

# World of Digital Marketing, Importance of Artificial Intelligence

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**Abstract:** *This study reviews digital marketing AI experiments. AI may affect marketing and other industries. AI helps companies analyze massive volumes of data, spot patterns, and make smart decisions, changing online commerce. Evaluation of 26 relevant papers was done using library research. Every study was published 2017–2023. Study suggests AI may enhance customer interactions, advertising campaigns, and marketing effectiveness. Digital marketing uses AI for tailored content, chatbots for customer support, recommendation engines for new ideas, and predictive analytics for targeting and segmentation. The research examined AI's digital marketing pros and cons.*

**Keywords:** Personalization, Predictive Analytics, Chatbots

## I. INTRODUCTION

AI has changed digital marketing and other sectors. Digital marketing promotes goods and services (Mkwizu, 2020; Yasmin et al., 2015). Magano et al. (2020) see digital marketing as the future of marketing and a fast growing scientific subject. Due to significant technology breakthroughs, organizations are embracing AI to improve their marketing and acquire a digital advantage. A computerized system that learns to assist sentient creatures prosper is artificial intelligence (AI), according to Russell and Norvig (2016). AI-powered digital marketing enhances Facebook and Instagram user experience. The computers meticulously assess customer data before matching them with offers. AI may help marketers discover and anticipate trends, according to E. Forrest, B. Hoanca, 2015, D. Dumitriu, and M.A.M. Popescu (2020).

This research study explores digital marketing's AI uses, pros, and cons. The latest research and industry practices demonstrate how artificial intelligence (AI) is changing how organizations engage with their target audience, improve marketing, and encourage digital growth.

### Research Objectives

- To explore the role of artificial intelligence in digital marketing by examining recent relevant studies.
- To study various applications of artificial intelligence in digital marketing.
- To understand the key benefits and the potential challenges associated with implementing artificial intelligence in digital marketing strategies.

### Various Applications of Artificial Intelligence in Digital Marketing

#### Customer Segmentation:

According to Kotler and Keller (2016), customer segmentation helps firms identify profitable client categories, target marketing, and better allocate resources. AI algorithms analyse demographic data, internet behaviour, and social media interactions to help advertisers segment their audience (Smith et al., 2019). By segmenting customers by preferences and interests, marketers can personalize their pitch to each group.

#### Personalized Advertising:

AI has transformed other sectors, including digital marketing. Estrada-Jiménez et al. (2016) define personalized advertising as offers tailored to each consumer and placed next to the website's content to blend in. Businesses may

reach clients with relevant offerings via customized advertising (Jung, 2017). Advertisers invest on ad customisation because they see results (Evergage, 2019).

AI-powered recommendation systems personalise consumer ads using machine learning (Li et al., 2020). User activity data is used to understand preferences and deliver more relevant advertising that are more likely to sell. Personalized advertising boosts company conversions and user experience.

#### **Content Creation:**

Gagnon (2014) offers "show what you know" material to market a company and its goods. Every organization should provide content that educates consumers on what it "knows". Gagnon (2014) defines "know" as "improving organizational knowledge," which should be useful, entertaining, and competitive. People should ponder about the information so they return to the company for their needs. NLP-powered AI can now produce high-quality material (Gupta and Agrawal, 2019). NLP chatbots can answer customer inquiries and deliver accurate information in real time. AI-powered content creation tools let businesses write blog posts, social media updates, and email newsletters.

#### **Chatbots**

Chatbots, AI-powered computer programs in digital marketing platforms, advise customers on how to improve human interaction and allow natural language communication (Chopra, 2020). Doctors and attorneys utilize chatbots for professional purposes as well as conversation. Taxonomy, civic duty, consumer protection, cyber security, privacy and data protection, and IPR are considered with other human rights issues (Leaua and Didu, 2021).

#### **Data Analysis:**

AI systems can analyze and analyse enormous volumes of data in real time, giving marketers valuable insights into client behavior and preferences (Bughin et al., 2018). Marketers may better focus their efforts and understand client preferences by using AI-powered data analysis.

#### **Key Benefits of Implementing Artificial Intelligence in Digital Marketing**

##### **a. Improved Customer Relations**

AI will provide digital marketers a lot of consumer data to leverage to develop personalized experiences. This will strengthen client connections and raise brand awareness.

##### **b. Increased Productivity**

Digital marketers may automate monotonous processes using AI. This will boost production and save up time and resources.

##### **c. Effective Marketing**

In advertising, AI reduces assumption. AI-driven data analysis and services help digital marketers better their strategy.

##### **d. Increased Return on Investment (ROI)**

AI will help digital marketers make better decisions and create better content. Improved audience understanding allows them to target digital marketing with a greater ROI.

##### **e. Improved User Experience**

AI will help digital marketers target the appropriate audience with the right content. Customers are more comfortable when they know what to look for. AI-powered companies are more likely to attract customers, studies say.

#### **Potential Challenges Associated with Implementing Artificial Intelligence in Digital Marketing**

##### **Loss of Jobs**

As AI technology improves, worry and frenzy have spread, especially in internet marketing. This is because AI-based technology might harm this field's experts. Society needs AI to adapt better. Workers must always enhance their abilities to retain personnel.

##### **lack of high-quality data**

In a world with frequent data updates, marketing must be improved via sales. One of AI's biggest problems is poor data. Insufficient data sets exist for AI processing.

### **Lack of Transparency**

AI is used in marketing decision-making, making it hard to understand. Identifying system flaws and ensuring ethical usage of technology is tough.

### **Lack of Privacy**

Most digital marketers worry that AI will compromise our privacy; data breaches, including identity theft, have increased on many platforms. Many consumers are becoming more security and privacy conscious.

### **Lack of Creativity**

AI can automate many marketing chores, but it cannot match human ingenuity and insight. Thus, human-created advertising campaigns without emotional effect or authenticity may occur.

## **II. LITERATURE REVIEW**

### **The Role of Artificial Intelligence in Digital Marketing by Examining Recent Relevant Studies**

Hadalgekar and Desai studied AI in digital marketing in 2023. The research investigated how AI may improve consumer engagement and marketing. The authors conducted a comprehensive literature review on AI in digital marketing. They mentioned chatbots, recommendation systems, and predictive analytics as AI applications. Their discussion on the pros and cons of using AI in digital marketing stressed the necessity for firms to adapt to this technology-driven world.

In "Digital Transformation 4.0: Integration of AI & Metaverse in Marketing," Bharati Rathore (2023) examined AI and metaverse integration in marketing. AI and the metaverse might transform marketing and consumer experiences, according to the report. This connection may boost brand loyalty, consumer engagement, and tailored marketing initiatives, according to the study. The study showed how companies may use AI and the metaverse to build immersive virtual experiences for consumers to connect meaningfully with goods and services.

The 2022 research "AI in Social Media Marketing" by Hafizah Omar Zaki studied AI in social media marketing. AI technologies like machine learning algorithms and natural language processing may enhance many social media marketing methods, according to the report. The writers explored how AI might automate content development, optimize ad targeting, analyze consumer behavior, and boost social media engagement. They noted that AI might boost social media marketing efforts' efficiency, personalization, and ROI.

Bawack et al. (2022) examined AI in e-commerce using bibliometrics and literature review. The authors examined a large collection of scientific publications from several sources to identify significant themes and trends in e-commerce AI adoption. E-commerce uses AI for chatbots for customer service, tailored advice, fraud detection, supply chain management, and price optimization, according to the report. The poll also showed rising interest in machine learning and natural language processing in e-commerce.

Kumar, V., Rajan, B., and Lecinski, J. (2019) study AI in customized engagement marketing. AI might transform marketing by providing scaled tailored consumer interactions, the authors said. They described how AI might gather and analyze enormous volumes of client data to understand preferences and habits. Marketers may use this data to personalize marketing messages and offers. The report also discussed machine learning algorithms and natural language processing for tailored interaction marketing. These methods let marketers automate content production and campaign optimization, improving efficiency and effectiveness. The authors stressed that AI should improve human marketers, not replace them. Marketers can boost consumer happiness and loyalty by using AI to provide relevant and engaging experiences.

Brill, T. M., Munoz, L., and Miller, R. J. (2019) investigated Siri and Alexa consumer satisfaction. The research examined how AI affects consumer experience and how these digital helpers affect user happiness. Researchers polled 300 people on their AI app use, expectations, and opinions. The results showed that perceived utility, simplicity of use, dependability, and customisation affect digital assistant users' happiness. The report also stressed the relevance of AI system trust for consumer happiness. The study revealed consumers' views on AI apps and suggested ways for organizations to better AI technology and user experiences.

Kietzmann, Paschen, and Treen (2018) studied how marketers may employ AI in advertising across the customer experience. AI can alter advertising by giving customers tailored and targeted experiences, the authors said. AI applications like chatbots, recommendation systems, and virtual assistants may boost consumer engagement and

advertising effectiveness. The article stressed the need of knowing customer behavior and preferences for AI advertising. AI algorithms can find patterns and trends in massive data sets to help marketers offer relevant content to customers at various points of their journey.

The authors advised marketers to be customer-centric and develop trust with customers via transparent data practices. This study report showed how AI can transform advertising by personalizing customer experiences. Understanding customer behavior and developing confidence via transparent data methods were stressed. Chatbots and recommendation systems may help marketers engage customers throughout the buying experience.

In "AI: the next digital frontier?" Bughin et al. (2017) examined how AI may affect different businesses and economies. AI might transform productivity and economic development, but its acceptance and deployment must be carefully considered, according to the authors. The report said that AI is already changing healthcare, manufacturing, and finance. Data availability, talent acquisition, and regulatory issues impede AI implementation, the scientists found. They stressed the need of creating an AI strategy that matches corporate goals and capabilities. Bughin et al. (2017) suggested that governments should spend in R&D, education, and infrastructure to promote AI development. They also stressed the need for government, commercial, and academic cooperation to solve AI ethics.

### III. CONCLUSION

AI changes digital marketing. This review assessed the importance of AI in digital marketing using current, relevant studies (2017–2023). Chatbots, automated content creation for digital marketing, personalised advertising, customer segmentation, which is essential for targeted marketing campaigns, and personalised advertising, which is the main challenge for digital marketers to balance personalised advertising experiences and user privacy, were discussed in this paper. This research also examined the pros and cons of using AI in digital marketing. Digital marketers must stay current with AI and use it to boost company. AI in digital marketing requires large financial inputs. Small firms with limited resources and finance may struggle to deploy AI. The lack of quick AI adaptability may lead to missed chances or poor initiatives, emphasizing the necessity for digital marketing professional growth. AI does various digital marketing duties automatically. However, human ingenuity and intuition are still essential for effective marketing initiatives. In conclusion, although AI's potential for digital marketing growth is yet unknown, its overuse may reduce human touch and authenticity, which may hurt consumer engagement and brand loyalty.

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