

## THE ROLE OF ARTIFICIAL INTELLIGENCE IN SHAPING THE FUTURE OF MARKET RESEARCH

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### **Abstract**

*AI is a computer science technology that teaches computers to comprehend and emulate human communication and behavior. Artificial Intelligence (AI) has vast potential in marketing. It aids in proliferating information and data sources, improving software's data management capabilities, and designing intricate and advanced algorithms. AI is changing the way brands and users interact with one another. The application of this technology is highly dependent on the nature of the website and the type of business. Marketers can now focus more on the customer and meet their needs in real time. By using AI, they can quickly determine what content to target customers and which channel to employ at what moment, thanks to the data collected and generated by its algorithms. Users feel at ease and are more inclined to buy what is offered when AI is used to personalise their experiences. AI tools can also be used to analyse the performance of a competitor's campaigns and reveal their customers' expectations. Machine Learning (ML) is a subset of AI that allows computers to analyse and interpret data without being explicitly programmed. Furthermore, ML assists humans in solving problems efficiently. The algorithm learns and improves performance and accuracy as more data is fed into the algorithm. For this research, relevant articles on AI in marketing are identified from Scopus, Google scholar, research Gate and other platforms. Then these articles were read, and the theme of the paper was developed. This paper attempts to review the role of AI in marketing. The specific applications of AI in various marketing segments and their transformations for marketing sectors are examined. Finally, critical applications of AI for marketing are recognised and analysed.*

**Keywords:** *Artificial Intelligence (AI), Applications, Customer, Data Analysis, Marketing*

### **Introduction**

AI is a computer science technology that teaches computers to comprehend and emulate human communication and behaviour. Based on the data provided, AI has created a new intelligent machine that thinks, responds, and performs jobs the same way people do. AI can do highly technical and specialised activities such as robotics, speech and picture recognition, natural language processing, problem-solving, etc. AI is a collection of several technologies capable of executing tasks that need human intelligence. When applied to standard commercial processes, these technologies can learn, act, and perform with human-

like intelligence. It simulates human intelligence in machines, saving us time and money in business transactions.

Artificial Intelligence (AI) will become an integral part of every commercial entity across the globe in the long term. The new trends in AI-driven automation reflect substantial changes in the AI landscape. It is evident in the form of reconfigured ideas, interests, and investments in the field of AI adoption by the enterprise. This technology is sophisticated enough to recognise faces and objects, which has enormous implications for various business applications. For security purposes, facial recognition can distinguish individuals; On the other hand, object detection can be used to distinguish and analyse images. AI treats human images like cookies, allowing for more personalised services based on customers' preferences. Some businesses are experimenting with facial recognition to diagnose their customers' moods and, as a result, make appropriate product recommendations.

AI is primarily concerned with user retention and lead conversion in digital marketing. It can guide a user in the direction that aligns with the business's goals by using intuitive AI chatbots, intelligent email marketing, interactive web design, and other digital marketing services. Several factors determine the impact of AI on digital marketing. ML, a subset of AI, is concerned with computer programmes that access data and use it to learn independently. It compiles data from various places, including social media accounts, menus, online reviews, and websites. AI then uses the information to produce and deliver content relevant to the audience. AI software enables in-depth online analysis of restaurants and their customers. By implementing AI into marketing strategy, businesses can use the available data better and reach out to potential customers with attractive commercials at more convenient times.

Digital marketing gives a visibly pleasant experience for clients with AI for advertising across social media and digital platforms such as Facebook and Instagram. These platforms thoroughly assess users' information before directing them to offers appropriate to their wants. AI also assists marketers in identifying and forecasting trends. It prevents the company from overspending on digital advertising and ensures that the money is well spent. The ability of a computer to recognise objects, scenes, and activities in images is referred to as computer vision. Medical imaging analysis, face recognition, public security, and security monitoring are a few uses. If computer vision and AI are properly coupled, robots can predict what will happen in the future and act accordingly based on potential changes.

AI has simplified building client profiles and comprehending the customer journey process. It allows brands to quickly and easily provide valuable personalised content for the various client profiles in any marketing funnel stage and throughout each avenue. Based on historical data, AI applications in digital marketing can determine what content is most likely to bring customers back to the site. AI identifies which customers are most likely to unsubscribe from a specific service and analyses which features are standard among

unsubscribers. As a result of these analytics, marketers can plan their future campaigns and implement practices encouraging people to stay.

AI applications in digital marketing can sift through billions of data points on the internet and tell precisely what it needs to know for business. It will describe what price will get the most conversions, when is the best time to post, what subject line will get the most attention, etc. Intelligent marketers stay current with all trends. It simplifies jobs and allows for more creativity and out-of-the-box thinking. It also adds value to the customers who benefit. This paper examined AI and its need in the marketing sector. We briefly cover the various applications of AI in several marketing segments. The paper also looks at other AI-based transformations for the marketing industries. Finally, the study identifies and discusses important uses of AI in marketing.

### **Need for Artificial Intelligence in Marketing**

AI is a fascinating and cutting-edge technology that complements a company's current content strategy. This technology is a broad term that encompasses a wide range of technologies such as natural language processing, ML, deep learning, computer vision, and many others. ML significantly impacts the digital marketing scenario because of its ability to analyse data and provide analytical tools. As a result, it assists marketing teams in conducting needs-based analyses. Businesses that use AI tools save time by focusing on other aspects of digital marketing. AI is a vast and ongoing technological evolution with far-reaching consequences. As a result, it is advised to embrace AI in digital marketing to foster innovation and improve productivity in the coming years.

Marketers can use AI to gain deeper consumer insights and better understand how to categorise and drive customers to the next step in their journey, providing the best possible experience. Marketers can increase ROI without spending on ineffective attempts by thoroughly examining consumer data and knowing what they truly want. They can also avoid wasting time on mind-numbing advertising that irritates clients. AI will personalise marketing in several ways. Many firms are already using AI to personalise their websites, emails, social media posts, videos, and other materials to better respond to customer demands. One of the primary goals of AI is to automate jobs that formerly needed human intellect. This decrease in the number of labour resources required by an organisation to execute a project, or the amount of time an individual must dedicate to routine chores, allows for significant efficiency benefits.

### **Research Objectives**

- AI to personalise marketing emails based on consumer preferences and behaviour to increase engagement and persuade them to convert or make a buy.
- AI automated the segmentation process and began providing personalised material through email, SMS messaging, and in-app notifications based on each recipient's lifecycle stage.

- AI assist in preserving privacy and the ownership of private data and its derivative assets

## **How AI is used in Marketing Today**

### **Website Copy**

In the realm of digital marketing, AI is being used to create, streamline and improve website copy on a large scale. For example, Wix's AI text creator lets you generate product descriptions, about pages, FAQs and even newsletters with a few simple prompts.

### **Personalization**

An effective small business marketing strategy means reaching your target audience in the most effective way possible using the fewest resources possible. AI marketing can replace manual guesswork and help your business use your already-existing customer data more efficiently, satisfying this requirement perfectly.

### **Brand Reputation**

You can use an AI logo maker to shape your branding, install a chatbot like Tidio to respond to customer inquiries 24/7 or use AI to instantly generate assets like blogs, images and much more. Wix's built-in AI functionality can even generate social post captions, giving you three options to choose from—complete with emojis and relevant or trending hashtags.

### **Advertising**

Generative AI can also automate otherwise tedious marketing tasks like creating different versions of ad copy for various social profiles. Additionally, if you struggle to come up with ideas for ad copy at all, AI can be a lifesaver. For example, with Wix, you can use AI to generate titles and descriptions for Google Ads, and then publish them directly from your site editor.

Some additional ways you can use AI to optimize your small business marketing efforts include:

- Providing real-time product suggestions based on previous customer interactions
- Using programmatic ads to help maximize media planning efforts
- Automatically pricing items based on supply and demand data to boost sales

### **Benefits of AI Marketing**

AI benefits small businesses by optimizing their marketing strategies to move faster and more efficiently. "When people come to a small business, they come for a specific reason," says Shachaf Rodberg, researcher and curator at Wix who works to inspire internal teams with industry news and marketing trends. "Any type of marketing tool will automate manual tasks and allow you to focus on talking with people and creating a good customer

experience. You can use AI to scale yourself as a person when you don't have a large budget."

**Saves time:** 97% of small businesses in an Unbounce survey said that AI helps them save a significant amount of time on marketing tasks. Imagine, for example, using generative AI to write unique product descriptions for hundreds of items in an online store. This task would have taken days—if not weeks—to accomplish manually, versus seconds with AI.

**Increases your Return on Investment (ROI):** AI marketing tools increase ROI by reducing the time you spend on repetitive tasks. You can create marketing materials more quickly, which makes your message more relevant, and allows you to optimize your campaigns more efficiently.

**Accelerates Revenue Growth:** Per the Unbounce survey, 82% of small businesses claim that AI marketing tools help accelerate their revenue growth. AI can help you create more effective blog outlines, suggest copy for social media posts, transcribe video and audio content, and allow you to launch campaigns more quickly.

**Improve Customer Experience:** One of the most promising functions of AI marketing is the ability to analyze large volumes of customer data. This data can be used to understand your customers' preferences, detect changes in behavior and make personalized recommendations for products and content. All of this contributes to creating a better customer experience—and much of this can be automated.

**Remain Competitive:** AI can also help your business become more competitive using programmatic ads and cutting-edge media. Small businesses traditionally don't have the time or resources to compete with the big brands in this capacity. Now, you can use tools and AI features like Wix's AI text creator to generate newsletter copy, or Synthesia.io to create realistic talking-head avatar videos from text. It's a way to keep your marketing ideas fresh.

### Challenges of AI Marketing

While AI marketing can benefit your business, it's not always a plug-and-play option. You'll still need to devote training, time and financial resources to make sure you're getting the best outcome in any type of marketing initiative.

Here are some of the challenges you may face when implementing AI marketing solutions:

**Privacy:** Privacy can be an ongoing challenge since you need to confirm that you have permission to share customer information with the third-party tools in an ethical and private form. You should create a system of best practices within your business to ensure that customer data is processed, analyzed and shared in a secure manner.

**Content quality:** The quality of content generated by AI tools might not always align with your brand's voice or resonate with your target audience. Creating unique and custom content requires human oversight and editing. It's also important to validate that all content

created by an AI tool isn't plagiarized and is accurate, since AI tools have been known to "hallucinate" (e.g., make up statistics, links, facts and stories.) CEO of OpenAI, Sam Altman, even called this out while speaking to the Indra prastha Institute of Information Technology Delhi in 2023. "I probably trust the answers that come out of ChatGPT the least of anybody on Earth," Altman said.

**Bias:** CMS Wire reports that because AI tools use already-existing data, it's likely they will reproduce any inherent bias in the dataset, be that racial, gender, ethnic or other social inequality. You'll thereby need to be vigilant in checking that your AI-generated content is not assuming these biases.

**Customer Adoption:** It may make time for customers to acclimate to any customer-facing marketing tools. While some customers may feel uneasy about the shift at first, Shachaf says as the quality of AI improves, and these tools are more embedded in the culture, it's likely that more people will learn to live with them. The first step towards that, he says, is simply to disclose to the customer that AI technology is assisting the interaction. "Human behavior doesn't change: technology can change, tools can change, but humans are basically the same," Shachaf says.

**Disruption to Workflow:** Implementing AI tools can sometimes disrupt established workflows, necessitating adjustments and adaptations. If you're a one-person business, then it's easy to adjust your processes to new platforms and tools—but for larger businesses, it's important you train and prepare your team to ensure that you're using all AI tools effectively.

## Conclusion

It is no longer a debate that companies who provides great customer experiences will be winners in the Fourth Industrial Revolution — where intelligence will reign supreme. The Fourth Industrial Revolution has been conceptualizing the company to have integrated data about customers and products across all channels and products, using that data to understand better its end customer experience and visibility across all functional areas. In this context, AI and ML have played a crucial role in big data analytics to anticipate and provide guided experiences to meet customer expectations. Through this research, the authors provided a holistic view of using AI to enhance customer experience. Leveraging AI and predictive analytics is the key to offering customer experiences that builds advocacy and customers for life. Event-based architectures combined with AI and predictive analytics is the future. There is no end state, but it is a journey all companies must begin as we enter the Fourth Industrial Revolution. Disruptive technologies such as internet of things, big data analytics, blockchain, and artificial intelligence have changed the ways businesses operate. Of all the disruptive technologies, artificial intelligence (AI) is the latest technological disruptor and holds immense potential for manufacturing, pharmaceuticals, healthcare, agriculture, logistics, and digital marketing. Many practitioners and academicians worldwide are trying to figure out the best fit AI solutions that their organizations can utilize. However,

there is a lack of bibliometric reporting that exhibit detailed research pattern of AI in marketing. Therefore, this study aims to aggregate the research studies about AI in marketing field.

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