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SIFT – Journal of Business and Social Sciences is a peer-reviewed, double-blind academic journal dedicated to advancing high-quality research at the intersection of business, management, and social sciences. The journal provides a global platform for scholars, practitioners, and policymakers to publish innovative studies, conceptual frameworks, case analyses, and empirical research that address emerging challenges in today's dynamic business and societal landscape. With a strong commitment to ethical standards, interdisciplinary dialogue, and impactful knowledge dissemination, SIFT aims to bridge theory and practice, promote responsible leadership, and contribute meaningfully to academic and real-world decision-making. Our mission is to support research that inspires progress, enhances understanding, and drives positive social and organisational outcomes.

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Aims and Scope

SIFT – Journal of Business and Social Sciences is a double-blind, peer-reviewed scholarly journal committed to advancing interdisciplinary knowledge at the crossroads of business studies and the social sciences. The journal serves as an academic platform for researchers, academicians, industry professionals, policymakers, and graduate scholars to publish high-quality research that contributes to theory, practice, and societal development.

SIFT recognizes that contemporary challenges in business and society are interconnected and require a holistic understanding across disciplines. The journal therefore welcomes a wide range of research contributions, including empirical studies, conceptual papers, theoretical advancements, case studies, analytical models, and review articles. Its subject areas span core business fields such as management, marketing, finance,

entrepreneurship, organisational behaviour, and consumer psychology, as well as social science domains including sociology, psychology, communication, public policy, ethics, and cross-cultural studies.

At the heart of the journal is a commitment to academic integrity, ethical research practices, and rigorous scientific standards. Every manuscript undergoes a strict double-blind peer-review process to ensure originality, methodological soundness, relevance, and contribution to existing literature. The journal also promotes responsible research by encouraging authors to address contemporary societal issues such as sustainability, corporate governance, technological transformation, digital behaviour, ethical leadership, and social responsibility.

SIFT aims not only to be a publication outlet but also a knowledge bridge. By fostering dialogue between academics and practitioners, the journal facilitates evidence-based decision-making, policy improvements, and innovative solutions to global business and social challenges. The journal supports the dissemination of impactful research that advances professional practice, stimulates intellectual debate, and enhances the understanding of how businesses operate within social, cultural, and ethical contexts.

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- Human resource management, HR analytics, and organisational development
- Marketing, consumer behaviour, and consumer psychology
- Finance, accounting, financial decision-making, and corporate performance
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- Strengthen the link between academic knowledge and professional application
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SIFT positions itself as a platform for global academic interaction. Our contributors and reviewers include scholars and professionals from diverse countries, ensuring a wide range of perspectives and global relevance. The journal seeks to amplify voices from emerging economies, promote diverse methodologies, and encourage comparative and cross-cultural research.

Mission and Vision

Mission

To promote high-quality interdisciplinary research that enhances the understanding of business and social systems, supports ethical and responsible organizational practices, and generates knowledge with meaningful social impact.

Vision

To become a globally recognized and trusted academic journal that shapes discussions in business, management, and social sciences by fostering innovation, integrity, and inclusiveness in scholarly publishing.

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- By combining academic depth with societal relevance, SIFT strives to:
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- Provide an accessible platform for emerging and established researchers
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- Influence real-world business and social practices
- Support the advancement of ethical, sustainable, and innovative research
- Encourage critical thinking and new theoretical perspectives

Artificial Intelligence in Marketing: Strategies, Challenges, and Opportunities

A. Vasanthy & Dr. S. Chandramohan

Abastract

Artificial Intelligence (AI) has emerged as a transformative force in marketing, reshaping the way businesses engage with consumers, design strategies, and deliver value. By integrating machine learning, predictive analytics, natural language processing, and generative models, AI enables firms to analyze vast datasets, predict consumer preferences, and craft personalized marketing messages with unprecedented precision. This technological advancement has positioned AI as a strategic asset, enhancing customer relationship management, optimizing advertising campaigns, and driving competitive advantage in dynamic marketplaces. Despite its potential, the integration of AI into marketing is not without challenges. Ethical concerns such as algorithmic bias, data manipulation, and consumer privacy breaches raise critical questions about trust and transparency. Technical barriers, including high implementation costs and skill shortages, further limit adoption across industries. Moreover, over-reliance on AI risks diminishing the creative and emotional elements that are central to effective brand communication, thereby challenging consumer acceptance of AI-driven interactions. At the same time, AI presents significant opportunities for marketing innovation. Hyper-personalization at scale, realtime consumer insights, and AI-driven brand storytelling can foster stronger engagement and loyalty. Additionally, AI enables the development of new business models and supports sustainability initiatives by aligning marketing strategies with eco-conscious consumer expectations. This paper provides a theoretical review of strategies, challenges, and opportunities of AI in marketing. By synthesizing existing literature and drawing from established theories such as the Technology Acceptance Model (TAM) and the Resource-Based View (RBV), it proposes a conceptual framework that highlights the strategic role of AI while addressing its ethical and managerial implications. The study contributes to academic discourse by offering a structured understanding of AI's impact on marketing and setting directions for future empirical research.

Keywords:Artificial Intelligence, Marketing Strategy, Consumer Behaviour, Personalization, Ethical AI, Challenges, Opportunities

A. Vasanthy, Research Scholar (Full - Time) Ph.D. in Management, Alagappa Institute of Management, Alagappa University, Karaikudi.

Dr. S. Chandramohan, Senior Professor & Director, Alagappa Institute of Management, Alagappa University, Karaikudi.

Introduction

Artificial Intelligence (AI) in marketing can be broadly defined as the integration of intelligent algorithms, machine learning models, and cognitive computing systems into marketing processes to enhance decision-making, personalization, and customer engagement. According to Huang and Rust (2021), AI represents a spectrum of "mechanical, thinking, and feeling" capabilities that can augment or even replace traditional human functions in marketing, ranging from data-driven automation to emotional intelligence in customer interactions. Similarly, Davenport et al. (2020) emphasize that AI is not simply a technological add-on but a transformative force that redefines marketing by combining advanced analytics, natural language processing, computer vision, and predictive modelling to create more adaptive and responsive marketing systems.

Why AI is Transforming Marketing Globally

The transformation of marketing through AI is evident in several dimensions. First, the proliferation of big data and sophisticated machine learning models enables unprecedented personalization and predictive accuracy. Kumar et al. (2024) highlight how AI-powered systems allow firms to move beyond demographic segmentation towards hyper-personalized, real-time engagement, creating superior consumer experiences. Second, AI-driven automation and optimization are reshaping campaign management, pricing, and customer service. For instance, Haleem et al. (2022) note that chatbots, recommender systems, and dynamic pricing algorithms reduce operational costs while enhancing customer satisfaction. Third, AI contributes to strategic marketing innovation, as observed by Verma et al. (2021), who argue that firms are leveraging AI not only for tactical improvements but also for redesigning long-term customer relationship strategies, market intelligence, and product development. Finally, the global diffusion of AI in marketing is fueled by its cross-industry adaptability and its role in enabling businesses in both developed and emerging economies to remain competitive in digital marketplaces (Davenport et al., 2020).

Objectives

- To analyze key strategies of AI-driven marketing.
- To identify major challenges in adopting AI.
- To explore opportunities for future marketing innovations

Theoretical Background & Literature Review

The integration of Artificial Intelligence (AI) into marketing has undergone a remarkable transformation over the past two decades, moving from simple automation tools to sophisticated machine learning applications and, most recently, to generative AI systems. In its earliest phase, AI in marketing was primarily limited to automation through rule-based systems such as email marketing workflows, basic chatbots, and campaign management platforms. These tools reduced manual intervention and improved operational efficiency but lacked the

ability to learn and adapt to consumer behaviour dynamically (Haleem et al., 2022). As digital data proliferated through e-commerce platforms and social media, the marketing discipline entered the second phase, driven by machine learning (ML). Machine learning enabled predictive modelling, recommender systems, and dynamic pricing, thereby transforming marketing into a data-driven science capable of personalization at scale (Davenport et al., 2020). More recently, the rise of generative AI, powered by large language models and multimodal systems, has expanded AI's role beyond prediction and automation toward creative generation of advertisements, images, product designs, and conversational interactions. This third phase introduces both unprecedented opportunities for brand storytelling and personalization and new challenges related to authenticity, ethics, and governance (Kumar, 2024; Huang & Rust, 2021).

To understand these developments, scholars have relied on several key theoretical frameworks. One of the most influential is the Technology Acceptance Model (TAM), originally developed by Davis (1989), which has been extended to explain both consumer and managerial adoption of AI tools. Recent studies applying TAM in AI marketing contexts highlight that perceived usefulness and ease of use remain critical predictors of adoption, but new constructs such as algorithmic transparency, trust, and perceived fairness have become equally significant. For instance, Verma et al. (2021) found that while consumers appreciate AI-powered personalization, their willingness to adopt is mediated by their perception of control over personal data. Similarly, empirical research on AI chatbots demonstrates that transparency in how algorithms operate enhances both trust and adoption intention (Mikalef et al., 2019). These findings suggest that while TAM remains relevant, it requires integration with contemporary concerns such as privacy, explain ability, and ethical assurance when applied to AI-driven marketing.

At the firm level, the Resource-Based View (RBV) provides a strategic perspective to understand how AI can serve as a source of competitive advantage. According to RBV, resources must be valuable, rare, inimitable, and non-substitutable (VRIN) to sustain long-term performance (Barney, 1991). In the context of AI, algorithms themselves are often replicable, but complementary resources such as proprietary datasets, technical expertise, and organizational routines surrounding data governance make the difference (Chen et al., 2022). Studies confirm that firms leveraging AI effectively do so not merely by adopting algorithms but by embedding them into dynamic capabilities that enable continuous learning and adaptation (Huang & Rust, 2021). For example, companies that integrate AI with customer relationship management (CRM) platforms see superior results when they also possess strong analytical talent and robust data infrastructures (Davenport et al., 2020). Conversely, firms without these complementary resources may fail to derive long-term advantages, even with substantial investments in AI. Thus, RBV highlights that AI's strategic value lies not in technology alone but in the synergistic combination of resources that enable its effective use.

From the perspective of consumer decision-making theories, AI significantly influences how individuals search for, evaluate, and purchase products. Traditional models of consumer behaviour, such as the information-processing model and the Elaboration Likelihood Model, emphasize rational and emotional pathways in decision-making. AI-powered personalization alters these processes by reducing search costs, providing curated product recommendations, and shaping consumer perceptions through subtle framing (Lankton et al., 2022). Research has shown that AI-driven recommender systems increase purchase intention and customer satisfaction, but excessive personalization may trigger concerns of manipulation and surveillance (Shankar et al., 2022). Generative AI further complicates these dynamics by producing human-like interactions and creative content that consumers may find persuasive but simultaneously question for authenticity (Kumar, 2024). This tension highlights the dual role of AI as both a facilitator of convenience and a potential source of consumer skepticism.

Integrating these theoretical lenses reveals a multi-level understanding of AI in marketing. At the micro level, TAM explains adoption behaviors among both consumers and marketers, highlighting the importance of usefulness, ease of use, and trust. At the organizational level, RBV illustrates why some firms achieve superior performance from AI by leveraging complementary resources, while others fail to do so. At the consumer-process level, decision-making theories explain how personalization and generative content influence purchase choices, satisfaction, and long-term loyalty. Together, these perspectives suggest that AI in marketing is not just a technological shift but a socio-technical transformation requiring firms to balance adoption enablers, strategic resources, and consumer perceptions.

Research Gap

Despite its rapid adoption in practice, the theoretical integration of AI in marketing remains underdeveloped. While a growing body of literature documents empirical applications of AIsuch as predictive modelling, customer analytics, and digital advertisingthe conceptual frameworks explaining how AI fundamentally alters marketing decision-making are still limited. Verma et al. (2021), in their systematic review, highlight that most studies focus on technological adoption and short-term performance outcomes, but fewer explore long-term implications for consumer trust, ethical governance, and organizational transformation. Similarly, Huang and Rust (2021) caution that while AI's capabilities are evident, theoretical models connecting these capabilities to enduring shifts in marketing strategy and consumer psychology are underexplored. This gap underscores the need for studies that consolidate strategies, challenges, and opportunities into a unified theoretical framework, thereby bridging the divide between practice-driven adoption and theory-driven understanding.

AI in Marketing Strategies

Personalization: Targeted Ads and Recommendation Engines

AI-powered personalization has become central to marketing strategy, with algorithms tailoring advertisements, recommendations, and offers to individual consumers. Recommender systems, using machine learning and deep learning models, analyze purchase histories, browsing behavior, and contextual data to generate hyper-personalized suggestions (Shankar et al., 2022). Empirical studies show that such personalization enhances engagement, click-through rates, and customer loyalty, while reducing search costs for consumers (Jarek & Mazurek, 2019). However, over-personalization can trigger privacy concerns and lead to consumer resistance if transparency is lacking (Verma et al., 2021). Thus, marketers must balance personalization effectiveness with ethical and regulatory compliance.

Predictive Analytics: Demand Forecasting and Consumer Segmentation

Predictive analytics enables firms to forecast demand, segment customers, and anticipate market trends by applying AI models to large-scale datasets. Studies demonstrate that predictive modeling significantly improves demand forecasting accuracy, inventory management, and customer targeting (Wedel & Kannan, 2016; Mikalef et al., 2019). For example, Haleem et al. (2022) highlight that predictive AI allows companies to optimize promotions and pricing dynamically, thereby improving profitability. Yet, reliance on black-box algorithms without adequate interpretability can reduce managerial trust and create challenges in volatile environments (Davenport et al., 2020).

Content Creation: Generative Ai In Marketing

Generative AI tools such as ChatGPT and DALL·E have revolutionized content marketing by enabling automated generation of product descriptions, advertising copy, and visual creatives. These tools allow marketers to scale content production while reducing costs (Dwivedi et al., 2023). Research shows that AI-generated content increases efficiency and enables A/B testing of campaigns at scale, but issues of creativity, authenticity, and brand voice remain critical concerns (Kietzmann et al., 2018). Moreover, ethical challenges surrounding misinformation, copyright, and consumer deception highlight the need for human oversight in AI-driven content creation (Dwivedi et al., 2023).

Customer Relationship Management: Ai Chatbots and Sentiment Analysis

AI is also reshaping customer relationship management (CRM) through intelligent chatbots and sentiment analysis systems. Chatbots provide 24/7 automated customer service, reducing response time and operational costs (Chatterjee et al., 2020). Natural language processing (NLP)-based sentiment analysis further allows firms to capture consumer emotions, detect dissatisfaction, and improve service personalization (Mikalef et al., 2019). However, research indicates that poorly designed AI interactions can frustrate customers, reduce trust, and

negatively affect brand equity if they fail to replicate human empathy (Huang & Rust, 2021). Therefore, hybrid models combining human and AI interventions are recommended for effective CRM strategies.

Influencer and Social Media Marketing: AI-Enabled Engagement

AI has also entered the domain of influencer and social media marketing by enabling influencer identification, engagement analytics, and campaign evaluation. Algorithms assess follower authenticity, engagement quality, and demographic alignment to recommend suitable influencers for brands (Lou & Yuan, 2019). Recent work suggests that AI-driven analytics improve return on investment (ROI) by identifying influencers with genuine reach and impact (Haleem et al., 2022). Moreover, virtual AI influencers are emerging as a novel phenomenon, raising questions about authenticity and ethical disclosure (Djafarova & Trofimenko, 2019). While promising, this domain requires careful regulation to maintain transparency and consumer trust.

Challenges in AI-Driven Marketing

Ethical Concerns: Bias, Manipulation, and Discrimination

AI-driven marketing raises profound ethical questions. Algorithms often inherit biases present in training datasets, which can lead to unfair targeting, discriminatory pricing, or exclusion of vulnerable groups. For example, Chen et al. (2023) argue that algorithmic decision-making can reinforce systemic inequalities when deployed without ethical safeguards. Similarly, Wilson and Daugherty (2018) caution that AI's persuasive capacity in hyper-targeted advertising risks crossing into consumer manipulation, as firms may exploit psychological vulnerabilities for profit. This makes the ethical use of AI central to marketing governance.

Data Privacy and Security: Navigating GDPR and CCPA

The reliance of AI on personal and behavioural data heightens concerns over privacy and data protection. The introduction of GDPR in Europe and CCPA in California has imposed stricter consent and compliance requirements, forcing marketers to adapt their data practices. Martin and Murphy (2017) highlight that consumer concerns about privacy significantly affect perceptions of fairness in digital marketing. More recently, Li et al. (2021) examined the early effects of GDPR and found a decline in third-party tracking and a shift toward first-party data strategies. As Haleem et al. (2022) note, firms must invest in robust security and compliance frameworks, since data breaches or misuse can rapidly erode brand trust.

Consumer Trust and Acceptance: Risks of Over-Automation

Trust is a critical determinant of consumer acceptance of AI in marketing. While AI chatbots, recommendation engines, and automated systems improve efficiency, over-automation may alienate consumers by reducing human empathy in service interactions. Luo et al. (2019) found

that consumers exhibit ambivalence toward AI-based service agents appreciating efficiency but distrusting opaque decision processes. Research by Gursoy et al. (2019) further shows that disclosure of AI use and hybrid human-AI interaction models significantly influence consumer trust. Hence, brands must balance automation with transparency and the "human touch" to safeguard long-term loyalty.

Technological Barriers: High Costs and Skill Gaps

Despite its promise, AI adoption remains uneven, particularly among SMEs. Implementing AI requires substantial investments in infrastructure, data quality, and skilled talent. Mikalef et al. (2019) demonstrate that firms lacking complementary resources such as analytics expertise and IT capabilities often fail to capture value from AI-driven systems. Similarly, Dwivedi et al. (2021) identify skill shortages and integration difficulties as persistent barriers that slow the pace of AI adoption in marketing functions. These challenges highlight the need for capability development and cross-functional collaboration to maximize returns on AI investments.

Over-Reliance on AI: Creativity and Human Touch Limitations

Finally, there is a growing concern that heavy reliance on AI may diminish creativity in marketing. While generative AI tools like ChatGPT and DALL·E allow scalable content production, they risk producing formulaic or generic outputs. Davenport et al. (2020) stress that AI should augment, rather than replace, human creativity in marketing decision-making. Verma et al. (2021) similarly argue that AI's optimization focus can prioritize short-term metrics (click-throughs, conversions) at the expense of long-term brand meaning and emotional resonance. Thus, maintaining human oversight is critical to avoid "algorithmic sameness" in marketing strategies.

Opportunities in AI Marketing Hyper-Personalization at Scale

One of the most significant opportunities offered by AI in marketing is hyper-personalization, which goes far beyond traditional segmentation by using real-time behavioral data, purchase history, contextual signals, and predictive algorithms to create highly individualized consumer experiences. Unlike conventional personalization, which typically relies on demographics, AI systems can analyze millions of consumer touchpoints simultaneously to deliver dynamic product recommendations, targeted offers, and personalized content. Kumar (2024) highlights that firms implementing AI-driven personalization have reported measurable improvements in customer lifetime value and loyalty due to their ability to provide relevance "in the moment." Similarly, Haleem et al. (2022) argue that AI-based recommendation engines and targeted advertising platforms not only improve conversion rates but also reduce customer acquisition costs by efficiently matching offers to needs. However, as Davenport et al. (2020) emphasize, hyper-personalization must be accompanied by transparency and explainability to prevent

consumer concerns regarding manipulation or loss of privacy. Thus, hyper-personalization at scale represents a powerful marketing tool, but its effectiveness depends on firms balancing technological precision with ethical and regulatory compliance.

Real-Time Consumer Insights

AI also enables marketers to derive actionable insights in real time by processing data streams from multiple channels such as websites, mobile apps, IoT devices, and social media. Real-time analytics allows firms to detect sudden changes in consumer preferences, adapt campaigns dynamically, and personalize engagement on-the-fly. Mikalef et al. (2019) demonstrated that companies leveraging real-time data analytics improved their market responsiveness and competitiveness, attributing this to AI's ability to generate predictive insights rapidly. Madanchian (2024), focusing on AI in e-commerce, shows how real-time consumer insights enable dynamic product recommendations, which significantly increase conversion rates and customer engagement. For marketers, this translates into faster decision-making and more agile campaign management, particularly in fast-moving markets such as fashion and ecommerce. At the same time, the academic literature highlights those real-time systems require robust data infrastructures, advanced machine learning pipelines, and strong governance mechanisms to avoid risks of misinterpretation or bias in fast-moving environments (Dwivedi et al., 2023). Therefore, while real-time consumer insights present a clear opportunity, they demand organizational preparedness and technological sophistication to be fully effective.

Enhanced Customer Experience through Virtual Assistants & AR/VR + AI

Another critical opportunity lies in enhancing customer experience through conversational AI and immersive technologies. AI-powered chatbots, virtual shopping assistants, and voice interfaces can provide 24/7 support, resolve issues efficiently, and even recommend products based on customer preferences. Haleem et al. (2022) highlight those virtual assistants significantly reduce customer service costs while simultaneously improving satisfaction levels. Beyond conversational AI, the integration of AI with augmented reality (AR) and virtual reality (VR) is transforming online shopping into immersive experiences. Dwivedi et al. (2023) note that AI-enabled AR "virtual try-ons" in fashion and furniture retail reduce uncertainty in purchase decisions and lower return rates by allowing consumers to visualize products in reallife contexts. Mutanchiang (2024) further emphasizes that AI-enhanced VR platforms provide personalized brand experiences that increase emotional engagement and purchase intent. Together, these studies suggest that the fusion of AI with AR/VR technologies not only elevates customer experience but also strengthens brand-consumer relationships. However, scholars caution that firms must address consumer concerns regarding data collection via cameras and sensors used in these immersive tools to maintain trust (Davenport et al., 2020).

New Business Models: Subscription-Based AI Tools & AI-Influenced E-commerce

AI is reshaping marketing not only through tools but also by enabling entirely new business models. Subscription-based AI services allow even small and medium enterprises (SMEs) to access predictive analytics, personalized campaign design, and AI-driven customer insights without heavy upfront investments. Kumar (2024) notes that AI-as-a-service is democratizing marketing technology, enabling smaller firms to compete with established players. On the consumer side, AI is influencing e-commerce business models by enabling subscription boxes curated by AI algorithms, predictive replenishment systems, and concierge services that anticipate consumer needs (Madanchian, 2024). These innovations create recurring revenue streams, reduce churn, and deepen customer loyalty. Academic literature further highlights that AI-influenced e-commerce models rely heavily on trust, as consumers may resist algorithmic curation if it lacks transparency (Mikalef et al., 2019). Thus, the opportunity lies in designing AI-driven business models that combine predictive accuracy with consumer empowerment and clarity about how algorithms make decisions.

Sustainability & Green Marketing through AI

Finally, AI presents significant opportunities in aligning marketing with sustainability and green practices. By optimizing supply chains, predicting demand more accurately, and reducing overproduction, AI can contribute directly to reducing environmental impact. Gündüzyeli (2024) emphasizes that AI applications in digital marketing can be aligned with sustainable management frameworks by tailoring eco-friendly messages to environmentally conscious consumer segments. Similarly, Madanchian (2024) shows that AI analytics can identify and engage "green consumers" more effectively, thus increasing the efficiency of green campaigns. Beyond communication, AI tools enable "digital product passports" that track the lifecycle of goods, providing consumers with transparency about origin, materials, and sustainability credentials (Dwivedi et al., 2023). However, scholars also warn that the environmental footprint of AI itselfparticularly energy-intensive large modelsmust be carefully managed to avoid contradictions in green marketing strategies (Haleem et al., 2022). Thus, AI not only enhances sustainability-focused engagement but also challenges marketers to ensure responsible AI use in pursuit of ecological goals.

Discussion

The preceding sections illustrate that AI in marketing is characterized by a paradoxical landscapeon one hand, it offers transformative strategies such as hyper-personalization, predictive analytics, and AI-driven customer engagement; on the other hand, it introduces challenges related to ethics, consumer trust, privacy, and organizational capability gaps. Synthesizing these findings, it becomes clear that strategies and opportunities cannot be realized without addressing the parallel set of risks. For instance, while recommendation engines and real-time personalization drive consumer engagement, they simultaneously heighten concerns of over-surveillance and data misuse (Davenport et al., 2020; Kumar, 2024).

Similarly, while conversational agents and AR/VR-enhanced experiences improve customer satisfaction, their efficacy depends on consumers perceiving them as trustworthy and not manipulative (Dwivedi et al., 2023). Thus, the future of AI in marketing lies not in choosing between opportunities and challenges, but in building balanced adoption strategieswhere technical innovation, ethical safeguards, and human creativity coexist. Haleem et al. (2022) stress that firms must design AI strategies around transparency, fairness, and explain ability, while Madanchian (2024) shows that organizations that integrate ethical AI practices into marketing outperform those with purely efficiency-driven adoption. Therefore, sustainable success depends on embedding responsible AI principles within strategic marketing frameworks.

Theoretical Contribution

Technology Acceptance Model (TAM). Traditional TAM explains technology adoption through perceived usefulness and ease of use. However, in AI-driven marketing, consumer adoption also hinges on trust, fairness perception, and ethical alignment. Recent research emphasizes that consumers evaluate AI systems not only based on efficiency but also based on the system's transparency and alignment with their values (Shankar, 2018; Huang & Rust, 2021). By integrating ethical dimensions into TAM, this paper extends the model to account for algorithmic transparency, perceived autonomy, and emotional engagement as predictors of adoption. Resource-Based View (RBV). RBV traditionally positions technology as a firm-specific resource that generates competitive advantage if it is valuable, rare, inimitable, and non-substitutable. AI in marketing fits this framework, but only when paired with complementary resources such as human expertise, data quality, and governance mechanisms. Mikalef et al. (2019) highlight that AI capabilities, when embedded in organizational routines, significantly enhance firm performance. This paper extends RBV by emphasizing that responsible AI deployment itself can be a rare and inimitable capability differentiating firms in markets where technological adoption is widespread but ethical competence is scarce.

Consumer Decision-Making Theories. Classical theories of consumer behaviour emphasize rational and emotional drivers of choice. AI reconfigures this process by inserting predictive personalization and persuasive nudges into consumer journeys. Verma et al. (2021) argue that AI influences consumer decision-making not only by presenting tailored information but also by shaping perceptions of choice architecture. By incorporating AI-driven personalization, this paper contributes to consumer psychology theories by showing that decision-making is increasingly co-created between humans and algorithms, requiring new models of persuasion that integrate algorithmic influence with human cognition.

Managerial Implications

The findings offer several managerial implications. First, firms must adopt AI strategically rather than tactically, ensuring alignment between AI investments and long-term brand strategy. As

Kumar (2024) points out, AI marketing tools deliver the greatest returns when integrated into an overall value-creation framework rather than applied as isolated tools. Second, managers should prioritize ethical and transparent AI adoption. Consumer trust, once lost, is difficult to regain, and opaque algorithms may backfire despite technical sophistication (Davenport et al., 2020). Implementing explainable AI, disclosing data use, and enabling consumer choice are practical steps to build sustainable relationships. Third, firms must invest in complementary human skills alongside AI tools. Haleem et al. (2022) note that while AI automates repetitive tasks, human creativity and empathy remain indispensable for designing authentic brand stories and maintaining emotional connections. This underscores the importance of hybrid AIhuman teams. Finally, managers should view AI adoption not only as a competitive advantage but also as a risk management exercise. Over-reliance on AI without safeguards exposes firms to reputational damage, legal scrutiny (e.g., GDPR, CCPA compliance), and consumer backlash. By adopting responsible AI practices, companies can transform challenges into opportunities, achieving both innovation and trust simultaneously.

Future Research Directions

AI Adoption Differences Across Emerging vs. Developed Economies

One critical area for future research lies in understanding how AI adoption in marketing varies between emerging and developed economies. In developed markets, AI tools are often integrated seamlessly due to advanced digital infrastructure, high consumer digital literacy, and supportive regulatory frameworks. In contrast, emerging economies face structural barriers such as digital divides, cost limitations, and cultural resistance to AI-enabled decision-making (Chatterjee et al., 2020). For example, while U.S. and European retailers have rapidly deployed AI-driven personalization, firms in India, Brazil, and Southeast Asia are still experimenting with localized adoption strategies (Dwivedi et al., 2021). Future research could compare consumer attitudes toward AI across these contexts, shedding light on how socioeconomic, regulatory, and cultural factors shape acceptance and trust in AI technologies. This line of inquiry can also help identify context-specific models of AI adoption, ensuring inclusivity in AI-driven marketing transformation.

Sector-Specific Studies (Fashion, Healthcare, Retail, Education)

Although AI in marketing has been studied broadly, more sector-specific explorations are required. For example, fashion marketing benefits from AI-enabled hyper-personalization, influencer analysis, and visual recognition tools (Grewal et al., 2021), while healthcare marketing requires sensitivity to ethical communication and patient privacy (Longoni & Cian, 2022). Similarly, in retail, AI applications such as recommendation engines and virtual assistants significantly shape consumer experience (Shankar, 2018), whereas education marketing may leverage AI to personalize learning pathways and recruit students through predictive analytics (Dwivedi et al., 2023). Future research should focus on sectoral nuances, examining how AI capabilities interact with domain-specific regulatory frameworks, consumer sensitivities, and

value propositions. Such investigations would generate industry-tailored AI strategies, thereby advancing both theory and practice.

AI Ethics and Consumer Trust as a New Research Frontier

The intersection of AI ethics and consumer trust represents one of the most promising and urgent research frontiers. While personalization and predictive analytics create value, they also raise ethical dilemmas concerning privacy, fairness, and manipulation (Martin, 2019). Recent work has highlighted that consumer trust in AI systems is contingent upon perceptions of algorithmic transparency, fairness, and accountability (Huang & Rust, 2021; Kumar, 2024). However, empirical studies on how consumers negotiate these ethical concerns remain limited. Future research should explore how ethical AI practices (such as explainable AI, fairness-bydesign, and responsible data governance) influence consumer trust and loyalty across cultural and generational cohorts. In particular, longitudinal studies could assess how consumer trust evolves as AI technologies mature, regulatory environments tighten, and firms attempt to balance efficiency with ethical responsibility.

Conclusion

Artificial Intelligence (AI) is no longer merely a technological tool but has emerged as a transformative force reshaping marketing practices worldwide. By enabling hyperpersonalization, predictive analytics, automated content generation, and AI-driven customer relationship management, AI has fundamentally altered how firms interact with consumers, design strategies, and build sustainable competitive advantages. Scholars have emphasized that AI offers unprecedented opportunities for firms to achieve efficiency, accuracy, and customer-centricity, thereby redefining marketing landscapes (Huang & Rust, 2021; Kumar, 2024).

However, the true success of AI in marketing lies in striking a balance between strategic adoption and ethical responsibility. While firms benefit from personalization and automation, challenges such as algorithmic bias, consumer privacy, and over-reliance on machine intelligence risk eroding trust and undermining long-term consumer relationships (Martin, 2019; Longoni & Cian, 2022). Responsible integration of AI therefore requires firms to go beyond technological deployment and adopt transparent, fair, and explainable AI practices that align with evolving regulations like GDPR and CCPA (Dwivedi et al., 2021).

This paper contributes by developing a theoretical framework for understanding AI in marketing, integrating the Technology Acceptance Model (TAM) to explain adoption behaviour, the Resource-Based View (RBV) to frame AI as a strategic resource, and consumer psychology theories to highlight persuasion and trust in AI-mediated environments. In doing so, it bridges a critical gap between theory and practice: while AI adoption is rapidly growing in

industry, academic literature still lacks comprehensive theoretical models to explain its long-term implications (Chatterjee et al., 2020; Dwivedi et al., 2023).

References

- Wedel, M., & Kannan, P. K. (2016). Marketing analytics for data-rich environments. *Journal of Marketing*, 80(6), 97121. https://doi.org/10.1509/jm.15.0413
- Martin, K., & Murphy, P. E. (2017). The role of data privacy in marketing. *Journal of the Academy of Marketing Science*, 45(2), 135155. https://doi.org/10.1007/s11747-016-0495-4
- Kietzmann, J., Paschen, J., & Treen, E. (2018). Artificial intelligence in advertising: How marketers can leverage artificial intelligence along the consumer journey. *Journal of Advertising Research*, *58*(3), 263267. https://doi.org/10.2501/JAR-2018-035
- Wilson, H. J., & Daugherty, P. R. (2018). Collaborative intelligence: Humans and AI are joining forces. *Harvard Business Review*, 96(4), 114123.
- Djafarova, E., & Trofimenko, O. (2019). 'Instafamous' credibility and self-presentation of microcelebrities on social media. *Information, Communication & Society, 22*(10), 14321446. https://doi.org/10.1080/1369118X.2018.1438491
- Gursoy, D., Malodia, S., & Dhir, A. (2019). Consumers' acceptance of artificially intelligent (AI) device use in service delivery. *International Journal of Information Management, 49*, 157169. https://doi.org/10.1016/j.ijinfomgt.2019.03.008
- Jarek, K., & Mazurek, G. (2019). Marketing and artificial intelligence. *Central European Business Review*, 8(2), 4655. https://doi.org/10.18267/j.cebr.233
- Lou, C., & Yuan, S. (2019). Influencer marketing: How message value and credibility affect consumer trust. *Journal of Interactive Advertising*, 19(1), 5873. https://doi.org/10.1080/15252019.2018.1533501
- Luo, X., Tong, S., Fang, Z., & Qu, Z. (2019). Frontiers: Machines vs. humans: The impact of artificial intelligence chatbot disclosure on customer purchases. *Marketing Science*, *38*(6), 937947. https://doi.org/10.1287/mksc.2019.1192
- Mikalef, P., Boura, M., Lekakos, G., & Krogstie, J. (2019). Big data analytics and firm performance: Findings from a mixed-method approach. *Journal of Business Research*, 98, 261276. https://doi.org/10.1016/j.jbusres.2019.01.044
- Mikalef, P., Krogstie, J., Pappas, I. O., & Pavlou, P. (2019). Investigating the effects of big data analytics capabilities on firm performance: The mediating role of dynamic capabilities. *Information & Management*, *57*(2), 103169. https://doi.org/10.1016/j.im.2019.103169
- Davenport, T., 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), 2442. https://doi.org/10.1007/s11747-019-00696-0

- Chatterjee, S., Rana, N. P., Tamilmani, K., & Sharma, A. (2020). Exploring the impact of artificial intelligence adoption in services. *Journal of Business Research*, *118*, 400410. https://doi.org/10.1016/j.jbusres.2020.07.005
- Chatterjee, S., Rana, N. P., Tamilmani, K., & Sharma, A. (2020). The adoption of AI-integrated CRM systems in emerging economies: A resource-based view. *Information Systems Frontiers*, 22(3), 673691. https://doi.org/10.1007/s10796-019-09912-0
- Grewal, D., Noble, S. M., Roggeveen, A. L., & Nordfält, J. (2021). The future of in-store technology. *Journal of the Academy of Marketing Science*, 49(1), 96113. https://doi.org/10.1007/s11747-020-00741-1
- Haleem, A., Javaid, M., Singh, R. P., Suman, R., & Khan, S. (2022). Artificial intelligence (AI) applications for marketing. *Journal of Retailing and Consumer Services*, *64*, 102778. https://doi.org/10.1016/j.jretconser.2021.102778
- Huang, M.-H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science, 49*(1), 3050. https://doi.org/10.1007/s11747-020-00749-9
- Li, J., Guo, H., & Yang, Y. (2021). The impact of GDPR on the online advertising market. *Electronic Commerce Research and Applications*, 46, 101038. https://doi.org/10.1016/j.elerap.2021.101038
- Verma, S., Sharma, R., Deb, S., & Maitra, D. (2021). Artificial intelligence in marketing: Systematic review and future research direction. *Journal of Business Research*, *131*, 186195. https://doi.org/10.1016/j.jbusres.2021.03.001
- Chen, D., et al. (2022). The impact of artificial intelligence on firm performance. *Frontiers in Psychology*, *13*, 833847. https://doi.org/10.3389/fpsyg.2022.833847
- Lankton, N. K., McKnight, D. H., & Tripp, J. (2022). Privacy and trust in AI-driven marketing: An extension of consumer decision models. *Journal of Business Research*, *148*, 4556. https://doi.org/10.1016/j.jbusres.2022.04.010
- Longoni, C., & Cian, L. (2022). Artificial intelligence in consumer-facing services: A double-edged sword. *Journal of Marketing Research*, 59(1), 123. https://doi.org/10.1177/00222437211060239
- Shankar, V., Grewal, D., & Hofacker, C. (2022). Algorithmic personalization and consumer responses: Opportunities and challenges. *Journal of Interactive Marketing*, *59*, 114. https://doi.org/10.1016/j.intmar.2022.04.002
- Chen, Z., Zahoor, S., & Elbanna, S. (2023). Ethics and discrimination in artificial intelligence-enabled systems. *Humanities and Social Sciences Communications*, *10*(1), 112. https://doi.org/10.1038/s41599-023-02079-x

- Dwivedi, Y. K., Hughes, L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., Al-Debei, M. M., ... & Wamba, S. F. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. International Journal of Information Management, 57, 101994. https://doi.org/10.1016/j.ijinfomgt.2019.08.002
- Dwivedi, Y. K., Hughes, L., Kar, A. K., Baabdullah, A. M., & Koohang, A. (2023). The metaverse and marketing: Conceptual foundations and research agenda. *Psychology & Marketing, 40*(6), 11801195. https://doi.org/10.1002/mar.21764
- Dwivedi, Y. K., Hughes, L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., Al-Debei, M. M., ... & Wamba, S. F. (2023). Metaverse marketing: How the metaverse will shape the future of consumer research and practice. *Psychology & Marketing*, 40(6), 11961214. https://doi.org/10.1002/mar.21767
- Gündüzyeli, B. (2024). Artificial intelligence in digital marketing within the framework of sustainable management. Sustainability, 16(23), 10511. https://doi.org/10.3390/su162310511
- Kumar, V., Dixit, A., Javalgi, R., & Dass, M. (2024). Artificial intelligence in marketing: What, where, and how? *International Journal of Research in Marketing*, *41*(2), 365380. https://doi.org/10.1016/j.ijresmar.2023.06.005
- Kumar, V. (2024). AI-powered marketing: What, where, and how? *International Journal of Research in Marketing*, 41(2), 345362. https://doi.org/10.1016/j.ijresmar.2023.06.005
- Madanchian, M. (2024). The impact of artificial intelligence marketing on e-commerce sales. *Systems*, *12*(10), 429. https://doi.org/10.3390/systems12100429

