

A Narrative Review of AI Integration in Marketing Management: Theoretical Foundations and Future Research Directions

Muhammad Hanif Abdul Gafar^{1*}, Nor Amira Mohd Ali²

^{1,2}Faculty of Business and Management, Universiti Teknologi Mara, Kedah, Malaysia

*Corresponding Author

DOI: <https://dx.doi.org/10.47772/IJRISS.2026.100500126>

Received: 29 April 2026; Accepted: 01 May 2026; Published: 25 May 2026

ABSTRACT

The rapid advancement of Artificial Intelligence (AI) has precipitated a fundamental paradigm shift in marketing management, transitioning the discipline from intuitive decision-making toward an autonomous, data-driven orientation. Despite the proliferation of AI tools, the scholarly landscape remains fragmented by inconsistent terminology, uneven sectoral evidence, and a significant lag between technological affordance and strategic policy. The purpose of this paper is to delineate the theoretical foundations of AI integration which ranging from Knowledge Management to agile marketing frameworks while identifying critical voids in current practice and policy. To achieve this, the study employs a narrative review methodology, identifying and synthesizing high-impact literature indexed in the Scopus database published between 2021 and 2025. Following a transparent screening process, the review categorizes the extant research into four pivotal themes: the transformation of CRM and marketing intelligence, strategic adoption factors, operational efficiencies through hyper-personalization, and the burgeoning requirement for ethical governance. The analysis reveals that while AI significantly enhances predictive accuracy and consumer engagement, its successful integration is predicated on a hybrid intelligence model that balances algorithmic autonomy with human creative oversight. This article contributes to marketing theory by reconfiguring Dynamic Capability and Knowledge Management frameworks to account for "algorithmic capabilities," while providing practitioners with an evidence-informed roadmap for responsible AI deployment. By identifying a critical "policy-practice gap," the review highlights that the future of marketing management lies in the ethical orchestration of human-machine synergies. Consequently, this work serves as both a theoretical anchor and a forward-looking guide for navigating the complexities of the AI-enabled marketing ecosystem in a volatile digital economy.

Keywords: Artificial Intelligence in Marketing, Marketing Management, Narrative Review, Strategic AI Adoption, Algorithmic Governance

INTRODUCTION

The rapid proliferation of Artificial Intelligence (AI) has catalyzed a fundamental paradigm shift in marketing management, moving the discipline from traditional intuition-based methods toward a high-velocity, data-driven orientation. In the contemporary digital economy, AI integration is no longer a peripheral technical upgrade but a core strategic imperative that influences every facet of the marketing mix, from predictive customer relationship management to automated content generation (Al-Weshah et al., 2023). As organizations grapple with the sheer volume of "Big Data," AI-driven analytics have become indispensable for synthesizing dark data and generating actionable consumer insights (Theodorakopoulos et al., 2026).

Problem Statement

Despite the transformative potential of AI, organizations face a critical strategic misalignment problem, which then refer to the speed of technological adoption has drastically outpaced the development of cohesive organizational and ethical management frameworks. This has led to a fragmented landscape where marketing managers implement advanced AI tools such as predictive analytics and chatbots without a shared strategic compass or an understanding of the long-term socio-technical implications.

Consequently, firms risk operational inefficiency and the erosion of consumer trust due to a lack of structured guidance on how to balance algorithmic autonomy with human oversight.

Research Gap

A critical review of the current literature reveals a profound conceptual and sectoral gap characterized by a significant disconnect between technological potential and organizational reality. While the service and e-commerce sectors have aggressively adopted AI for personalization and operational efficiency (Islam et al., 2024; Savariapitchai & Yenurkar, 2025), in other domains particularly B2B marketing and small-to-medium enterprises (SMEs), they remain under-researched and technologically underserved. Furthermore, the discourse is hindered by inconsistent terminology and a distinct lack of longitudinal evidence regarding the ethical implications of AI, such as algorithmic bias and data privacy (Neves et al., 2025). This lack of terminological precision, where concepts like "machine intelligence" and "algorithmic management" are used interchangeably, obscures specific nuances and prevents the establishment of a unified theory of AI-enabled marketing management.

The knowledge gap is further widened by a lack of conceptual integration regarding the ethical and human elements of AI adoption. While performance and effort expectancy significantly drive manager attitudes toward AI integration (Bai, 2025), there is a critical shortage of policy-oriented research addressing the long-term implications of algorithmic bias, data privacy, and the erosion of consumer trust (El Hassani & Azdimousa, 2025). Existing studies often focus on short-term operational gains, such as campaign effectiveness or dynamic pricing, while neglecting the broader socio-technical frameworks required for sustainable and responsible AI deployment (Singh et al., 2024). Consequently, a comprehensive review is urgently needed to synthesize these disparate threads of research into a cohesive narrative that addresses both the technical affordances and the human-centric challenges of the AI era.

Justification for Narrative Review

This study adopts a narrative review methodology rather than a systematic review to address these lacunae. This choice is justified by the need to provide a holistic and critical synthesis of a rapidly evolving, multidisciplinary field where concepts are still being defined. Unlike a systematic review, which focuses on exhaustive statistical aggregation of narrow variables, a narrative review allows for the flexibility to bridge fragmented sub-fields, interpret complex theoretical tensions such as the "automation vs. augmentation" debate and propose a comprehensive future research agenda. This approach is essential for establishing a conceptual foundation in an era of "intelligence transformation" where implementation models vary significantly across industries. The primary aim of this paper is to delineate the theoretical foundations of AI integration while identifying critical voids in current practice and policy. The remainder of this paper is structured as follows, first, we examine the core theoretical foundations that underpin AI adoption. Next, we analyze the primary drivers and barriers to implementation. This is followed by a critical discussion of the ethical dilemmas inherent in AI-driven strategies. Finally, the paper concludes by proposing a research agenda to guide future scholarly efforts.

Review Approach

The methodology for this narrative review was designed to ensure a transparent, systematic, and reproducible process for identifying the theoretical foundations of AI in marketing management. Unlike a systematic literature review, which focuses on exhaustive statistical aggregation, this narrative approach prioritizes the synthesis of high-impact conceptual frameworks and emerging strategic themes (Snyder, 2019). The literature identification process relied exclusively on the Scopus database, selected for its rigorous indexing of peer-reviewed journals and its comprehensive coverage of multidisciplinary research spanning management, computer science, and social sciences.

The search was conducted using a Boolean-weighted string designed to capture the intersection of technological tools, marketing functions, and management processes:

("artificial intelligence" OR "ai" OR "machine learning" OR "data analytics") AND ("marketing" OR "advertising" OR "promotion" OR "branding") AND ("management" OR "strategy" OR "planning" OR "execution") AND ("customer behavior" OR "consumer insights" OR "market research" OR "segmentation").

To capture the most recent advancements and the rapid evolution of generative and predictive AI, the publication timeframe was restricted to the most recent decade, with a specific emphasis on groundbreaking research published between 2021 and 2025. This window ensures the inclusion of "next-generation" AI applications, such as synthetic data and dark data analytics (Theodorakopoulos et al., 2026).

The screening process followed a two-stage qualitative assessment. Initially, titles and abstracts were screened for relevance to "marketing management" rather than purely technical algorithmic development. Following this, the remaining papers underwent a full-text appraisal based on their ability to contribute to theoretical development or their identification of critical research gaps. Inclusion criteria focused on peer-reviewed journal articles, conference proceedings from reputable bodies like IEEE, and high-impact book chapters published in English (Singh et al., 2024; Ertz & Kordi, 2025).

A total of 11 core publications were selected for detailed synthesis, representing a diverse array of perspectives including CRM integration, agile marketing frameworks, and ethical AI deployment. This selection approach ensures that the narrative is built upon a foundation of scholarly rigor while allowing the flexibility to bridge fragmented sub-fields into a cohesive roadmap for future research (Marvi et al., 2024).

Table 1: Search Strategy

Element	Description
Database	Scopus
Search String	("artificial intelligence" OR "ai" OR "machine learning" OR "data analytics") AND ("marketing" OR "advertising" OR "promotion" OR "branding") AND ("management" OR "strategy" OR "planning" OR "execution") AND ("customer behavior" OR "consumer insights" OR "market research" OR "segmentation")
Timeframe	2021 – 2025
Inclusion Criteria	Peer-reviewed articles; English language; focus on marketing management/strategy; theoretical or empirical contributions to AI adoption.
Exclusion Criteria	Non-English publications; purely technical/mathematical papers without marketing application; editorials; trade magazine articles.
Selection Approach	Purposeful narrative synthesis; screening for thematic relevance and theoretical impact.

Conceptual Background

Definitions

In the context of modern marketing management, Artificial Intelligence (AI) is defined as the application of advanced computational technologies including machine learning (ML), natural language processing (NLP), and deep learning to simulate human-like cognitive functions for the purpose of problem-solving and decision-making (Ertz & Kordi, 2025). Within this review, AI Integration refers to the strategic embedding of these technologies into the organizational marketing fabric, moving beyond mere tool adoption to a systemic reconfiguration of marketing workflows (Singh et al., 2024). This process is intrinsically linked to Marketing Intelligence (MI), which represents the capability of an organization to collect, analyze, and act upon market-related data. As AI transforms MI, traditional Customer Relationship Management (CRM) systems evolve into autonomous, self-correcting platforms that minimize manual intervention and maximize predictive accuracy (Al-Weshah et al., 2023).

Key Theories or Frameworks

This review is anchored by three primary theoretical pillars that serve as the conceptual framework for our narrative analysis:

First, the Knowledge Management (KM) Framework serves as a foundational lens, emphasizing how AI facilitates the conversion of raw data into strategic organizational knowledge. Within this framework, AI optimizes marketing campaigns by enhancing business communication and enabling data-driven personalization, which are critical for maintaining a competitive edge in high-velocity markets (Marvi et al., 2024). This KM perspective underscores the role of AI as an enhancer of human creativity rather than a simple replacement for it.

Second, Dynamic Capability Theory explains how firms leverage AI to adapt to rapidly shifting market environments. This theory suggests that AI integration provides the "sensing" and "seizing" capabilities necessary for real-time consumer behavior analysis and marketing agility (Bai, 2025). By utilizing AI-driven insights, organizations can reconfigure their internal resources to respond to emerging trends more effectively than through traditional management methods.

Finally, the Unified Theory of Acceptance and Use of Technology (UTAUT) is frequently employed to understand the behavioral drivers of AI adoption. This framework identifies performance expectancy, effort expectancy, social influence, and facilitating conditions as the primary determinants of a manager's intent to integrate AI into business marketing (Al-Weshah et al., 2023; Bai, 2025).

These theories are not examined in isolation but they are used throughout the narrative to explain the Strategic Adoption Paradox: the tension between technological capability and managerial readiness. Besides, these theories provide a robust multidimensional view of AI, addressing its technical functions, its role in organizational strategy, and the human factors that govern its successful implementation.

THEMATIC REVIEW OF LITERATURE

To synthesize the complex and rapidly evolving body of work surrounding AI in marketing management, the following section moves beyond a simple chronological or study-by-study summary. Instead, it adopts a thematic approach to highlight the conceptual shifts and practical tensions currently defining the field. By clustering the literature into four pivotal areas, this review offers a more integrated perspective on how technological affordances intersect with organizational strategy. We first examine the AI-Driven Transformation of CRM and Marketing Intelligence, followed by an analysis of the Strategic Adoption and Managerial Implementation Factors that dictate how these tools are actually deployed. The discussion then shifts to the tangible outcomes of these technologies in Operational Efficiency through Personalization and Big Data, before concluding with a critical look at the essential guardrails of Ethical Governance and Responsible AI Deployment. This structure allows for a deeper interrogation of the synergies and contradictions inherent in the "intelligence transformation" of modern marketing. (Refer figure 1)

Theme 1: AI-Driven Transformation of CRM and Marketing Intelligence

The integration of Artificial Intelligence (AI) has fundamentally redefined the parameters of Customer Relationship Management (CRM) and Marketing Intelligence (MI). Scholarly consensus suggests that AI transitions traditional, passive databases into active, self-correcting ecosystems capable of reducing manual intervention while simultaneously increasing operational precision (Al-Weshah et al., 2023). By embedding machine learning algorithms into CRM frameworks, organizations can achieve a higher degree of predictive accuracy, allowing for the automation of complex marketing intelligence tasks that were previously labor-intensive (Marvi et al., 2024). This synthesis of technology and relationship management serves as the primary driver for efficiency in contemporary service-oriented industries.

Across the literature, researchers emphasize different facets of this transformation, yet a recurring pattern of "automation vs. augmentation" emerges. While some studies focus on the technical capability of AI to self-update CRM systems (Al-Weshah et al., 2023), others emphasize the strategic shift toward real-time data analysis and immediate strategy adjustment (Singh et al., 2024). Disagreements persist regarding the extent to which human intuition remains necessary; however, there is general agreement that the "machine-human interface" is becoming increasingly blurred as AI takes over higher-order cognitive functions within marketing intelligence systems.

Critically, this theme highlights a significant transition from descriptive to prescriptive marketing management. The ability of AI to provide self-correcting theoretical foundations for MI suggests that the discipline is moving toward a state of autonomous strategic execution. However, a notable gap remains in understanding the long-term stability of these self-updating systems in volatile market environments. Connecting this to the broader review purpose, the evolution of CRM through AI serves as the operational backbone that enables the more advanced personalization and agility discussed in subsequent themes.

Theme 2: Strategic Adoption and Managerial Implementation Factors

The adoption of AI within marketing management is not merely a technical hurdle but a complex socio-technical process governed by specific organizational drivers. Applying the Unified Theory of Acceptance and Use of Technology (UTAUT), researchers have identified that performance expectancy and social influence are the most critical factors shaping managerial attitudes toward AI integration (Bai, 2025; Al-Weshah et al., 2023). This suggests that the perceived strategic value on how much a manager believes AI will enhance job performance, is the primary catalyst for organizational change, often outweighing the actual technical complexity of the tools being implemented.

Patterns in recent research reveal a dichotomy between organizational readiness and technological capability. While the literature consistently identifies "facilitating conditions" as a requirement for adoption, there is a distinct lack of consensus on what constitutes "adequate" infrastructure. Some studies suggest that agile marketing frameworks are the prerequisite for AI success (Neves et al., 2025), whereas others argue that the AI tools themselves create the agility (Fikri & Cherrat, 2025). This chicken-and-egg debate underscores the inconsistency in implementation models currently observed across the marketing sector.

Interpretively, these findings suggest that the human element remains a significant bottleneck in the AI revolution. If managerial attitudes are the primary gatekeepers of technology, then AI integration is as much a psychological and cultural challenge as it is a technical one. This theme illuminates a critical gap: while we understand why managers adopt AI, we lack robust frameworks for how they should manage the transition of their human teams. Addressing these adoption factors is essential for the future research directions proposed later in this review.

Theme 3: Operational Efficiency through Personalization and Big Data

AI's most visible impact on marketing management lies in its ability to synthesize Big Data for hyper-personalization and operational agility. Technologies such as predictive analytics, chatbots, and recommender systems are now standard tools for enhancing consumer engagement and campaign effectiveness (Savariapitchai & Yenurkar, 2025; Islam et al., 2024). Furthermore, the emergence of synthetic data and dark data analytics has provided marketers with new avenues for deriving behavioral insights without compromising the privacy of primary data sources (Theodorakopoulos et al., 2026). This capability allows for dynamic pricing and data-driven product development that is responsive to micro-trends in consumer behavior.

A comparison of studies shows a clear trend moving away from simple demographic segmentation toward behavioral and emotional AI-driven analysis. However, disagreements arise concerning the "creativity-automation" balance. While some scholars advocate for a hybrid approach that blends AI automation with human creativity (Fikri & Cherrat, 2025), others emphasize the increasing efficacy of fully autonomous, AI-driven content generation and distribution (Neves et al., 2025). These patterns suggest that while the industry is unified on the value of Big Data, the optimal level of human intervention in the creative process remains a contested domain.

This theme underscores the transformative power of AI in reconfiguring marketing frameworks toward extreme consumer-centricity. The critical interpretation here is that "personalization" has evolved from a marketing tactic into a fundamental management philosophy enabled by Big Data. However, the reliance on increasingly complex data sets, including dark data, poses significant risks if not managed within a structured theoretical framework. This section reinforces the review's aim by demonstrating how operational efficiencies are driving the need for new, more robust management theories.

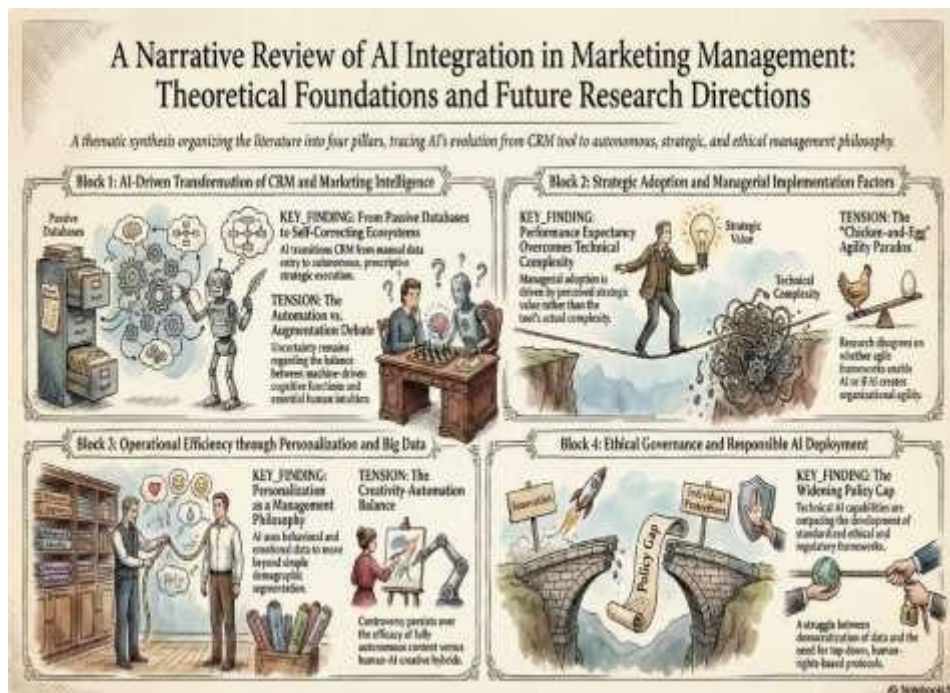
Theme 4: Ethical Governance and Responsible AI Deployment

As AI integration deepens, the ethical dimensions of data privacy, algorithmic bias, and transparency have moved to the forefront of marketing management discourse. Scholars increasingly argue that the collection of personal data for AI-driven strategies necessitates transparent practices to maintain consumer trust (Islam et al., 2024; El Hassani & Azdimousa, 2025). The potential for AI to perpetuate systemic biases or violate privacy protocols represents a significant "dark side" to the technological advancements discussed in previous themes, leading to calls for comprehensive ethical frameworks that prioritize corporate social responsibility (CSR).

There is a noticeable tension in the literature between the drive for innovative data use and the requirement for ethical adherence. Some studies suggest that consumer participation and data democratization are the solutions to trust issues (Theodorakopoulos et al., 2026), while others advocate for more rigid, top-down regulatory and human-rights-based protocols (Singh et al., 2024). This disagreement reflects the broader societal struggle to balance technological progress with individual protections, with marketing management serving as a primary battleground for these competing interests.

Critically, the absence of standardized ethical frameworks remains the most significant gap in current marketing management research. While the technical capabilities of AI are well-documented, the "policy gap" in responsible deployment is widening. This theme connects to the overall purpose of the review by highlighting that future research must move beyond technical efficacy to address the socio-ethical sustainability of AI. Without solving the trust and bias equations, the theoretical foundations of AI in marketing will remain precarious and vulnerable to regulatory backlash.

Figure 1: Thematic of Literature



Critical Discussion

Building upon the thematic synthesis of the preceding sections, this critical discussion moves beyond a descriptive account of the existing literature to evaluate the state of the field through a multi-dimensional analytical lens. By interrogating the intersections of theory and practice, the following analysis examines the academic landscape across four distinct dimensions: identifying areas of robust consensus in the literature, uncovering points of theoretical and operational disagreement, highlighting persistent research gaps, and articulating the strategic implications for marketing management. This evaluative approach is designed to expose the underlying tensions of the "intelligence transformation" and provide the necessary conceptual clarity to bridge the divide between current technological affordances and the structural requirements of future-ready marketing frameworks.

Agreements in the Literature

There is a robust consensus within the current literature that the integration of Artificial Intelligence (AI) has fundamentally transitioned marketing management from a reactive to a predictive discipline. Scholars agree that AI-driven tools, particularly in the realms of Customer Relationship Management (CRM) and big data analytics, provide unprecedented operational efficiencies by automating the synthesis of vast datasets into actionable insights (Al-Weshah et al., 2023; Savariapitchai & Yenurkar, 2025). Furthermore, the literature consistently identifies a shift toward hyper-personalization, where machine learning algorithms allow for real-time adjustments to consumer engagement strategies, effectively rendering traditional, static marketing models obsolete (Islam et al., 2024; Fikri & Cherrat, 2025).

This widespread agreement signals a "technological turn" in marketing theory, where the value of AI is no longer debated, but rather assumed as a prerequisite for competitive advantage. However, this consensus often masks a deeper reliance on the "black box" of algorithmic processing. While researchers agree on the outcomes such as increased engagement and efficiency, there is a subtle but significant convergence on the idea that human marketers must now pivot toward strategic oversight rather than tactical execution. This shift emphasizes Knowledge Management (KM) as the primary framework for organizational success, suggesting that the "intelligence" in marketing management is now a co-produced outcome of human-machine collaboration (Marvi et al., 2024).

Disagreements in the Literature

Despite the consensus on AI's utility, significant disagreements persist regarding the optimal balance between algorithmic autonomy and human intervention. One school of thought advocates for the rapid iteration and autonomy of AI systems to maximize marketing agility and dynamic decision-making (Neves et al., 2025). Conversely, other researchers argue for a hybrid approach, maintaining that human creativity and emotional intelligence remain irreplaceable components of brand storytelling and high-level strategy (Fikri & Cherrat, 2025). These divergent perspectives reveal an underlying tension concerning whether AI should function as a replacement for human marketers or merely as a sophisticated augmentation tool.

These disagreements extend to the conceptualization of implementation frameworks. Some studies suggest that internal organizational readiness and "facilitating conditions" under the UTAUT model are the primary determinants of successful AI integration (Bai, 2025). In contrast, other scholars place greater weight on external technological pressures and sectoral evidence, suggesting that the industry-specific context dictates the adoption path more than internal managerial attitudes (Al-Weshah et al., 2023). This theoretical friction indicates that a "one-size-fits-all" model for AI marketing management remains elusive, as the field struggles to reconcile the universal capabilities of AI with the highly nuanced needs of different market sectors.

Gaps in the Literature

A critical assessment of the current state of research identifies a profound "policy-practice gap," particularly regarding the ethical governance of AI. While the literature frequently mentions data privacy and algorithmic bias, there is a distinct lack of actionable, cross-industry ethical frameworks that move beyond vague corporate social responsibility (CSR) statements (El Hassani & Azdimousa, 2025; Islam et al., 2024). Furthermore, most research is heavily skewed toward large-scale e-commerce and B2C environments, leaving a significant void in our understanding of AI integration within Small and Medium Enterprises (SMEs) and complex B2B marketing contexts (Islam et al., 2024).

The omission of longitudinal studies is another significant gap that hinders theoretical development. Most current evidence is cross-sectional, capturing the immediate impacts of AI adoption while ignoring the long-term effects on brand equity, consumer psychological well-being, and organizational culture. This lack of temporal depth means that the "intelligence transformation" is being analyzed through a snapshot lens, potentially overlooking the "decay" of AI models or the long-term erosion of consumer trust due to persistent surveillance (Theodorakopoulos et al., 2026). Without addressing these gaps, marketing management theory remains ill-equipped to handle the systemic risks associated with a fully automated marketing future.

Implications

The implications for marketing theory are profound, requiring a fundamental revision of existing frameworks like Dynamic Capability Theory to account for "algorithmic capabilities." The literature suggests that the ability to manage the machine-human interface is now a primary determinant of a firm's agility and its capacity to thrive in digital environments (Bai, 2025; Marvi et al., 2024). For practitioners, this implies a need for a radical shift in human resource strategy, prioritizing data literacy and ethical oversight as core competencies for the modern marketing manager.

Moreover, the integration of AI necessitates a more rigorous approach to data governance and consumer trust. If, as suggested, AI-driven analytics are reshaping consumer behavior analysis through synthetic and dark data, then transparency must become a strategic pillar rather than a regulatory compliance checkbox (Theodorakopoulos et al., 2026; Singh et al., 2024). The ultimate significance of these findings lies in the realization that AI integration is not just a technological upgrade; it is a structural reconfiguration of the relationship between the brand and the consumer, demanding a new social contract built on responsible and inclusive intelligence deployment.

RECOMMENDATIONS AND FUTURE DIRECTIONS

Recommendations for Practice

To effectively navigate the intelligence transformation, practitioners must transition from viewing AI as a peripheral tool to treating it as a core component of the organizational Knowledge Management (KM) strategy. It is recommended that marketing managers adopt a hybrid intelligence model that systematically blends AI-driven automated insights with human-centric creative oversight. Evidence suggests that while AI excels at predictive analytics and CRM self-correction, human intervention remains critical for brand storytelling and managing complex customer emotions (Fikri & Cherrat, 2025; Marvi et al., 2024). Practitioners should prioritize the use of AI for high-velocity tasks, such as dynamic pricing and real-time segmentation, while maintaining "human-in-the-loop" protocols for high-stakes strategic decisions and creative campaign development.

Furthermore, marketing professionals should invest in upskilling to enhance data literacy and "algorithmic fluency." Rather than focusing solely on the technical operation of specific software, the emphasis should be on understanding the theoretical foundations of AI-driven marketing intelligence to better interpret "dark data" and synthetic insights (Theodorakopoulos et al., 2026). Successful practice requires the ability to audit AI outputs for potential biases and to leverage predictive models for proactive, rather than reactive, customer engagement (Savariapitchai & Yenurkar, 2025). By aligning AI capabilities with agile marketing frameworks, practitioners can ensure that technological integration leads to measurable gains in consumer value creation.

Recommendations for Policy or Organizational Use

Organizations must move beyond ad-hoc AI implementation toward the establishment of robust, enterprise-wide AI governance frameworks. These policies should explicitly address data democratization and the ethical use of consumer information, moving beyond mere regulatory compliance to foster long-term consumer trust (Islam et al., 2024). It is recommended that organizations appoint multidisciplinary "AI Ethics Committees" comprising marketing, legal, and data science experts to oversee the deployment of algorithmic models. Such a structural approach ensures that AI integration remains consistent with corporate social responsibility (CSR) goals and mitigates the risks associated with algorithmic bias and privacy violations (El Hassani & Azdimousa, 2025).

At the infrastructure level, organizations should prioritize investments in adaptable and scalable data management systems that can accommodate emerging technologies like the Internet of Things (IoT) and blockchain (Islam et al., 2024). Policy-makers within the firm must ensure that AI adoption is supported by "facilitating conditions" such as adequate technical support and a culture of innovation which align with the Unified Theory of Acceptance and Use of Technology (UTAUT) (Bai, 2025). By creating clear internal

protocols for AI experimentation and data sharing, organizations can bridge the current implementation gap and create a sustainable environment for long-term digital transformation.

Future Research Directions

Future scholarly inquiry should address the critical gaps identified in current literature, specifically by shifting focus toward under-researched sectors such as B2B marketing and Small and Medium Enterprises (SMEs). There is a pressing need for longitudinal studies that track the long-term impact of AI integration on organizational culture, brand equity, and the psychological well-being of the consumer (Theodorakopoulos et al., 2026). Additionally, researchers should explore the "human-AI interaction" in greater depth, moving beyond simple adoption factors to investigate how AI-driven decision-making reconfigures the identity and roles of marketing professionals over time (Marvi et al., 2024).

The development of comprehensive ethical frameworks and standardized terminology remains a priority for the academic community. Future research should strive to create empirical models that measure the success of "Responsible AI" in marketing, examining the trade-offs between algorithmic efficiency and consumer privacy (Singh et al., 2024; El Hassani & Azdimousa, 2025). Finally, exploring the convergence of AI with other emerging technologies, such as Augmented Reality (AR) and Virtual Reality (VR), offers a fertile ground for understanding the next generation of immersive, personalized consumer experiences (Ertz & Kordi, 2025). By addressing these areas, the field can move toward a unified theory of AI-enabled marketing management that is both technically advanced and socially responsible.

CONCLUSION

This narrative review has synthesized the transformative impact of Artificial Intelligence (AI) on marketing management, delineating how the shift from predictive to prescriptive analytics is reconfiguring the discipline's theoretical foundations. The primary insight derived from this synthesis is that AI integration is no longer a localized technical enhancement but a systemic organizational reconfiguration that demands a new synergy between machine intelligence and human strategic oversight. By evaluating the literature through the lenses of Knowledge Management (KM), Dynamic Capability Theory, and the Unified Theory of Acceptance and Use of Technology (UTAUT), this review has demonstrated that successful AI adoption is predicated as much on managerial attitudes and ethical governance as it is on algorithmic sophistication.

The significant contribution of this review lies in its thematic integration of fragmented research, bridging the gap between operational efficiencies such as hyper-personalization and CRM automation and the urgent need for robust ethical frameworks. Unlike previous studies that focus on isolated AI applications, this work provides a holistic roadmap that identifies the "policy-practice gap" as the most critical hurdle for future implementation. By clarifying inconsistent terminology and aligning disparate sectoral evidence, the review offers a foundational framework for both scholars and practitioners to navigate the complexities of data-driven value creation.

Ultimately, the "intelligence transformation" of marketing management represents a fundamental evolution in the relationship between brands and consumers. As AI continues to converge with emerging technologies like the Internet of Things (IoT) and synthetic data analytics, the discipline must move toward a model of "responsible intelligence" that prioritizes transparency and consumer trust alongside profitability. This review concludes with the forward-looking assertion that the future of marketing management will not be defined by the total automation of the creative process, but by the strategic ability of human managers to orchestrate increasingly autonomous systems within a sustainable, ethical, and consumer-centric ecosystem.

LIMITATIONS

Despite the rigorous thematic synthesis provided, several limitations inherent in the scope and methodology of this narrative review must be acknowledged. First, the identification of literature was restricted exclusively to the Scopus database. While Scopus offers extensive coverage of high-impact, peer-reviewed journals, the exclusion of other major databases such as Web of Science or ProQuest may have resulted in the omission of relevant interdisciplinary studies or niche management perspectives. Furthermore, the timeframe was strictly

bounded between 2021 and 2025; while this captured the most recent advancements in generative AI, it inherently excludes foundational historical perspectives that may provide deeper context for current technological trajectories.

Second, there is a notable sectoral imbalance within the reviewed literature. A significant majority of current research focuses on B2C e-commerce and high-tech service industries, leaving a deficit of empirical evidence regarding AI integration in B2B contexts and Small and Medium Enterprises (SMEs). This imbalance limits the generalizability of the findings across the broader marketing landscape. Additionally, the field suffers from conceptual overlap and inconsistent terminology; the varying definitions of "AI integration" and "automated marketing" across different studies may lead to interpretive ambiguity. Finally, as a narrative review, the selection and synthesis of literature are inherently qualitative and interpretive. While efforts were made to maintain transparency through the "Review Approach" section, the findings are subject to the researchers' perspective and do not carry the statistical weight of a meta-analysis or the exhaustive breadth of a systematic literature review.

REFERENCES

1. Al-Weshah, G. A., Kakeesh, D. F., & Shishan, F. (2023). Integrating electronic customer relationship management and artificial intelligence: A theoretical foundation for marketing intelligence in the service industry. In *Contemporary approaches of digital marketing and the role of machine intelligence* (pp. 73–104). IGI Global. <https://doi.org/10.4018/978-1-6684-7735-9.ch004>
2. Alam, A. (2025). Ethical challenges and bias in AI-driven marketing: Educational imperatives and policy perspectives. In *Impacts of AI-generated content on brand reputation* (pp. 55–107). IGI Global. <https://doi.org/10.4018/979-8-3373-4327-3.ch003>
3. Alexa, L., Pîslaru, M., Nistor, G. C., & Alexa, M. (2024). Artificial intelligence in marketing: Current status and future research agenda. *Intelligent Systems Reference Library*, 253, 39–51. https://doi.org/10.1007/978-3-031-55952-5_3
4. Bai, N. (2025). From concept to practice: How managers are integrating AI into business marketing. *Smart Innovation, Systems and Technologies*, 438, 3–21. https://doi.org/10.1007/978-981-96-3077-6_1
5. Benjelloun, A., & Kabak, S. (2024). Ethical challenges and managerial implications of artificial intelligence in digital marketing. *Lecture Notes in Networks and Systems*, 869, 439–445. https://doi.org/10.1007/978-981-99-9040-5_32
6. Davenport, T. H., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*, 48(1), 24–42. <https://doi.org/10.1007/s11747-019-00696-0>
7. Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. *Harvard Business Review*, 96(1), 108–116.
8. Eid, M. A. H., Hashesh, M. A., Sharabati, A.-A. A., Khraiwish, A., Al-Haddad, S., & Abusaimeh, H. (2024). Conceptualizing ethical AI-enabled marketing: Current state and agenda for future research. *International Journal of Data and Network Science*, 8(4), 2291–2306. <https://doi.org/10.5267/j.ijdns.2024.6.002>
9. El Hassani, M., & Azdimousa, H. (2025). Leveraging artificial intelligence for sustainable marketing: The mediating role of corporate social responsibility and ethics. *Lecture Notes in Networks and Systems*, 1402, 912–921. https://doi.org/10.1007/978-3-031-91334-1_83
10. Ertz, M., & Kordi, M. (2025). Advancing marketing strategy with artificial intelligence: A systematic literature review. In *AI in marketing applications, insights, and analysis* (pp. 22–48). Routledge. <https://doi.org/10.4324/9781003468806-3>
11. Gupta, A., & Agarwal, P. (2024). Enhancing sales forecasting accuracy through integrated enterprise resource planning and customer relationship management using artificial intelligence. *2024 3rd International Conference on Artificial Intelligence for Internet of Things (AIIoT)*. <https://doi.org/10.1109/AIIoT58432.2024.10574785>
12. Haleem, A., Javaid, M., Asim Qadri, M., Pratap Singh, R., & Suman, R. (2022). Artificial intelligence (AI) applications for marketing: A literature-based study. *International Journal of Intelligent Networks*, 3, 119–132. <https://doi.org/10.1016/j.ijin.2022.08.005>

13. Huang, M.-H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*, 49(1), 30–50. <https://doi.org/10.1007/s11747-020-00749-9>
14. Islam et al. (2024). Artificial intelligence in digital marketing automation: Enhancing personalization, predictive analytics, and ethical integration. *Edelweiss Applied Science and Technology*, Vol. 8, No. 6, 6498-6516. DOI: 10.55214/25768484.v8i6.3404
15. Jayakumar, M., Jenefa, L., Badrinarayanan, M. K., Subaniya Sarah, K., Ashok Kumar, S., & Mohan Kumar, R. (2024). Exploring organizational adoption of innovative technologies in consumer online purchase. 2nd International Conference on Emerging Research in Computational Science (ICERCS). <https://doi.org/10.1109/ICERCS63125.2024.10895563>
16. Kumar, V., Ashraf, A. R., & Nadeem, W. (2024). AI-powered marketing: What, where, and how? *International Journal of Information Management*, 77, Article 102783. <https://doi.org/10.1016/j.ijinfomgt.2024.102783>
17. Kumar, V., Dixit, A., Sharma, P., & Roy, S. N. (2025). Implementing responsible artificial intelligence in marketing. *American Business Review*, 28(2), 319–342. <https://doi.org/10.37625/abr.28.2.319-342>
18. Kumar, V., Rajan, B., Venkatesan, R., & Lecinski, J. (2019). Understanding the role of artificial intelligence in personalized engagement marketing. *California Management Review*, 61(4), 135–155. <https://doi.org/10.1177/0008125619859317>
19. Kumari, R., & Singh, K. (2025). AI-driven marketing automation and hyper-personalization strategies for enhanced consumer engagement. In *Improving consumer engagement in digital marketing through cognitive AI* (pp. 153–176). IGI Global. <https://doi.org/10.4018/979-8-3373-3775-3.ch007>
20. Marvi, R., Foroudi, P., & Cuomo, M. T. (2024). Past, present and future of AI in marketing and knowledge management. *Journal of Knowledge Management*, 29(11), 1–31. <https://doi.org/10.1108/JKM-07-2023-0634>
21. Nagina, R., & Paruthi, M. (2024). The integration of artificial intelligence and its technological optimizations models to enhance the smart marketing management. 2024 4th International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), 1397–1402. <https://doi.org/10.1109/ICACITE60783.2024.10617275>
22. Nassar, S. Y. (2025). Redefining business with artificial intelligence: Strategies for innovating consumer experience. *Applied Marketing Analytics*, 10(4), 374–389. <https://doi.org/10.69554/DPJY4417>
23. Neves et al. (2025). The Influence of Artificial Intelligence Algorithms on Digital Marketing. *Digital Transformation Initiatives for Agile Marketing*. DOI: 10.4018/979-8-3693-4466-8.ch002
24. Podevin, D., Paulus, M., Wilhelm, A., & Hellbrück, N. (2026). Responsible marketing in the age of AI: Ethical reflection for companies between innovation and responsibility. *Communications in Computer and Information Science*, 2666, 216–228. https://doi.org/10.1007/978-3-032-08614-3_13
25. Potwora, M., Vdovichena, O., Semchuk, D., Lipych, L., & Saienko, V. (2024). The use of artificial intelligence in marketing strategies: Automation, personalization and forecasting. *Journal of Management World*, 2024(2), 41–49. <https://doi.org/10.53935/jomw.v2024i2.275>
26. Reavey, B. M. (2025). AI in consumer insights. In *AI in marketing applications, insights, and analysis* (pp. 251–270). Routledge. <https://doi.org/10.4324/9781003468806-13>
27. Rosário, A. T., & Casaca, J. (2024). How artificial intelligence can leverage relationship marketing strategies. In *Leveraging AI for effective digital relationship marketing* (pp. 1–34). IGI Global. <https://doi.org/10.4018/979-8-3693-5340-0.ch001>
28. Rosário, A. T., & Raimundo, R. J. (2025). The integration of AI and IoT in marketing: A systematic literature review. *Electronics*, 14(9), Article 1854. <https://doi.org/10.3390/electronics14091854>
29. Sarin, A. B., & Sharma, S. (2024). Harmonizing AI and human interaction: Enhancing modern marketing strategies. In *Balancing automation and human interaction in modern marketing* (pp. 151–174). IGI Global. <https://doi.org/10.4018/979-8-3693-2276-5.ch009>
30. Savariapitchai, M., Yenurkar, A. (2025). Artificial Intelligence’s Influence on Modern Marketing Strategies: A Comprehensive Analysis. In: Joshi, A., Ragel, R., Mahmud, M., Kartik, S. (eds) *ICT: Applications and Social Interfaces. ICTCS 2024. Lecture Notes in Networks and Systems*, vol 1383. Springer, Singapore. https://doi.org/10.1007/978-981-96-5754-4_19



31. Semwal, R., Tripathi, N., Tyagi, P. K., & Nadda, V. (2024). AI-infused strategies for customer retention. In *Integrating AI-driven technologies into service marketing* (pp. 115–134). IGI Global. <https://doi.org/10.4018/979-8-3693-7122-0.ch007>
32. Theodorakopoulos, L., Theodoropoulou, A., & Klavdianos, C. (2026). Big Data Analytics and AI for Consumer Behavior in Digital Marketing: Applications, Synthetic and Dark Data, and Future Directions. *Big Data and Cognitive Computing*, 10(2), 46. <https://doi.org/10.3390/bdcc10020046>
33. Timimi, H., Baaddi, M., & Bennouna, A. (2025). Impact of artificial intelligence on the personalization of the customer experience: A systematic literature review. *Multidisciplinary Reviews*, 8(7), Article e2025224. <https://doi.org/10.31893/multirev.2025224>
34. Türkyilmaz, S. (2024). AI in marketing. In *Generative AI for transformational management* (pp. 211–239). IGI Global. <https://doi.org/10.4018/979-8-3693-5578-7.ch009>
35. Zavalii, T., Lehenchuk, S., Ostapchuk, T., Vlasenko, O., & Medvediev, M. (2025). Artificial intelligence in digital marketing: Bibliometric analysis. *CEUR Workshop Proceedings*, 4029, 135–142.