence (AI) in business management systems, especially in relation to managerial decision-making processes and overall organizational performance. This condition shows that there is a research gap at the conceptual level that requires theoretical synthesis across studies and across management functions.

In addition, the existing literature tends to discuss Artificial Intelligence (AI) as a technological tool, rather than as a strategic resource integrated with managerial capabilities and organizational structures. Research examining the relationship between Artificial Intelligence (AI), decision-making quality, and organizational performance is fragmented and has not provided a complete conceptual framework. On the other hand, the context of a dynamic and complex business environment demands a deeper understanding of the mechanisms by which Artificial Intelligence (AI) influences managerial processes and organizational

[6] Aliza Khafiyatul Awalia et al., "Penerapan Teori Pengambilan Keputusan Dalam Proses Perencanaan Strategis Perusahaan," *Musytari: Jurnal Manajemen, Akuntansi, Dan Ekonomi* 24, no. 12 (2025): 1071–80.

[7] Siti Nur Azizah, *Kecerdasan Buatan Dalam Pengelolaan SDM: Tantangan Dan Peluang* (Penerbit NEM, 2025).

performance outcomes.[8] Therefore, a systematic literature review is needed to identify, synthesize, and develop a conceptual understanding of the strategic role of Artificial Intelligence (AI) in contemporary business management.

Based on the background and research gaps that have been described, the formulation of the problem in this article is focused on the conceptual aspect. The main problem studied is how Artificial Intelligence is positioned in contemporary business management and how its role is in supporting managerial decision-making. In addition, this article also examines how the integration of Artificial Intelligence (AI) in business management processes has implications for improving organizational performance conceptually based on the synthesis of existing literature.

The main purpose of writing this article is to review and synthesize the literature related to the role of Artificial Intelligence in contemporary business management and its implications for managerial decision-making and organizational performance. Through a literature approach, this article aims to build a comprehensive conceptual understanding of the strategic position of Artificial Intelligence (AI) in modern business management systems.

Literature Review

Artificial Intelligence in Business Management

Artificial Intelligence (AI) is generally defined as a branch of computer science that focuses on developing systems or machines that are capable of mimicking human cognitive abilities.[9] such as studying, reasoning, and making decisions. In the context of business management, Artificial Intelligence (AI) is understood not only as an automation technology, but as an intelligent system that is able to process data, generate insights, and support managerial processes strategically. The management literature places Artificial Intelligence (AI) as a decision-making support tool that enables organizations to improve efficiency, accuracy, and speed in responding to the dynamics of the business environment.

From a business management perspective, the concept of Artificial Intelligence (AI) is closely related to the use of data and analytics to create organizational value. Artificial Intelligence (AI) encompasses various technologies such as machine learning, deep learning, natural language processing, and decision support systems that are used to analyze historical data as well as real-time data. This technology allows organizations to identify patterns, predict trends, and objectively evaluate various alternative decisions.[10] Thus, Artificial Intelligence (AI) plays an enabler in the application of data-driven management, where business decisions are no longer based solely on intuition, but on empirical evidence generated from data analysis.

Furthermore, Artificial Intelligence (AI) in business management can be positioned as a strategic resource that supports the achievement of competitive advantage. Based on the Resource-Based View perspective, the organization's ability to develop and integrate Artificial Intelligence (AI) into managerial processes is a capability that is difficult for competitors to replicate.[11] Artificial Intelligence (AI) does not stand alone as a technology, but rather is

[8] Muh Arfah, Suherlan Suherlan, and Susatyo Adhi Pramono, "Eksplorasi Transformasi Digital Dalam MSDM: Dampak Integrasi Artificial Intelligence Dan Big Data Analytics Terhadap Pengambilan Keputusan Strategis," *Jurnal Minfo Polgan* 14, no. 1 (2025): 183–92.

[9] Arnolus Juantri E Oktavianus, Lamhot Naibaho, and Djoys Anneke Rantung, "Pemanfaatan Artificial Intelligence Pada Pembelajaran Dan Asesmen Di Era Digitalisasi," *Jurnal Kridatama Sains Dan Teknologi* 5, no. 02 (2023): 473–86.

[10] Abraham Arbeit et al., "Pemanfaatan Teknologi Kecerdasan Buatan (Ai) Dalam Sistem Informasi Manajemen Untuk Meningkatkan Efektivitas Pengambilan Keputusan Manajerial," *Musytari: Jurnal Manajemen, Akuntansi, Dan Ekonomi* 24, no. 12 (2025): 91–100.

[11] Tri Wahyudi et al., "Green Innovation Meets Artificial Intelligence: The Strategic Function of Intellectual Capital in Emerging Economies: Inovasi Hijau Berpadu Dengan Kecerdasan Buatan: Fungsi Strategis Modal

integrated with human resource competencies, organizational structures, and decision-making culture. Therefore, a conceptual understanding of Artificial Intelligence (AI) in business management is important to explain how this intelligent technology contributes to the continuous improvement of the quality of decision-making and organizational performance.

Types and Applications of Artificial Intelligence in Business Organizations

Artificial Intelligence in business organizations includes different types of intelligent technologies designed to support operational and managerial processes. The management literature classifies Artificial Intelligence (AI) based on its functions and levels of complexity, ranging from basic analytics systems to machine learning systems that are capable of adapting autonomously. In contemporary business management practices, Artificial Intelligence (AI) is used to process data, automate processes, and support strategic decision-making. The application of AI across organizational functions shows that this technology has become an integral component in modern management systems and plays an important role in improving organizational efficiency and performance. Applicatively, Artificial Intelligence (AI) is utilized in various business activities such as consumer behavior analysis, demand forecasting, risk management, and performance evaluation. Artificial Intelligence (AI) implementations enable organizations to manage data complexity and accelerate decision-making processes that previously required significant time and resources [12]. As such, the types and applications of Artificial Intelligence (AI) in business organizations not only reflect technological advancements, but also reflect changes in the way organizations manage information and formulate business strategies.

1. Machine Learning dan Big Data Analytics

   Machine learning is one of the main forms of Artificial Intelligence that allows systems to learn from data and improve their performance without explicit programming. In the context of business management, machine learning is used to analyze historical and real-time data to identify patterns, trends, and relationships that are relevant to managerial decision-making [13]. This technology is closely related to big data analytics, which is the process of processing data in high volumes, variations, and speeds. The combination of machine learning and big data analytics allows organizations to generate more accurate and predictive strategic insights.

   In practice, machine learning and big data analytics are applied to various management functions, such as customer segmentation in marketing, risk detection and anomalies in finance, and process optimization in operations management. The use of this technology helps organizations improve the quality of planning and control, while reducing uncertainty in decision-making. Therefore, machine learning and big data analytics are seen as the main foundation in the implementation of data-based business management oriented towards improving organizational performance.

2. Decision Support Systems dan Predictive Analytics

   Decision Support Systems (DSS) are computer-based systems designed to assist managers in the decision-making process by providing relevant information, analysis, and models. In the latest developments, DSS has been integrated with Artificial Intelligence so that it is able to provide smarter and adaptive decision recommendations. The integration of AI in DSS allows the system to process complex data, simulate various decision scenarios,

Intelektual Di Negara-Negara Berkembang," *Economic and Education Journal (Ecoducation)* 7, no. 2 (2025): 578–93.

[12] Upik Sri Sulistyawati, "Decoding Big Data: Mengubah Data Menjadi Keunggulan Kompetitif Dalam Pengambilan Keputusan Bisnis," *Jurnal Manajemen Dan Teknologi* 1, no. 2 (2024): 58–71.

[13] Asrul Asrul et al., "Pemanfaatan Big Data Analytics Dalam Proses Manajemen Teknologi Untuk Prediksi Permintaan Pasar," *Jurnal Minfo Polgan* 13, no. 2 (2024): 2433–38.

and provide alternative actions based on systematic analysis. This makes DSS a strategic tool in contemporary business management [14].

Predictive analytics is an important part of AI-based DSS that focuses on forecasting future events or performance based on historical data. In the context of business management, predictive analytics is used to predict market demand, financial performance, and business risk [15]. By utilizing statistical techniques and AI algorithms, predictive analytics helps managers anticipate changes in the business environment and formulate more proactive strategies. Therefore, the application of decision support systems and predictive analytics contributes significantly to improving the quality of decision-making and the effectiveness of overall business management.

Managerial Decision Making Theory

Managerial decision-making is at the core of the management function because it determines the strategic and operational direction of the organization. The management literature explains that the decision-making process involves identifying problems, collecting and analyzing information, evaluating alternatives, and selecting the actions that best suit the organization's goals. As the complexity of the business environment increases, managerial decision-making theory evolved to explain how managers make decisions under conditions of uncertainty and information limitations [16] . The two main theoretical approaches that are often used in the study of business management are rational decision-making theory and bounded rationality which later developed into evidence-based management. In the context of contemporary business management, decision-making theory is an important framework for understanding the role of Artificial Intelligence as a managerial support tool. Artificial Intelligence (AI) is seen as able to strengthen the decision-making process by providing more accurate information and more in-depth analysis. Therefore, an understanding of managerial decision-making theory becomes a conceptual foundation to explain how intelligent technology can be integrated into business management practices.

1. Rational Decision-Making Theory

Rational decision-making theory departs from the assumption that decision-makers act rationally with the aim of maximizing the desired outcome. This theory assumes that managers have full access to relevant information, are able to evaluate all decision alternatives, and can choose the most optimal alternative [17]. In this framework, the decision-making process is seen as a logical and systematic process that follows clear stages, from problem identification to evaluation of decision results. This rational approach is widely used in strategic planning and long-term decision-making. However, in business management practice, the assumption of full rationality is often difficult to meet due to information and time constraints. Nevertheless, rational decision-making theory remains relevant as a normative model that describes how decisions should be made. In this context, Artificial Intelligence has the potential to help managers approach rational conditions by providing comprehensive and objective data analysis. Thus, Artificial Intelligence (AI) can be seen as a means to improve the quality of decisions to be more in line with the principle of rationality in decision-making theory.

[14] Muhammad Subhan Iswahyudi et al., *Sistem Pendukung Keputusan* (Cendikia Mulia Mandiri, 2025).

[15] Abdul Kholik Nasution and Muhammad Irwan Padli Nasution, "Penerapan Data Analystic Di Era Sekarang Sehingga Berpengaruh Dalam Mengoptimalkan Bisnis Secara Efektif," *Derivatif: Jurnal Manajemen Ekonomi Dan Akuntansi* 1, no. 02 (2025): 35–43.

[16] Damara Altaf Alawdin et al., "Analisis Teori Pengambilan Keputusan Berbasis Risiko Dalam Manajemen Proyek," *Jurnal Akuntansi, Manajemen, Dan Perencanaan Kebijakan* 2, no. 2 (2024): 13.

[17] Febrianty et al., *Manajemen Pengambilan Keputusan*.

2. Bounded Rationality dan Evidence-Based Management

The concept of bounded rationality introduced by Herbert A. Simon criticizes the assumption of full rationality in decision-making [18]. This theory states that the human cognitive ability to process information is limited, so managers tend to make satisfactory decisions rather than optimal ones. These limitations are caused by limited information, time, and human processing capacity. In complex business environments, bounded rationality becomes a more realistic framework for explaining managerial decision-making behavior. Subsequent developments of bounded rationality gave birth to the evidence-based management approach, which emphasizes the use of the best empirical evidence in the decision-making process. Evidence-based management encourages managers to rely on data, research results, and systematic analysis rather than mere intuition. In this context, Artificial Intelligence plays an important role as a tool capable of processing data and generating relevant evidence to support managerial decisions. Thus, the integration of Artificial Intelligence (AI) in business management can be understood as an effort to reduce the limitations of rationality and improve the quality of decisions through an evidence-based approach.

Artificial Intelligence and Managerial Decision Making

Artificial Intelligence plays a strategic role in improving the quality of managerial decision-making through its ability to process and analyze data quickly and accurately. In the context of business management, Artificial Intelligence (AI) serves as a decision support tool that assists managers in identifying problems, evaluating alternatives, and choosing the most appropriate course of action based on data analysis. The integration of Artificial Intelligence (AI) in decision-making processes enables a shift from intuition-based decisions to empirical evidence-based decisions, thereby increasing the objectivity and consistency of managerial decisions [19]. Furthermore, Artificial Intelligence (AI) contributes to overcoming the limitations of human rationality as described in the theory of bounded rationality. By utilizing machine learning algorithms, Artificial Intelligence (AI) is able to process large amounts of information and present decision recommendations in real-time. This is especially relevant in a dynamic and uncertain business environment, where managers are required to make decisions quickly and appropriately. Therefore, the use of Artificial Intelligence (AI) in managerial decision-making is seen as a strategic effort to improve the quality of decisions and the overall effectiveness of business management.

Organizational Performance Concepts and Indicators

Organizational performance is a multidimensional concept that reflects the level of achievement of organizational goals both in operational and strategic aspects.[20] In the management literature, organizational performance is not only measured from financial results, but also from process efficiency, service quality, innovation, and the organization's ability to adapt to changing environments. This approach emphasizes that organizational performance must be viewed holistically to understand the organization's long-term success and sustainability. Organizational performance indicators generally include operational performance, financial performance, and non-financial performance. Operational performance is concerned with the efficiency and effectiveness of business processes, financial performance reflects the organization's ability to generate economic value, while non-financial performance

[18] Sitti Harlina, "BAB III Informasi SIMON'S Model," *Sistem Pendukung Keputusan Pada Teknologi Informasi* 25 (2022).

[19] Alawdin et al., "Analisis Teori Pengambilan Keputusan Berbasis Risiko Dalam Manajemen Proyek."

[20] Devy Wulandari et al., "Analisis Integrasi Pengukuran, Evaluasi, Dan Kinerja Organisasi Dalam Perspektif Pendidikan Dan Bisnis Syariah," *JPIK–Jurnal Pendidikan Islam Dan Studi Keislaman* 1, no. 1 (2025): 116–27.

includes aspects of customer satisfaction, innovation, and organizational capabilities. In the context of contemporary business management, the use of Artificial Intelligence has the potential to improve these various performance indicators through more accurate and data-driven decision-making. Thus, understanding the concept and indicators of organizational performance is important to explain the strategic implications of Artificial Intelligence (AI) on the achievement of organizational goals.

Artificial Intelligence as an Organizational Strategic Resource

In the study of strategic management, Artificial Intelligence is no longer seen solely as a technological tool, but as a strategic resource that has the potential to create a competitive advantage for organizations. The use of Artificial Intelligence (AI) in business management allows organizations to develop analytics and decision-making capabilities that are difficult for competitors to replicate. The strategic value of AI lies in its ability to integrate data, technology, and managerial knowledge to support the formulation and implementation of business strategies [21]. Therefore, Artificial Intelligence (AI) needs to be understood within the framework of strategic management theory that emphasizes the role of resources and organizational capabilities. AI as a strategic resource also depends on how the organization manages and integrates it into the management system. The success of Artificial Intelligence (AI) utilization is determined not only by technological sophistication, but also by the organization's readiness to develop human resource competencies, data infrastructure, and evidence-based decision-making culture. Thus, a theoretical study of Artificial Intelligence (AI) as a strategic resource is important to explain the mechanisms of value creation and organizational performance improvement in the contemporary business environment.

1. Resource-Based View (RBV)

   The Resource-Based View (RBV) is one of the key perspectives in strategic management that emphasizes that an organization's competitive advantage is determined by the ownership and management of resources that are valuable, scarce, difficult to replicate, and not easily replaceable. In the framework of RBV, Artificial Intelligence can be seen as a strategic resource if it is able to provide significant added value for the organization. Artificial Intelligence (AI) becomes valuable when used to improve decision-making quality, operational efficiency, and business innovation. [22] Furthermore, Artificial Intelligence (AI) fulfills the characteristics of strategic resources in RBV when integrated with other organizational assets and capabilities, such as high-quality data, human resource expertise, and effective managerial processes. This combination creates an AI-based management system that is unique and difficult for competitors to replicate. Thus, RBV provides a theoretical foundation to explain how Artificial Intelligence (AI) can be a source of competitive advantage and contribute to the continuous improvement of organizational performance.

2. Dynamic Capabilities

   The dynamic capabilities theory complements the RBV perspective by emphasizing the organization's ability to respond to changes in the dynamic business environment. Dynamic capabilities refer to an organization's capacity to integrate, build, and reconfigure internal and external resources to adapt to changing environments. In this context, Artificial Intelligence acts as an enabler that strengthens the organization's ability to respond to changes in markets, technology, and customer needs quickly and precisely. The use of

[21] Manerep Pasaribu and Albert Widjaja, *Manajemen Strategis Di Era Kecerdasan Buatan* (Kepustakaan Populer Gramedia, 2022).

[22] Willem Engel Oktavianus Umboh, "Transformasi Digital Dalam Manajemen SDM: Studi Tentang Strategi Adaptasi Di Era AI Pada Industri Perbankan Indonesia," *SENTRI: Jurnal Riset Ilmiah* 4, no. 9 (2025): 1999–2013.

Artificial Intelligence (AI) supports dynamic capabilities through improving the organization's sensing, seizing, and transforming capabilities [23]. Artificial Intelligence (AI) helps organizations detect opportunities and threats through data analysis, facilitate informed strategic decision-making, and support business process transformation. Therefore, the integration of Artificial Intelligence (AI) in business management can be understood as part of an organization's efforts to build sustainable dynamic capabilities. The dynamic capabilities perspective provides a strong conceptual framework to explain the role of Artificial Intelligence (AI) in improving organizational resilience and performance in the midst of an ever-changing business environment.

Research methods

This research uses a type of qualitative research with a library research approach which aims to review, analyze, and synthesize scientific literature relevant to the topic of Artificial Intelligence in contemporary business management [24]. Research data sources come from secondary materials in the form of reputable national and international journals, as well as academic textbooks and scientific publications that have theoretical relevance to AI studies, managerial decision-making, and organizational performance. The journals used include publications from leading scientific databases, such as management and business journals of national and international repute. In addition, academic textbooks and scientific publications are used to strengthen the theoretical foundation and enrich the conceptual perspective of the research. Literature search was carried out systematically through scientific databases using relevant keywords, such as artificial intelligence, business management, managerial decision making, and organizational performance, either separately or in combination.

To maintain the quality and relevance of the literature analyzed, this study applied certain inclusion and exclusion criteria. Inclusion criteria include articles that discuss Artificial Intelligence in the context of business management, decision-making, or organizational performance, as well as published in credible scientific journals and academic books [25]. Meanwhile, the exclusion criteria include publications that are not conceptually relevant, popular, or lack a clear academic foundation. The literature reviewed is limited to a specific publication period to ensure the up-to-date of the study, with the number of articles analyzed adjusted to the needs of the conceptual synthesis. The data analysis techniques used are content analysis and thematic analysis, which aim to identify themes, patterns, and conceptual relationships between concepts in the literature. Furthermore, the results of the analysis are synthesized systematically to draw conceptual conclusions regarding the role of Artificial Intelligence in managerial decision-making and its implications on organizational performance.

Results and Discussion

The results of the research are the results of data processing and/or research results from problems both quantitatively and qualitatively. Can be clarified with Tables, Graphs, Charts. Discussion is the most important aspect in this journal. The discussion includes comprehensive analysis of research data, interpretation or interpretation of findings in the field, the relationship of research results with other relevant concepts, theories or research results, compiling new or modifying existing theories and implications for scientific developments in their respective

[23] Tri Setio Utomo Suharto, "Analisis Integratif Design Thinking Dan Artificial Intelligence Dalam Mendorong Inovasi UMKM Di Indonesia," *Bit-Tech* 7, no. 3 (2025): 1078–89.

[24] Bela Kusmadina, Asa Khairunnisa, and Ani Ani, "Kajian Studi Kelayakan Bisnis Melalui Pendekatan Studi Pustaka: Konsep, Metode, Dan Implementasi," *Jurnal Intelek Insan Cendikia* 2, no. 5 (2025): 9604–12.

[25] Mutahira Nur Insirat et al., "Analisis Dampak Implementasi AI Dalam Proses Pengambilan Keputusan Manajerial Terhadap Etika Bisnis Dan Keberlanjutan Organisasi: A Systematic Literature Review," *Owner: Riset Dan Jurnal Akuntansi* 9, no. 1 (2025): 11–25.

fields (Content can be adjusted to the type of research). Writing table titles and table names written on top of the table.

Map of Literature Findings on Artificial Intelligence in Contemporary Business Management

The results of the literature review show that the literature on Artificial Intelligence in contemporary business management has developed significantly, both in terms of concepts, applications, and managerial implications. Most research places Artificial Intelligence (AI) as a key technology in an organization's digital transformation that supports data management, process automation, and improved decision-making quality. Literature findings indicate that Artificial Intelligence (AI) has been widely applied to various management functions, such as marketing, finance, human resources, and operations management. The main focus of the study tends to highlight the use of AI for data analysis, performance prediction, and business process optimization in response to the complexity and uncertainty of the contemporary business environment [26].

However, the literature findings map also shows that the study of Artificial Intelligence (AI) in business management is still fragmented and partial. Many studies discuss Artificial Intelligence (AI) separately based on specific business functions, without linking it in its entirety to the organization's management system and overall performance. In addition, most studies emphasize the technical and implementive aspects, while conceptual studies that integrate Artificial Intelligence (AI) with management and decision-making theories are still relatively limited. Therefore, the results of the literature synthesis confirm the need for a more comprehensive conceptual approach to understand the strategic position of Artificial Intelligence (AI) in contemporary business management.

The Role of Artificial Intelligence in Improving the Quality of Decision Making

The consistently analyzed literature shows that Artificial Intelligence plays an important role in improving the quality of managerial decision-making. Artificial Intelligence (AI) allows managers to process large amounts of data quickly and accurately, so decisions can be made based on more comprehensive and objective information. Through technologies such as machine learning, predictive analytics, and decision support systems, Artificial Intelligence (AI) helps managers identify patterns, predict the consequences of decisions, and evaluate alternative course of action. As such, Artificial Intelligence (AI) supports the shift from intuition-based decision-making to data-driven and evidence-based decision-making [27].

In addition to improving the accuracy and speed of decisions, Artificial Intelligence (AI) also contributes to reducing the limitations of managers' rationality as described in the theory of bounded rationality. Artificial Intelligence (AI) serves as a cognitive tool that expands managers' ability to process information and evaluate the complexity of business problems. The literature shows that organizations that integrate Artificial Intelligence (AI) in decision-making processes tend to have more consistent, transparent, and adaptive decisions to environmental changes. Therefore, the role of Artificial Intelligence (AI) in managerial decision-making can be understood as a strategic factor that contributes directly to improving management effectiveness and achieving organizational performance.

[26] Muhammad Fauzen Adiman et al., "Pengembangan Aplikasi Berbasis Artificial Intelligence (AI) Mengubah Pradigma Tekhnologi Informasi," *Indonesian Research Journal on Education* 4, no. 4 (2024): 3084–94.

[27] Cut Asiana Gemawaty and Yuce Yuliani, "Perkembangan Teknologi Big Data Dalam Sistem Informasi Bisnis: Systematic Literature Review," *RIGGS: Journal of Artificial Intelligence and Digital Business* 4, no. 2 (2025): 5113–17.

Artificial Intelligence and Organizational Performance

The literature reviewed shows that Artificial Intelligence has a significant relationship with improving organizational performance, both from operational and strategic aspects. Artificial Intelligence (AI) is seen as a driving factor for organizational efficiency and effectiveness through its ability to automate processes, improve planning accuracy, and support better quality decision-making. The application of Artificial Intelligence (AI) allows organizations to manage resources more optimally, reduce operational errors, and accelerate responses to changes in the business environment. Thus, Artificial Intelligence (AI) directly contributes to improving organizational performance in the short and long term [28].

However, the literature also confirms that the impact of Artificial Intelligence (AI) on organizational performance is not automated, but rather depends on the degree of integration of Artificial Intelligence (AI) with the organization's management systems and strategies. Organizations that are able to align the use of Artificial Intelligence (AI) with strategic goals and internal capabilities tend to reap more significant performance benefits. Therefore, understanding the role of Artificial Intelligence (AI) in organizational performance needs to consider operational and strategic dimensions simultaneously in order to provide a comprehensive picture of AI's contribution in contemporary business management.

Integration of Artificial Intelligence, Decision Making, and Organizational Performance

The results of the literature synthesis show that the integration of Artificial Intelligence, managerial decision-making, and organizational performance forms an interrelated and systemic relationship. Artificial Intelligence (AI) serves as a key enabler in data-driven decision-making processes, which in turn impacts improving organizational performance. This integration allows organizations to leverage data as a strategic asset to support planning, control, and performance evaluation. With the support of Artificial Intelligence (AI) , decision-making not only becomes faster and more accurate, but also more adaptive to changes in the dynamic business environment.

The literature also asserts that the success of Artificial Intelligence (AI) integration in decision-making and organizational performance depends on alignment between technology, managerial processes, and organizational strategies [29]. Artificial Intelligence (AI) provides optimal added value when integrated into formal decision-making systems and organizational cultures that support the use of data. In this context, Artificial Intelligence (AI) acts as a link between information, knowledge, and managerial actions. Therefore, the integration of Artificial Intelligence (AI), decision-making, and organizational performance can be understood as a strategic mechanism that strengthens management effectiveness and organizational competitiveness on an ongoing basis.

Supporting and Inhibiting Factors for the Implementation of Artificial Intelligence in Organizations

The literature identifies various supporting factors that influence the successful implementation of Artificial Intelligence in organizations. The main supporting factors include the availability of adequate data infrastructure, good data quality and integration, and the competence of human resources in managing and utilizing Artificial Intelligence (AI) technology. Top management support and clarity of digital strategy are also crucial factors in ensuring that Artificial Intelligence (AI) implementation aligns with the organization's goals.

[28] Devi Yuniati Drajat et al., "Optimalisasi Manajamen Sdm Berbasis Ai: Dampak Pada Efisiensi Dan Pengambilan Keputusan Organisasi," *Jurnal Sains Manajemen* 7, no. 1 (2025): 36–45.

[29] Ketut Witara, "Pengaruh Implementasi Artificial Intelligence Dalam Pengelolaan Sumber Daya Manusia Terhadap Kinerja Dan Produktivitas: Systematic Literature Review (SLR)," *JURNAL RISET MANAJEMEN DAN EKONOMI (JRIME)* 3, no. 4 (2025): 122–41.

In addition, an organizational culture that is open to innovation and data-driven decision-making also strengthens the effectiveness of Artificial Intelligence (AI) utilization [30].

On the other hand, the literature also reveals a number of factors inhibiting the implementation of Artificial Intelligence (AI) in organizations. Obstacles that are often found include limited data quality, lack of technical and managerial expertise, and resistance to change from within the organization. Issues of ethics, data security, and privacy are also significant challenges in the application of Artificial Intelligence (AI), especially in the context of managerial decision-making. Additionally, regulatory ambiguity and high initial investment costs may hinder widespread adoption of Artificial Intelligence (AI). Therefore, a comprehensive understanding of the supporting and inhibiting factors of Artificial Intelligence (AI) implementation is essential for organizations in designing effective and sustainable Artificial Intelligence (AI) utilization strategies.

A critical discussion of the research findings suggests that the role of Artificial Intelligence in business management can be powerfully explained through the lens of management theory and decision-making. Literature findings that affirm AI's contribution in improving the quality of decision-making are in line with rational decision-making theory, which emphasizes the importance of complete information and rational analysis in the decision-making process. Artificial Intelligence (AI) extends managers' rationality capabilities through large-scale data processing and predictive analytics. Nevertheless, these findings also confirm the relevance of the theory of bounded rationality, where Artificial Intelligence (AI) acts as a tool to overcome managers' cognitive limitations, rather than as a complete replacement in the decision-making process.

In addition, the findings regarding the contribution of Artificial Intelligence (AI) to organizational performance are in line with the perspective of Resource-Based View and dynamic capabilities. Artificial Intelligence (AI) can be understood as a valuable and hard-to-replicate strategic resource when integrated with data, organizational knowledge, and managerial capabilities. Previous research has also shown that the impact of Artificial Intelligence (AI) on performance is not direct, but rather mediated by the quality of decision-making and organizational readiness. Thus, this critical discussion confirms that Artificial Intelligence (AI) serves as a catalyst that strengthens managerial and strategic mechanisms, rather than as a single determinant of organizational performance.

This article places his contribution in the business management literature through a conceptual approach that integrates Artificial Intelligence, managerial decision-making, and organizational performance in one whole analytical framework. In contrast to previous research that tends to focus on technical aspects or applications of AI partially, this article emphasizes a strategic and managerial understanding of the role of Artificial Intelligence (AI) in contemporary business management systems. This contribution enriches the literature by providing a theoretical synthesis that connects Artificial Intelligence (AI) technology with classical and contemporary management theories.

In addition to the theoretical contributions, this article also provides practical implications for managers and policymakers in designing Artificial Intelligence (AI) implementation strategies. By identifying the mechanisms of Artificial Intelligence (AI) integration in organizational decision-making and performance, this article offers a conceptual perspective that can be used as a basis for the development of data-driven management policies and practices. Therefore, the position of this article in the business management literature is not only as a reinforcement of theoretical studies, but also as a conceptual reference for management research and practice in the era of digital transformation.

[30] Puput Saputri Dewi, Ai Ria Rohimah, and Pupung Purnamasari, "Manajemen Strategi Kontemporer: Pengaruh Teknologi Terhadap Kinerja Organisasi," *GLOBAL: Jurnal Lentera BITEP* 2, no. 03 (2024): 82–88.

Conclusion

This literature review concludes that Artificial Intelligence is a strategic element in contemporary business management that contributes significantly to improving the quality of decision-making and organizational performance. A synthesis of the literature shows that the utilization of AI is driving the transformation of the managerial paradigm from an intuitive-based approach to data-driven decision-making and analysis. Artificial Intelligence (AI) serves as a supporting mechanism that expands the capacity of managers' rationality in the face of the complexity and uncertainty of the business environment. However, the literature also confirms that the influence of Artificial Intelligence (AI) on organizational performance is contextual and non-deterministic, as it is strongly influenced by the level of integration of Artificial Intelligence (AI) with strategy, organizational structure, and managerial capabilities.

From a theoretical perspective, this article strengthens and expands the relevance of the theories of rational decision-making, bounded rationality, Resource-Based View, and dynamic capabilities in explaining the role of Artificial Intelligence (AI) in business management systems. Artificial Intelligence (AI) can be positioned as a strategic resource and dynamic capability that supports the creation of a sustainable competitive advantage when managed in an integrated manner. In practical terms, these findings imply that managers and organizations need to view Artificial Intelligence (AI) as part of a strategic decision-making architecture, not just a technological solution. Emphasis on data readiness, analytical competence, governance, and ethics in the use of AI are the main prerequisites for maximizing the contribution of Artificial Intelligence (AI) to organizational performance and competitiveness.

Suggestions

Further research is recommended to develop empirical studies to test the conceptual models offered, either through a quantitative approach to test the relationship between variables and a qualitative approach to explore the process of implementing Artificial Intelligence (AI) in more depth. Future research also needs to consider contextual factors such as organizational culture, Artificial Intelligence (AI) governance and ethics, and the level of digital readiness of organizations in order to understand the role of Artificial Intelligence (AI) in business management to be more comprehensive and practically relevant.

Bibliography

Adiman, Muhammad Fauzen, Baharuddin Baharuddin, Al Ikhlas, Muhamad Sigid Safarudin, M Syahputra, and Dhiraj Kelly Sawlani. “Pengembangan Aplikasi Berbasis Artificial Intelligence (AI) Mengubah Pradigma Tekhnologi Informasi.” *Indonesian Research Journal on Education* 4, no. 4 (2024): 3084–94.

Alawdin, Damara Altaf, Reghina Rahma Kamila, Muhammad Wildan Khasanu, and Indah Respati Kusumasari. “Analisis Teori Pengambilan Keputusan Berbasis Risiko Dalam Manajemen Proyek.” *Jurnal Akuntansi, Manajemen, Dan Perencanaan Kebijakan* 2, no. 2 (2024): 13.

Arbeit, Abraham, Andreas Putra, Muhamad Danil Danil, Muhamad Haikal, and Agung Wijoyo. “Pemanfaatan Teknologi Kecerdasan Buatan (Ai) Dalam Sistem Informasi Manajemen Untuk Meningkatkan Efektivitas Pengambilan Keputusan Manajerial.” *Musytari: Jurnal Manajemen, Akuntansi, Dan Ekonomi* 24, no. 12 (2025): 91–100.

Arfah, Muh, Suherlan Suherlan, and Susatyo Adhi Pramono. “Eksplorasi Transformasi Digital Dalam MSDM: Dampak Integrasi Artificial Intelligence Dan Big Data Analytics Terhadap Pengambilan Keputusan Strategis.” *Jurnal Minfo Polgan* 14, no. 1 (2025): 183–92.

Asrul, Asrul, Windayani Windayani, Ade Putra, Harmiaty Bahar, Baihaqi Baihaqi, Abdi Juryan Ladianto, Hera Pebrianti, and Muhammad Saleh Qadri. “Pemanfaatan Big Data Analytics Dalam Proses Manajemen Teknologi Untuk Prediksi Permintaan Pasar.” *Jurnal Minfo*

Polgan 13, no. 2 (2024): 2433–38.

Awalia, Aliza Khafiyatul, Ardita Ninda Purwaningtyas, Amalia Laili Attamimah, Rusdi Hidayat, Indah Respati Kusumasari, and Nugraha Kusbianto. "Penerapan Teori Pengambilan Keputusan Dalam Proses Perencanaan Strategis Perusahaan." *Musytari: Jurnal Manajemen, Akuntansi, Dan Ekonomi* 24, no. 12 (2025): 1071–80.

Azizah, Siti Nur. *Kecerdasan Buatan Dalam Pengelolaan SDM: Tantangan Dan Peluang*. Penerbit NEM, 2025.

Belinda, Belinda, and Diah Nofitasari. "Peran Artificial Intelligence Dalam Digital Marketing Dan Dampaknya Terhadap Perilaku Konsumen Tahun 2025." *Jurnal GICI Jurnal Keuangan Dan Bisnis* 17, no. 1 (2025): 100–108.

Dewi, Puput Saputri, Ai Ria Rohimah, and Pupung Purnamasari. "Manajemen Strategi Kontemporer: Pengaruh Teknologi Terhadap Kinerja Organisasi." *GLOBAL: Jurnal Lentera BITEP* 2, no. 03 (2024): 82–88.

Drajat, Devi Yuniati, Dwi Sandini, Ifani Hariyanti, and Agung Rachmat Raharja. "Optimalisasi Manajamen Sdm Berbasis Ai: Dampak Pada Efisiensi Dan Pengambilan Keputusan Organisasi." *Jurnal Sains Manajemen* 7, no. 1 (2025): 36–45.

Estede, Suprapto, Latifah Anom, Susilowati Rahayu, Dewi Rochmayanti, Nurul Mazidah, Hasan Bisri, Eka Adiputra, Dina Alafi Hidayatin, and Ahmad Saifurriza Effasa. *Manajemen Dinamis: Adaptasi Dan Strategi Global*. PENERBIT KBM INDONESIA, 2025.

Febrianty, S E, I Gede Eko Putra Sri Sentanu, S AP, and M AP. *Manajemen Pengambilan Keputusan*. Perkumpulan Rumah Cemerlang Indonesia, 2023.

Gemawaty, Cut Asiana, and Yuce Yuliani. "Perkembangan Teknologi Big Data Dalam Sistem Informasi Bisnis: Systematic Literature Review." *RIGGS: Journal of Artificial Intelligence and Digital Business* 4, no. 2 (2025): 5113–17.

Harlina, Sitti. "BAB III Informasi SIMON'S Model." *Sistem Pendukung Keputusan Pada Teknologi Informasi* 25 (2022).

Insirat, Mutahira Nur, Hasri Ainun Syahfir, Asri Usman, and Mediaty Mediaty. "Analisis Dampak Implementasi AI Dalam Proses Pengambilan Keputusan Manajerial Terhadap Etika Bisnis Dan Keberlanjutan Organisasi: A Systematic Literature Review." *Owner: Riset Dan Jurnal Akuntansi* 9, no. 1 (2025): 11–25.

Iswahyudi, Muhammad Subhan, M M Imam Radianto Anwar Setia Putra, Tulus Martua Sihombing, Frinda Novita, S Sos, S E Fuji Pratiwi, S E Edy Susanto, M Ak, Novianti Indah Putri, and Dwi Safiroh Utsalina. *Sistem Pendukung Keputusan*. Cendikia Mulia Mandiri, 2025.

Kusmadina, Bela, Asa Khairunnisa, and Ani Ani. "Kajian Studi Kelayakan Bisnis Melalui Pendekatan Studi Pustaka: Konsep, Metode, Dan Implementasi." *Jurnal Intelek Insan Cendikia* 2, no. 5 (2025): 9604–12.

Kusnanto, S Pd, Candra Gudiato, M Kom, S E Usman, S E Blasius Manggu, and Margaretha Lidya Sumarni. *Transformasi Era Digitalisasi Masyarakat Kontemporer*. Uwais Inspirasi Indonesia, 2024.

Nasution, Abdul Kholik, and Muhammad Irwan Padli Nasution. "Penerapan Data Analystic Di Era Sekarang Sehingga Berpengaruh Dalam Mengoptimalkan Bisnis Secara Efektif." *Derivatif: Jurnal Manajemen Ekonomi Dan Akuntansi* 1, no. 02 (2025): 35–43.

Oktavianus, Arnolus Juantri E, Lamhot Naibaho, and Djoys Anneke Rantung. "Pemanfaatan Artificial Intelligence Pada Pembelajaran Dan Asesmen Di Era Digitalisasi." *Jurnal Kridatama Sains Dan Teknologi* 5, no. 02 (2023): 473–86.

Pasaribu, Manerep, and Albert Widjaja. *Manajemen Strategis Di Era Kecerdasan Buatan*. Kepustakaan Populer Gramedia, 2022.

Septiawan, Bambang, and Aris Sunandes. "Implementasi Intuisi Dalam Manajemen Bisnis

(Sebuah Studi Literatur).” *Jurnal Penelitian Manajemen Terapan (PENATARAN)* 9, no. 2 (2024): 199–209.

Suharto, Tri Setio Utomo. “Analisis Integratif Design Thinking Dan Artificial Intelligence Dalam Mendorong Inovasi UMKM Di Indonesia.” *Bit-Tech* 7, no. 3 (2025): 1078–89.

Sulistyawati, Upik Sri. “Decoding Big Data: Mengubah Data Menjadi Keunggulan Kompetitif Dalam Pengambilan Keputusan Bisnis.” *Jurnal Manajemen Dan Teknologi* 1, no. 2 (2024): 58–71.

Umboh, Willem Engel Oktavianus. “Transformasi Digital Dalam Manajemen SDM: Studi Tentang Strategi Adaptasi Di Era AI Pada Industri Perbankan Indonesia.” *SENTRI: Jurnal Riset Ilmiah* 4, no. 9 (2025): 1999–2013.

Wahyudi, Tri, Edy Arisondha, Hana Solihat, and Aliffa Rhevalina Titiantono. “Green Innovation Meets Artificial Intelligence: The Strategic Function of Intellectual Capital in Emerging Economies: Inovasi Hijau Berpadu Dengan Kecerdasan Buatan: Fungsi Strategis Modal Intelektual Di Negara-Negara Berkembang.” *Economic and Education Journal (Ecoducation)* 7, no. 2 (2025): 578–93.

Witara, Ketut. “Pengaruh Implementasi Artificial Intelligence Dalam Pengelolaan Sumber Daya Manusia Terhadap Kinerja Dan Produktivitas: Systematic Literature Review (SLR).” *JURNAL RISET MANAJEMEN DAN EKONOMI (JRIME)* 3, no. 4 (2025): 122–41.

Wulandari, Devy, Rizky Amaliyah Ramdhani Ilham, Muh Rustam Saputra, Abdul Wahid Haddade, and Mukhtar Luthfi. “Analisis Integrasi Pengukuran, Evaluasi, Dan Kinerja Organisasi Dalam Perspektif Pendidikan Dan Bisnis Syariah.” *JPIK–Jurnal Pendidikan Islam Dan Studi Keislaman* 1, no. 1 (2025): 116–27.