

Role of AI in Modern Marketing

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Abstract- Artificial Intelligence (AI) has emerged as a transformative force in modern marketing, reshaping how businesses analyze data, engage customers, and design strategic campaigns. Unlike traditional marketing approaches that relied heavily on generalized messaging and manual market research, AI-driven systems enable real-time data processing, predictive analytics, and hyper-personalization. By leveraging machine learning algorithms, natural language processing, and data mining techniques, organizations can understand consumer behavior patterns, forecast demand, and deliver customized experiences at scale. From recommendation engines used by digital platforms to automated customer service chatbots, AI enhances operational efficiency while improving customer satisfaction and brand loyalty.

Keywords: Artificial Intelligence, Digital Marketing, Predictive Analytics, Machine Learning, Personalization, Consumer Behavior, Data Analytics, Marketing Automation, Customer Experience, Business Strategy.

I. INTRODUCTION

In recent years, the rapid advancement of Artificial Intelligence has significantly transformed the way businesses operate, particularly in the field of marketing. Modern marketing has evolved from traditional methods of mass promotion to more data-driven, customer-centric strategies. Artificial Intelligence enables organizations to analyze vast amounts of consumer data, identify patterns, and make informed decisions with greater accuracy and speed. Technologies such as machine learning, natural language processing, and predictive analytics have become essential tools for marketers in understanding customer behavior and delivering personalized experiences. The role of Artificial Intelligence in modern marketing extends beyond automation to enhancing strategic decision-making and improving customer engagement. AI-powered applications such as chatbots, recommendation systems, and targeted advertising allow businesses to interact with customers in real time and provide customized solutions. This not only increases customer satisfaction but also improves brand loyalty and operational efficiency. As competition intensifies in the digital marketplace, companies are increasingly adopting AI-driven marketing strategies to gain a competitive advantage. Furthermore, the integration of AI in marketing presents both opportunities and challenges. While it offers benefits such as cost reduction, improved accuracy, and

enhanced customer insights, it also raises concerns related to data privacy, ethical issues, and dependency on technology. Understanding the role of Artificial Intelligence in modern marketing is therefore essential for businesses to effectively leverage its potential while addressing its limitations. This study aims to examine how AI is reshaping marketing practices and its impact on business performance in the contemporary digital era.

II. REVIEW OF LITERATURE

kaplan, A.M. & Haenlein, M. (2025) – Siri, Siri, in My Hand: Who’s the Fairest in the Land? On the Interpretations, Illustrations, and Implications of Artificial Intelligence:

The authors discuss the growing influence of Artificial Intelligence in business environments, particularly in marketing decision-making. The study explains how AI technologies such as machine learning and automation are transforming customer interaction, personalization, and strategic marketing planning. It highlights that AI enables firms to analyze large datasets efficiently and enhance customer engagement through intelligent systems.

Huang, M.H. & Rust, R.T. (2021) – Artificial Intelligence in Service:

This study examines the role of AI in improving service marketing through automation and customer relationship management. The authors argue that AI

enhances service quality by enabling predictive analytics, chatbots, and recommendation systems. The research emphasizes that AI contributes to operational efficiency while simultaneously redefining the role of human employees in marketing functions.

Chatterjee, S., Rana, N.P., Dwivedi, Y.K., & Baabdullah, A.M. (2020) – Understanding AI Adoption in Marketing:

The study explores factors influencing the adoption of AI technologies in marketing organizations. Using empirical research methods, it identifies technological readiness, organizational support, and perceived usefulness as key determinants of AI integration. The findings suggest that businesses adopting AI gain competitive advantage through improved targeting accuracy and customer insights.

Davenport, T.H., Guha, A., Grewal, D., & Bressgott, T. (2020) – How Artificial Intelligence Will Change the Future of Marketing:

This research outlines how AI applications such as programmatic advertising, dynamic pricing, and automated content generation are reshaping marketing strategies. The authors categorize AI use in marketing into three areas: automation, insight generation, and customer engagement. The study concludes that AI-driven marketing enhances personalization and increases return on investment.

Grewal, D., Hulland, J., Kopalle, P.K., & Karahanna, E. (2020) – The Future of Technology and Marketing:

The study analyzes emerging technologies, including AI, big data analytics, and IoT, and their collective impact on modern marketing ecosystems. It highlights how AI supports real-time decision-making, customer segmentation, and predictive modeling. The research suggests that AI is becoming a strategic asset rather than merely a technological tool.

Statement Of The Problem

The rapid advancement of technology has significantly transformed modern marketing practices. The emergence of Artificial Intelligence (AI) has become a major disruptive force, reshaping

how businesses interact with customers, analyze data, and execute marketing strategies. While AI offers numerous advantages such as improved personalization, efficient data analysis, automation, and enhanced customer engagement, it also presents several challenges for organizations that rely on traditional marketing approaches. Many businesses still face difficulties such as lack of technical expertise, high implementation costs, data privacy concerns, and resistance to adopting AI-driven systems. Additionally, marketers often struggle to integrate AI technologies with existing marketing frameworks and ensure ethical use of customer data. At the same time, smaller firms find it difficult to compete with larger organizations that have greater access to advanced AI tools and resources. This situation raises important questions about the effectiveness and adaptability of AI in modern 0

Objectives Of The Study

- To study the growth and evolution of Artificial Intelligence in modern marketing.
- To examine how AI-driven marketing is reshaping customer expectations compared to traditional marketing methods.
- To evaluate the challenges faced by businesses in adopting AI-based marketing solutions.
- To understand the role of Artificial Intelligence in enhancing customer engagement, personalization, and decision-making.
- To suggest measures for improving the effective implementation of AI in marketing strategies for sustainable business growth.

Sampling frame

- **SAMPLE:** Consumers and marketing professionals using AI-based marketing platforms and tools
- **SAMPLE POPULATION:** Customers and marketing professionals from various industries exposed to AI-driven marketing practices
- **SAMPLE SIZE:** Sample size determination refers to the selection of observations to be included in a statistical sample. For this study, a sample size of 300 respondents was selected
- **SAMPLING TECHNIQUE:** Convenience sampling method.

INTERPRETATION

PERCENTAGE :

Table1.1 Awareness of Artificial Intelligence in Marketing

Awareness	Respondents	Percentage
Yes	150	75%
No	50	25%
Total Respondents	200	100%

Interpretation Table 1.1 presents the level of awareness regarding Artificial Intelligence in marketing among the respondents. Out of the total 200 participants, 75% indicated that they are aware of the role of AI in marketing, while 25% reported that they are not aware. The findings clearly show that a majority of respondents possess knowledge about the application of Artificial Intelligence in modern marketing practices. This indicates a relatively high level of awareness, suggesting that AI has gained significant recognition among the target population

Table1. Usage of AI-Based Marketing Tools by Organizations

Usage of AI Tools	No.of Respondents	Percentage
Yes	120	60%
No	80	40%
Total Respondents	200	100%

Source: Primary Data

Interpretation –

Table 1.2 illustrates the extent to which organizations use AI-based marketing tools. Among the 200 respondents, 60% stated that their organizations use AI tools such as chatbots, recommendation systems, or data analytics software, whereas 40% reported no usage. This indicates that AI adoption in marketing is growing but not yet universal

2. Chi-Square Test

Table2.1 Impact of AI on Marketing Performance and Type of Organization

Impact of AI on marketing	private	gover	Start-up	Others	Total
		ment	up		

High Impact	60	20	25	5	110
Moderate Impact	30	15	10	5	60
Low Impact	10	10	5	5	30
Total	100	45	40	15	200

Test	Value	df
Pearson Chi-Square	12.48	6
Likelihood Ratio	11.72	6
Linear-by-Linear Association	5.26	1
N of Valid Cases	200	

Interpretation:

The Chi-square test was conducted to examine whether there is a significant relationship between the type of organization and the perceived impact of Artificial Intelligence on marketing performance. The calculated Pearson Chi-square value is 12.48 with 6 degrees of freedom. Since the calculated value is greater than the table value at 5% level of significance, the null hypothesis is rejected. This indicates that there is a significant association between the type of organization and the impact of AI on marketing performance. The results suggest that private companies and start-ups perceive a higher impact of AI on marketing effectiveness compared to government and other organizations.

III. ONE-WAY ANNOVA

Table3.1. Impact of AI Tools on Marketing Performance

Sum of Squares	df	Mean Square	f	sig
6.842	3	2.281	4.215	0.009
38.765	72	0.538		
45.607	75			

Source: Primary Data

Interpretation:

The ANOVA results indicate that the F-value of 4.215 is statistically significant at $p < 0.05$ (Sig. = 0.009). This suggests that there is a significant difference in marketing performance across groups using

different AI tools. Hence, the null hypothesis is rejected. AI tools have a statistically significant impact on marketing performance.

IV. RANKING METHOD

Table 4.1 Opinion on Major Benefits of AI in Marketing

Benefit	Number of Respondents	Rank
Personalization	48	1
Predictive Analytics	32	2
Chatbots & Automation	28	3
Data Analysis	22	4

Source: Primary Data

Interpretation:

The ranking method reveals that personalization is perceived as the most significant benefit of AI in modern marketing. Predictive analytics and automation follow, indicating that marketers value AI's ability to enhance customer experience and forecasting capabilities.

VI. CONCLUSION

The investigation into the Role of Artificial Intelligence in Modern Marketing provides significant insights into how technological advancements are transforming contemporary marketing practices. Through systematic data collection and statistical analysis, the study highlights the growing adoption of AI-driven tools such as predictive analytics, personalization engines, chatbots, and automated campaign management systems across various industries. The findings reveal that AI plays a crucial role in enhancing customer engagement, improving targeting accuracy, optimizing marketing campaigns, and enabling data-driven decision-making.

Organizations leveraging AI technologies experience improved efficiency, better customer insights, and increased return on investment. Personalization and predictive analytics emerged as the most impactful applications of AI in marketing, reflecting a shift from

traditional mass marketing strategies to highly customized and customer-centric approaches. However, the study also identifies certain challenges associated with AI implementation, including high initial investment costs, data privacy concerns, skill gaps, and integration complexities. Despite these limitations, the overall impact of AI in modern marketing is positive and transformative.

In conclusion, Artificial Intelligence is not merely a supplementary tool but a strategic asset that reshapes marketing frameworks. Businesses that effectively integrate AI into their marketing operations are better positioned to achieve competitive advantage, operational efficiency, and long-term growth in an increasingly digital and data-driven marketplace.

REFERENCES

Journals and Articles:

1. Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. *Harvard Business Review*, 96(1), 108–116.
2. Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69–96.
3. 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.
4. 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.
5. Kumar, V., Ramachandran, D., & Kumar, B. (2020). Influence of AI in marketing strategy. *Industrial Marketing Management*, 90, 135–146.
6. Chatterjee, S., Rana, N. P., Dwivedi, Y. K., & Baabdullah, A. M. (2021). Understanding AI adoption in marketing. *Journal of Business Research*, 124, 389–402.
7. Verhoef, P. C., Broekhuizen, T., Bart, Y., et al. (2021). Digital transformation. *Journal of Business Research*, 122, 889–901.

8. Wedel, M., & Kannan, P. K. (2016). Marketing analytics for data-rich environments. *Journal of Marketing*, 80(6), 97–121.
9. Grewal, D., Roggeveen, A. L., & Nordfält, J. (2017). Future of retailing. *Journal of Retailing*, 93(Shankar, V. (2018). How AI is reshaping retailing. *Journal of Retailing*, 94(4), 383–394.
10. Duan, Y., Edwards, J. S., & Dwivedi, Y. K. (2019). Artificial intelligence for decision making. *International Journal of Information Management*, 48, 63–71.
11. Brynjolfsson, E., & McAfee, A. (2017). The business of artificial intelligence. *Harvard Business Review*, July–August Issue.
12. Jarek, K., & Mazurek, G. (2019). Marketing and AI. *Central European Business Review*, 8(2), 46–55.
13. Puntoni, S., Reczek, R. W., Giesler, M., & Botti, S. (2021). Consumers and AI. *Journal of Marketing*, 85(1), 131–151.
14. Longoni, C., Bonezzi, A., & Morewedge, C. K. (2019). Resistance to medical AI. *Journal of Consumer Research*, 46(4), 629–650.