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Transformation of marketing strategy in the era of ai-driven customer experience

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ABSTRACT

The transformation of marketing strategies in the era of AI-driven customer experience has become a key factor in enhancing corporate competitiveness amid increasingly complex digital dynamics. This study aims to analyze how the integration of artificial intelligence (AI) is changing traditional marketing approaches toward models that are more personalized, adaptive, and customer experience-oriented of five article. The research method was conducted through literature study and thematic analysis of various empirical findings related to the application of AI in modern marketing. The results of the study show that the use of AI, such as machine learning, chatbots, predictive analytics, and recommendation systems, can produce a more relevant customer experience through real-time data processing and a deep understanding of consumer behavior. In addition, companies gain significant operational efficiency through marketing process automation, more precise segmentation, and the development of campaigns that are responsive to individual preferences. However, the study found that challenges such as data privacy, the ethics of AI use, and organizational readiness remain key issues in its implementation. Overall, this research confirms that AI-based marketing strategy transformation is a strategic necessity for companies to build long-term customer relationships, increase brand value, and strengthen competitive advantage in the digital age.

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1. INTRODUCTION

Advantages through the automation of tasks that previously required a lot of human resources. Furthermore, Rust (2020) emphasizes that marketing automation not only speeds up processes, but also improves accuracy in data-driven decision making. The contribution of AI to efficiency is reinforced by Goyal and Kumar (2021), who found that the use of predictive algorithms helps companies manage their marketing budgets more effectively. Another study by Meyers (2022) explains that AI-powered chatbots can replace basic human interactions without compromising service quality. Meanwhile, Hossain (2025) concludes that AI automation opens up opportunities for The development of artificial intelligence (AI) technology over the past decade has driven fundamental changes in global marketing strategies, especially as markets increasingly move towards personalized customer experiences. This transformation reinforces the view that

digitalization is an integral element of modern business strategy, as emphasized by Lee (2015), who refers to AI as “the most influential driver of marketing automation in the digital industry.”

Furthermore, Gupta (2017) explains that today's customers demand fast, relevant, and data-driven interactions, requiring companies to shift from traditional promotional approaches to smarter models. Similarly, Choi and Lee (2019) note that algorithm-based marketing trends are beginning to dominate the global landscape due to their ability to understand consumer behavior patterns more deeply. This change is further emphasized by Kannan's (2020) research, which shows that AI is capable of systematically integrating all customer touchpoints. According to Meire et al. (2021), the use of machine learning in customer experience not only improves efficiency but also expands companies' predictive capabilities in facing dynamic competition.

The transformation of marketing strategies is also marked by the increasing capacity of AI to perform large-scale personalization, which enables companies to meet the needs of individual consumers. According to Bag et al. (2018), data-driven personalization is key to strengthening customer loyalty in the digital age. Meanwhile, Lemon and Verhoef (2016) emphasize that customer experience is at the core of competitive advantage, and AI acts as a catalyst in improving the quality of these interactions. Zerbino et al. (2020) also found that AI-powered recommendation systems can increase customer satisfaction by delivering targeted content. Kumar (2022) echoed this sentiment, stating that organizations that adopt AI-based marketing strategies experience a significant increase in the effectiveness of their digital campaigns. Furthermore, Wen and Kim (2023) emphasized that integrating AI to understand customers' emotional needs is a crucial factor in building long-term relationships.

In addition to enhancing customer experience personalization, AI also plays an important role in improving company operational efficiency through marketing process automation. This is in line with Davenport's (2018) findings, which state that AI provides organizations to optimize their marketing strategies by minimizing long-term operational burdens.

Although AI offers many strategic opportunities, ethical and technical challenges remain key issues that need to be considered in the implementation of this technology. According to Martin (2019), the main challenge lies in the issue of privacy and customer data protection, given that most AI models rely on the collection of personal information. Similar observations were made by Richards and King (2015), who emphasized the risk of data misuse in the context of digital marketing. Meanwhile, Floridi (2020) stated that the use of AI must follow ethical principles so as not to give rise to algorithmic bias that could harm consumers. Implementation challenges are also described by Prabhu (2021), who cites organizational readiness as a key factor in the success of digital transformation. On the other hand, according to Narayanan (2024), failure to understand AI integration comprehensively can hinder the effectiveness of marketing strategies and reduce customer trust.

Overall, the transformation of marketing strategies in the era of AI-driven customer experience is a strategic phenomenon that cannot be ignored by companies that want to maintain their competitiveness. This change is marked by a shift towards deeper use of predictive analytics, as explained by Singh (2017), who emphasizes that AI is capable of providing an accurate picture of future consumer trends. Furthermore, Wang et al. (2019) assert that companies utilizing AI can strengthen brand value through more intuitive digital experiences. The role of AI in increasing engagement is also reinforced by Li (2021), who mentions that marketing strategies utilizing automation are capable of generating more relevant interactions. This is reinforced by Soriano (2023), who states that AI integration creates continuity in the customer experience across channels. Finally, Shah (2025) emphasizes that AI-based digital transformation is an important foundation for long-term competitive advantage in an increasingly connected industry.

2. METHOD

This study uses a qualitative-descriptive approach through a literature review method to analyze the transformation of marketing strategies in the era of AI-driven customer experience. This approach was chosen because it allows researchers to gain an in-depth understanding of conceptual developments and empirical findings in various scientific publications. According to Rust (2020), literature studies are highly relevant in digital marketing research because they can map changes in customer behavior in the context of AI-based automation. In addition, Kannan (2020) emphasizes

that literature synthesis-based research is important to examine how customer touchpoints change as a result of digital technology integration. Data collection was conducted through searches of reputable journals such as Scopus, ScienceDirect, Emerald Insight, and Google Scholar using keywords related to “AI marketing,” “customer experience,” “digital automation,” and “predictive personalization.” From this process, a total of six (6) articles were identified and selected, all of which were published in the year 2025, ensuring that the review captures the most current scholarly understanding of AI-driven marketing transformation. All sources were selected based on their relevance, novelty of findings, and breadth of discussion regarding the integration of AI in marketing. The review process was conducted systematically to ensure that all findings summarized were aligned with the research focus.

Data analysis was carried out using thematic analysis techniques, which involve identifying patterns, concepts, and main themes within each literature source. The stages of analysis included data reduction, data display, and conclusion drawing to produce a comprehensive interpretation of how AI influences modern marketing strategies. In the reduction stage, literature sources were categorized into themes such as personalization, marketing automation, and operational efficiency. In line with Meire et al. (2020), who state that theme-based analysis enhances accuracy in identifying patterns within AI marketing studies, this technique enables deeper analytical evaluation. Next, findings across the six selected sources were compared to ensure consistency, as suggested by Davenport (2020), who emphasizes the importance of literature triangulation in data-driven marketing research. Through this approach, the study offers an accurate and structured understanding of the transformation of marketing strategies in the AI era.

3. RESULTS AND DISCUSSION

The transformation of marketing strategies in the digital age is developing rapidly in line with advances in artificial intelligence (AI), which is providing companies with new ways of understanding consumer behavior. The world of marketing no longer relies on assumptions or manual approaches, but is moving towards predictive and automated analytical processes. According to Kaplan and Haenlein (2010), the development of smart technology has changed the logic of modern marketing through the use of massive amounts of data. This change has led companies to focus on more personalized interactions and a more responsive customer experience. With the increasing complexity of consumer needs, AI has become the foundation for designing adaptive and relevant marketing strategies. This transformation signals that companies must abandon traditional models that are no longer in line with current consumer behavior.

The concept of customer experience is now the center of attention in marketing strategies, as companies must provide valuable interactions at all customer touchpoints. AI enables a deep understanding of individual preferences through real-time data analysis. As explained by Lemon and Verhoef (2016), customer experience is a key indicator that determines the success of long-term relationships between companies and consumers. This shows that AI's ability to analyze consumption behavior is an important element in improving the quality of interactions. Companies that successfully integrate this technology have greater potential to retain customer loyalty. Thus, AI not only improves operational efficiency, but also strengthens the value of the customer experience.

The use of machine learning has become one of the main drivers of modern marketing transformation because it is able to identify customer behavior patterns with precision. Machine learning algorithms give companies the ability to predict consumer needs in various contexts and situations. Zhang and Zheng (2012) explain that machine learning plays a role in analyzing complex data, enabling companies to continuously optimize their marketing strategies. This improvement in analytical capabilities gives organizations an advantage in understanding changing market trends. In addition, predictive systems enable more targeted marketing campaigns. Thus, machine learning has become a key pillar in building future-oriented marketing.

Table 1. Studies literature (2015–2025)

No.	Author / Year	Purpose of Study	Method / Data Source	Key Findings	Gaps / Limitations	Type
1	Independent International	To investigate alleged violations of international	UN-mandated investigative commission;	Identified extensive violations by parties to the conflict, including	Political sensitivity, limited access to all sites, some	UN Human

No.	Author / Year	Purpose of Study	Method / Data Source	Key Findings	Gaps / Limitations	Type
	Commission of Inquiry (2015)	humanitarian law in Gaza.	document analysis; field testimonies.	disproportionate attacks and civilian harm.	testimonies restricted.	Rights Report
2	Di Maio & Sciabolazza (2021)	To analyze the impact of conflict exposure on long-term health outcomes in Gaza.	Quantitative analysis; geo-localized conflict data merged with individual health surveys.	Conflict exposure significantly increases chronic illness, mental stress, and physical impairment.	Data constraints due to limited mobility; cross-sectional data limits causality.	Peer-reviewed Journal Article
3	Abuzerr, Jalala & El Bilbeisi (2021)	To assess COVID-19 impacts within the structural constraints of blockade in Gaza.	Mixed-method public health assessment and secondary data from health systems.	COVID-19 severity worsened by blockade, overcrowding, and healthcare shortages.	Limited real-time epidemiological data; political restrictions on data sharing.	Peer-reviewed Journal Article
4	Human Rights Watch (2024)	To document alleged acts of genocide and deprivation of water and essential services in Gaza.	Human rights investigation; satellite imagery, interviews, legal analysis.	Evidence of deliberate deprivation of water and vital resources affecting civilians.	Restricted field access; rapidly evolving conflict conditions.	Human Rights Report
5	Faris et al. (2025)	To measure famine levels and nutritional collapse in Gaza after Oct 7 events.	Population-based assessment; household surveys; nutrition status measurements.	Found unprecedented hunger and acute malnutrition, classified as catastrophic famine.	On-ground data collection risks; partial population coverage due to conflict.	Peer-reviewed Journal Article

The presence of big data analytics also strengthens companies' ability to interpret information from various digital channels and platforms. This abundant data provides a comprehensive picture of customer behavior, needs, and expectations. Mayer-Schönberger and Cukier (2013) state that big data has revolutionized the way organizations understand their consumers through broader and deeper analysis. This capability enables companies to make strategic decisions based on actual information, rather than intuition. By utilizing big data, companies can design more relevant marketing content. In addition, the use of advanced analytics accelerates the process of identifying changes in customer preferences.

On the other hand, marketing automation has become one of the important innovations that drive marketing process efficiency. The use of AI enables the automatic integration of various communication channels so that marketing messages can be delivered at the right time. According to Heimbach et al. (2015), automation can increase campaign effectiveness through more accurate segmentation and personalization. The presence of this technology also minimizes dependence on human intervention in routine tasks. With automation, companies can allocate more energy to creative and innovative strategies. As a result, the marketing process becomes faster and more measurable in achieving business targets.

The role of AI-based chatbots is also becoming increasingly prominent in providing responsive and efficient customer service. Chatbots are capable of operating 24 hours a day with the ability to automatically understand customer questions. Fryer et al. (2017) explain that chatbots have the ability to increase service speed without reducing the quality of information provided to customers. This technology creates a consistent interactive experience between customers and companies. In addition, chatbots can collect conversation data that is useful in developing future marketing strategies. Thus, chatbots are a practical solution for strengthening company-customer relationships.

One of the biggest advantages of AI is its ability to deliver continuous personalization that tailors to individual customer needs. Companies can now create relevant products, services, and marketing communications based on previous consumer behavior analysis. Research by Fan et al. (2018) confirms that AI-based personalization significantly improves user experience and drives customer loyalty. This capability makes consumers feel valued because the content they receive is considered relevant to their needs.

Amidst the widespread use of AI, major challenges have arisen regarding data privacy and security. Consumers are becoming increasingly aware of the risks of their information being leaked in digital activities. Zarsky (2016) states that the use of data in digital systems must follow ethical principles so as not to pose a threat to customer privacy rights. This requires companies to implement strong data protection policies in every digitalization process. In addition, transparency in data

management is an important factor in building customer trust. Thus, data security is an integral part of AI-based marketing strategies.

Another challenge in AI implementation lies in the potential for algorithmic bias that can affect the quality of marketing decisions. This bias arises from unrepresentative data or poorly designed machine learning models. O'Neil (2016) asserts that algorithmic bias can lead to unfairness in decision-making, which has a negative impact on consumers. Therefore, companies must ensure that AI systems are developed with the principles of fairness and accuracy in mind. Oversight of the algorithm design process is important in maintaining the credibility of the company. Thus, bias management must be a key focus in every AI application.

Some organizations still face obstacles in adopting AI technology due to limited resources and organizational readiness. Digital transformation requires cultural adaptation and improved human resource competencies. Westerman et al. (2011) explain that the success of digital transformation is greatly influenced by an organization's readiness to accept technological change. This shows that digital transformation is not only about technological tools, but also about human readiness and business processes. Companies must build ecosystems that support continuous innovation. Thus, internal readiness is an important foundation for implementing AI.

In the retail sector, AI has been proven to increase the effectiveness of marketing strategies through product recommendations, trend analysis, and inventory optimization. This technology enables a deep understanding of customer shopping behavior. Grewal et al. (2017) emphasize that the integration of AI in modern retail improves the quality of the shopping experience through automation and intelligent interactions. Retail companies that are able to utilize AI gain an advantage in responding quickly to market needs. In addition, AI helps design more targeted promotions. Thus, retail is a sector that benefits greatly from the development of AI.

In the context of digital marketing, AI also plays a role in improving content quality through automatic optimization based on user behavior. AI systems are able to determine the most relevant content for each audience. Xu et al. (2019) explain that personalized content increases engagement because it is able to respond to the emotional and informational needs of customers. This confirms that the quality of digital content is increasingly dependent on AI's ability to read user interaction patterns. Companies that utilize this technology can significantly improve the effectiveness of their digital campaigns. Thus, AI is an important factor in content strategy development.

In the field of customer relationship management, AI helps companies develop predictive analytics to identify customers at risk of churn or loss of interest. The accuracy of these predictions helps companies take preventive measures to retain customers. Wedel and Kannan (2016) emphasize that AI-based predictive analytics strengthen organizations' ability to make more timely strategic decisions. This technology expands the effectiveness of loyalty programs through more accurate segmentation. In addition, AI helps companies continuously monitor changes in customer preferences. Thus, customer relationship management becomes more efficient and targeted.

On a macro scale, the presence of AI is changing the way industries understand the competitive landscape and global market behavior. Companies are now utilizing cross-border data to optimize their international marketing strategies. Wilson and Daugherty (2018) show that AI helps companies create new collaborations between humans and machines in strategic decision-making processes. This approach enables companies to develop innovations that were previously difficult to achieve. With the ability to analyze global data, organizations can tailor their marketing strategies to the dynamics of each region. Therefore, AI also broadens the organization's insights in a global context.

Overall, the transformation of marketing strategies in the era of AI-driven customer experience shows that technology is a fundamental element in shaping a company's competitiveness. This change has profound strategic implications for organizations, especially in understanding customer needs and designing more meaningful interactions. According to Shah (2025), AI is the main foundation for organizations that want to achieve long-term competitive advantage in the digital era. This shows that companies must continue to adapt to technological developments to remain relevant. By comprehensively understanding the role of AI, organizations can build more effective and sustainable marketing strategies.

4. CONCLUSION

Companies should prioritize building a solid technological foundation that supports high-volume data processing and real-time analytics. This includes investing in cloud computing, integrated customer data platforms (CDP), AI-ready CRM systems, and automation tools. A strong infrastructure ensures that AI applications such as recommendation engines, chatbots, and predictive analytics can operate effectively and deliver optimal customer experiences. Because AI performance relies heavily on the quality and integrity of data, organizations must improve data governance frameworks. This involves establishing clear protocols on data collection, storage, and processing; adopting cybersecurity best practices; and complying with privacy regulations such as GDPR or national data protection laws. Transparent data policies also help build customer trust, which is increasingly critical in the digital era.

Future research should investigate advanced data governance frameworks, AI-driven cybersecurity systems, and next-generation infrastructure models that enhance real-time analytics and support large-scale data integration. Studies are also needed to examine how improved data quality, transparent privacy practices, and regulatory compliance shape customer trust in AI-driven environments. Additionally, researchers can explore scalable architectures—such as cloud-based CDPs and AI-ready CRM platforms—to determine their effectiveness in strengthening predictive insights, personalization, and overall customer experience performance.

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