

## ROLE OF ARTIFICIAL INTELLIGENCE IN ENHANCING DIGITAL MARKETING IN NIGERIA

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### ABSTRACT

This study examined the role of Artificial Intelligence (AI) in enhancing digital marketing in Nigeria. The objectives of the study were: to identify the prominent tools of Artificial Intelligence in digital marketing, examine the level of exposure of Artificial Intelligence tools among digital marketers, to determine the role of Artificial Intelligence on consumer buying behaviour, and to find out how Artificial Intelligence can be used in enhancing the face of digital marketing and how companies utilise it to improve their performance and customers' experience. This study employed the qualitative research method. Marketing Automation Theory and Technological Determinism Theory were adopted to back the study. Findings from the study show that AI plays a prominent role in digital marketing. The study discovered that majority of the marketers are exposed and conversant with the prominent tools of AI. It was also revealed that AI has influence in digital marketing. Further findings show that majority of the marketers and companies are using AI to improve their business and customer experience. In conclusion, the study indicates that digital marketing does not only helps marketers to reach consumers across the globe but also to measure their performance metrics. Based on the findings, it is recommended that marketers and companies who are yet to incorporate AI into their marketing strategies should do so in order to improve their businesses and customers' experiences.

**KEY WORDS:** Artificial Intelligence, Digital marketing, Enhancement, Technology, Consumer

### Introduction

At creation, the creator (God) thought it wise to deposit intelligence in humans, such that they have the power of choice, whether good or evil. Over time, technology by man (using the wisdom given by God) started advancing

extensively. Retailing activities now largely demanded to become technology-oriented to survive. Constant adaptation of the advent of these technologies brought about the emergence of Artificial intelligence. The era of AI marketing is rapidly growing, and AI is becoming more sophisticated and widely adopted today in marketing.

The idea has been around and thorough AI research can be followed back to the 1950s, when Alan Turing developed the famous Turing Test, when he proposed to consider if machines can think (Turing, 2004); and John McCarthy coined the term Artificial Intelligence in 1955, when John arranged the 1956 Dartmouth Summer machines research project on Artificial Intelligence. An AI concern, according to their proposition, seems to be "that of making a machine behave in ways that would be called smart if a human were doing so," (McCarthy *et al.*, 1955).

Natural or human intelligence, according to Oxford Dictionary is the ability to acquire and apply knowledge and skills. This definition is in the context of human behaviour. Now if this Intelligence is applied without blood and cell then it becomes Artificial Intelligence. Therefore, Artificial intelligence (AI) refers to the transfer of human intelligence to machines. In other words, AI are machines or systems designed to stimulate human intelligence and act to achieve their programmed goals. Generally, it analyses data and looks for patterns to make predictions and decisions without human intervention. It refers to the computer-assisted analytical course that attempts to form automated systems which can be labeled as intelligent. It is the automated system that inputs data to conduct tasks of intelligent beings in a manner that increases the success rate.

As stated by Demis Hassabis, the founder of Deep Mind – the AI Company of Google, Artificial intelligence is the art to make machines intelligent (Ahmed, 2015). It is the most widely accepted definition and also a well-fitting since AI is a broader term used for a number of a variety of indicators. That means AI technology is more independent and does complex or repetitive tasks. It is likely to transform digital marketing interactions with customers (Pradeep *et al.*, 2018).

Today in Nigeria, the emergence of artificial intelligence has gradually transformed the face of digital marketing, hence, changing the scenario of marketing. Technology devices/process shows no signs of emotional decision making syndrome affecting the problem area; alternatively decision are based purely on analysis of factsheet and statistics (Kask, 2014) The utilisation of artificial knowledge (AI) in showcasing is so as to constantly follow and anticipate the following buying choices of the target consumers and to improve their consumer "venture". Today, Artificial Intelligence has largely revolutionised

marketing and will totally change its shape in near future. Artificial Intelligence is smart technology that generates self-learning algorithm the machine is provided with very large amount of training data with input and output. Machines analyse the pattern and develop the algorithm for itself.

According to Wikipedia, digital marketing is the component of marketing that uses the internet and online based digital technologies such as desktop computers, mobile phones, and other digital media and platforms to promote products and services. Higher customer satisfaction is more likely when businesses adopt digital marketing to influence consumer behaviour. AI-based digital marketing makes it even easier for businesses to reach the right customers at the right time. Businesses are benefitting from AI through AI-controlled chatbots, big data and outputs from cognitive technologies. Retailers using AI powered marketing do five times better than traditional retailers. Consumer behaviour has changed dramatically due to digital marketing, with modern consumers expecting a more consistent and personalised experience.

### **Statement of the Problem**

Today, the level at which artificial intelligence is penetrating, changing, and revolutionising businesses and the digital market is becoming so alarming. The customers are increasing for the companies because AI is improving day by day and also it can make the quick decisions on the bases of data and it has the ability to perform the task accurately. A cursory look at today's digital marketing; shows that AI is penetrating through the digital marketing, at the same time, businesses and marketing are constantly adapting to the technological advancement of AI but without proper understanding on how consumers' experiences have been, and how customers perceive AI innovation as a component of their ability to learn.

Modern marketing requires an in-depth grasp of customers' wants and interests, as well as the capacity to act swiftly and effectively on that knowledge. The majority of businesses who have not included AI in their marketing are unable to make real-time, data-driven decisions (Camilleri, 2017). A huge amount of data is collected in the process for personalisation, which enables businesses to better identify consumer behavior and interests across multiple platforms and touch points. This, therefore better fit customer interest with the suitable content and increase sales, especially when consumers are engaged throughout their journey with e-commerce, from awareness, investigation, and assessment to buy, review, and consumption (Kutton, 2018).

Digital marketers are still searching for a definitive answer to this question, but recent research by Gartner shows that AI could be a disruptive force in the

market, particularly given how consumers are embracing it. While many digital marketing experts remain skeptical about the power of artificial intelligence and machine learning in their industry, the potential for transformational change and innovation is apparent. However, for now these technologies have only been used sparingly in digital marketing. According to Thilagavathy & Kumar (2021), an Artificial intelligence-driven global business advisory firm, AI and digital marketing are expected to increase by 12% in the next few years. This is astonishing because research on this subject area is limited. The research gap for this topic is quite large, with a lot of gaps in the knowledge that are available to any person trying to learn more about the topic. Research on artificial intelligence and digital marketing appears to be scattered across a few different publications, but there doesn't appear to be a single article that covers all solutions resulting from artificial intelligence and its effects on digital marketing.

However, sequel to the above, the researcher is bothered at the rapid integration of AI in digital marketing and the sudden adaptation of AI tools in digital marketing. Besides, it is still very uncertain to ascertain if AI has been able to influence and enhance the face of digital marketing in recent times. This decision to go into this study was influenced by the prevalence and the emergence of artificial intelligence and its massive growth in digital marketing. Having considered the pervasiveness of artificial intelligence and machine learning, and the dynamic nature of the industry, the focus of this study is on analysing its effect when applied in digital marketing. Therefore, this study tends to find out the role of artificial intelligence in enhancing digital marketing.

### **Objectives of the Study**

The objectives of the study were to:

1. identify the prominent tools of artificial intelligence in digital marketing
2. examine the level of exposure of artificial intelligence tools among digital marketers
3. determine the role of artificial intelligence on consumer buying behavior
4. find out how artificial intelligence can be used in enhancing digital marketing and utilising it to improve performance.

## **LITERATURE REVIEW**

### **The Concept of Artificial Intelligence**

The concept of AI has been fueling science fiction since about 1920 when the Czech writer Karel Capek published 'RUR' his play about a mutiny led by a multitude of robots. Speculation about the behaviour of intelligent machines has made for fertile imaginations ever since. Today, AI is not a fantasy, and the

implications of its future are far reaching. AI is pervasive, embedded in personal assistants helping us manage our routines and answering our questions. It is powering the code that translates social media posts into natural languages so anyone, regardless of their language preference, can understand and share them. Advance in technology and the potential for AI in digital marketing are on the rise, and the possibilities are limitless. Artificial Intelligence is being used more and more in operational markets for identifying risk, conducting consumer research, and identifying business functions to coordinate with target customer.

Businesses are finding unique solutions to keep sales running round the clock. Tracking the customer journey has become more challenging because of the changing marketing environment. The market is getting bigger and better, with digital markets offering customers countless new options for shopping. Customers share their desires, attitudes, and beliefs through many avenues and mediums, as the need for exceptional customer experience grows across all digital platforms. Artificial intelligence (AI) is the answer to enhancing the digital experience while delivering personalised content. This seemingly endless source of customer-curated data is expanding on daily basis (Rust, 2020).

Artificial Intelligence in marketing is the use of customer data, statistical tools and computational concepts to predict the customer's preferences. Companies using Artificial Intelligence Techniques can target the right potential customers. Artificial Intelligence is popular now because customer today expects the companies to understand and stimulate their needs. This enables the digital marketers to correctly anticipate their customers' behaviour and can feed right content at the right time. Rust (2020) shows that almost 55% of businesses from various segments are based on AI. This is because marketers are boosting their Return on Investment (ROI) in short span of time by getting insights of their customer so they continuously working on to migrate their businesses more towards AI.

According to Guruduth Banavar, supervisor of AI research by IBM, there are a broader variety of various types of Artificial Intelligence, therefore, it can be considered as a collection of technologies (Kaput, 2016). These technologies have various functions and come in a variety of prices, but the aim of all of them is almost the same which is to mimic human intelligence in technologies to make the functions intelligent. The progressions made in AI and its executions in various domains have resulted in the advancement of AI technologies that is evident to be valuable and beneficial for marketing professionals. Artificial Intelligence is an intriguing issue in advertising. It is considered as the following outskirts of

showcasing marketing. AI is an expansive term which has secured a wide scope of various advancements.

The idea of Artificial Intelligence alludes to innovation that is trying to impersonate human insight. AI incorporates a wide assortment of capacities, for example, voice, picture recognition, machine learning and semantic searching. Marketers like to wax expressive about new energising refreshed innovations and technology. They strike into Artificial Intelligence for picture recognition and speech recognition. It likewise forestalls information spills in showcasing and aides in focusing on drones at remote networks.

### **Components of Artificial Intelligence**

The intensity of AI is reflected in its core components: big data, machine learning and powerful solutions. The idea of "big data" implies that marketer have capacity to total and section colossal measures of information with minimum manual work. Smart Technology like Machine Learning can interpret such pattern then analyse the customer pattern. Artificial Intelligence has largely revolutionised marketing and will totally change its shape in near future (Mari, 2019).

(a) Machine Learning- The ability of systems to learn without being explicitly programmed and is modeled around the paradigm of human and animal learning associations is known as 'Machine Learning'. Machine learning as the application of AI is the inbuilt capacity of modern era machines to learn from algorithms and statistical analysis tools (Rouse, 2018) by accessing large repository of databases and providing marketers with actionable insight to enable intelligent automation and decision making.

(b) Deep Learning- Deep learning is a specific machine learning technique and is defined as the mechanism of feeding machines with huge sets of data so as to enable them to work on self-learn-solve paradigm (Kutton, 2018). Deep learning is the subset of machine learning which is an application of artificial intelligence and it had yielded eye opening research results in the domains of speech recognition, computer vision and natural language processing Najafabadi, *et al*, 2015). Deep learning is based on the artificial neural networks much alike the biological neural connections.

(c) Big Data-The core of any business is largely depending upon Human Resource, Technology and Data. The generation of data in very large volume, high velocity and large variety is known as Big Data. This data is available in structured (eg tabular) and unstructured form (audio-video). Technology oriented organisations by incorporating a blend of analytic tools, statistical techniques, data interfaces; visualisation approaches and software analysis transformed this

Big Data into the useful data for Marketers to take smart decision to improve value for their products (Roski et al.,2014).

### **Artificial Intelligence Technology in Changing the World of Digital Marketing**

- (a) Marketing Increasingly Focused on Consumer: Behaviour: Artificial Intelligence is about information driven ways to deal with showcasing and dynamic and to this degree is being utilised to incorporate information from various platforms. Clients leave scraps of personal information when they connect on the web. Regardless of whether they shop, post or peruse, information is gathered at each progression. Presently, artificial insight applications are crunching these huge numbers and learning “online behaviour” and “digital identity” of the clients (Camilleri, 2017).
- (b) Predictive Marketing Social Media plays a vital role in gathering more personal information about the potential customer, which makes it simple for marketers to have an engaged crusade. With each click at whatever point a client is perusing the web, new information is being created and arranged for the Artificial Intelligence analysis. This information is significant for the advertiser to enhance the data and give the most applicable data (Ahmed, 2015).
- (c) Lead Generation Artificial Intelligence actually, sift through piles of data to find the ideal for customers, clients and even colleagues based on information that it already had and the program that it’s using. Even more fascinating, it can also predict or rate how hot a given lead is. So, for B2B or even recruiting purposes, this can save a lot of time and energy on just basic searching, leaving the marketer more time for things like pitching and sales calls. (Ahmed, 2015).
- (d) Chatbots: Are computer programs built by AI technology that guide customers to simplify human interaction in digital marketing platforms and support natural language conversational queries. Although they cannot seek human cooperation in promoting interactions, they can provide systematic research with a knowledgeable account. They are Artificial intelligence - driven programs that interact with users in a natural-language environment. These programs are rapidly becoming a major area of interest for marketers, as an increasing amount of social media traffic takes place on private messaging services like What Sapp and Facebook Messenger.
- (e) Automated Content Creation: Numerous brands are utilising Artificial Intelligence to computerise content creation. On account of this innovation all thanks to technology content creation is snappier, and simpler. For instance, worldwide drink significant Coca Cola utilises Artificial

Intelligence to robotise its advertising stories. Making of logos and music contents is done pair with the setting naturally.

- (f) Refining Advertisements: Artificial Intelligence is also used to refine advertisements and their delivery. According to marketing experts, Google and Facebook control more than 60% of all PPC campaigns today. Artificial intelligence can help advertisers to find out new advertising channels for their PPC campaigns. These channels may not be used by competitors and thus Artificial intelligence offers a competitive advantage to advertisers. (Camilleri, 2017).
- (g) Image Recognition: One of the most energising and perhaps most significant advancements in artificial knowledge is picture recognition. On the off chance that somebody need machines to have the option to 'think" like us and copy our capacity to react to our environment, for example, on account of self-driving vehicles, it is of imperative significance that they are likewise ready to 'see" like us. (Huang & Rust, 2021).
- (h) Email Marketing: Artificial intelligence is making email marketing even better, both for the marketer and their customer. Personalisation at scale is every marketer's dream - and Artificial intelligence makes it possible. Artificial intelligence can use data to create personalised emails to every one of the company subscribers, based on their previous interactions with the brand. It can customise based on what content they have consumed, what is on their wish list, what pages they have spent the most time on, and more.

### **How Artificial Intelligence Works in Recent Business Transactions**

Artificial intelligence (AI) is picking up significance in today's advanced commerce. Beginning from Google Assistant to Tesla's self-driving cars to Apple Siri, Artificial Intelligence is enhancing businesses. The applications of artificial intelligence extend from recognising patterns in information to moderate advertise risks, improving client benefit through virtual individual assistants, or indeed analysing millions of records over a company's servers to discover compliance failures. (Rouse, 2018)

In recent times, organisations have had the choice to anticipate and envision the conceivable results that artificial intelligence and robotics can bring to the destiny of the trade world. AI utilises self- learning systems by utilising devices like information mining, design acknowledgment and normal language processing. Along these lines, as distant as its key commerce favourable circumstances over human information, Manufactured Insights is significantly versatile, bringing about wonderful cost savings. Besides, Artificial Intelligence's consistency and rule-based programmes allow enterprises to minimise their

errors. Its longevity, coupled with continuous improvements and its ability to document processes, translates into rewarding business opportunities (Kutton, 2018).

When someone uses internet through browser and apps in that time his data is collected and manipulated with computer programs (application or apps) to create and send recommendations based on his interest and behaviours that are programmed in an application. This is the way machine learns. Another example when in someone's mobile, the data pack is finished; it automatically starts sending you the notification and various offers to recharge again. In business, it is customer retention process. Companies have to focus on their values, brand position in market, goals and customer experience while trying to implement Artificial Intelligence in their business process and system.

### **Digital Marketing and the Change Scenario of Marketing**

Change is the dominant fact of life in every business today. And the ability to master and exploit change has become one of the most sought-after management skills. Current global and competitive business environment constantly asks for innovation, existing knowledgebase is getting obsolete, continuously thriving for advancement in process improvement. The learning curve is always put to test, and every company is striving to remain ahead of the curve. Due to this shift in the way business is getting conducted has thrown out new reality of ever shortening product and service life cycle (Thilagavathy & Kumar, 2021). More and more companies are coming out with customised products and finding ways to differentiate from competition.

In marketing, the very tempo of change is constantly quickening. The major change in marketing environment is the emergence of electronic data-processing equipment as a major tool of scientific marketing not only for reporting data but also, more importantly, for planning and control by management. Most companies are taking advantage of electronic data- processing analyses, online communications, and information-retrieval systems as tools to help make marketing more efficient. This has led to the emergence of real-time marketing. (Kask, 2014).

## **THEORETICAL FRAMEWORK**

### **Marketing Automation Theory**

The term 'marketing automation' was first developed by John D.C. Little (Little, 2001), which he explains as a digital marketing system that assists in making marketing decisions. Little in a symposium described marketing decisions that can be made by answering certain questions that are critical in marketing. He proposed evaluating a customer's digital footprints and applying relevant

algorithms to generate meaningful management consequences for the entire purchase funnel. Through the personalisation of marketing activities, such automated marketing decision assistance offers increased productivity, better decision-making, higher returns on marketing spending, and more consumer happiness and loyalty (Bucklin *et al.*, 2002). Marketers are able to get help in the decisions they make which improves marketing abilities and reduces costs.

According to Little (2001), there are five layers of system operation: data inputs, real-time decision rules, decision rule updates, site management feedback, and strategy choice. Little proposes deploying real-time decision rules that are calibrated using previous data and updated through adaptive experimentation (Little 2001; Bucklin *et al.*, 2002). The established systems should provide feedback to site management as well as guidance for retailers to alter their strategy. Heimbach *et al.* (2015) provide a relevant example where a customer may buy a movie ticket for an actor of their choice online. This information is captured by marketing companies so that when a new movie with a similar theme or having the same actor, the advertisement would pop up on the customer's feed to inform them that something they would be willing to purchase is available.

Marketing automation is a technical invention that has greatly improved the marketing sector. Automated means of learning customer requirements and being able to provide personalised information that will aid in their demand decisions reduces the workload required to find such information. Automation also easily connects suppliers to buyers as customers are made aware of possible places to purchase their products and sellers will find their intended target market. When relating this concept to the developed AI with all its previously mentioned advanced sectors it can only be expected to increase the efficiency of digital marketing processes while improving the overall consumer experience by delivering extra relatable content based on their preferences and improving companies' performance. Observing such improvements in the field would provide tangible evidence that will allow for a better study of how AI is impacting digital marketing.

### **Technological Determinism Theory**

The term 'technological determinism' was coined by Thorstein Veblen in 1962, and this theory revolves around the proposition that technology in any given society defines its nature. Technology is viewed as the driving force of culture in a society and it determines its course of history. Technological determinism is a reductionist theory that assumes that a society's technology progresses by following its own internal logic of efficiency, while determining the development of the social structure and cultural values. It states that media technology shapes

how we as individuals in a society think, feel, act, and how the society operates as we move from one technological age to another. Corroborating McLuhan's theory that we learn, feel, and think the way we do because of the message we receive through the current technology that is available.

The theory basically explains the fact that changes in communication technology produce profound change in our societal order. Here, communication is seen to have the power to transform the sensory capacity and therefore the way we live our life. The first major elaboration of a technological determinism view of socioeconomic development came from a German philosopher and economist Karl Marx, who argued that changes in technology and specifically productive technology are the primary influence on human social relations and organizational structure.

### **Methodology**

The methodology used in this study was a qualitative method where analysis of reviewed literature, empirical studies, library, and google was carried out. Scholar databases were used to compile academic studies, papers, and publications. The papers were analysed in review context, and keywords were focused on the title and research objectives. Qualitative method is designed primarily to yield non-quantitative or non-numerical data. It involves the collection of extensive narrative data in order to gain insight into the phenomena of interest (Stempel & Westley, 2000).

### **DISCUSSION OF FINDINGS**

The discussion of findings of the study is based on the research objectives of the study, using the empirical studies cited in the work.

#### **RQ 1: What are the prominent tools of Artificial Intelligence used in digital marketing?**

This question is aimed at identifying the prominent AI tools used in digital marketing. Marketers are adapting to the tools of artificial intelligence and are willing to learn how to improve on daily basis. The study of Rust (2020) shows that 63% of the respondents agreed that they have come across the following tools of AI. They are: chatbots, automated content creation, refining advertising, image recognition, e-mail marketing, lead generation AI, predictive marketing social media.

To support this finding, Agarwal & Chauhan (2020) in their work also outlined the above tools as major tools of AI. This shows that these tools are very efficient in digital marketing. The findings of Alkhayyat & Muhamud (2019) clearly identified the above AI tools but indicated the chatbots as the most

common and popularly used tool of AI in digital marketing, as 68% of the respondents said they are more conversant with the chatbots especially on social media platforms. The findings of Thilagavathy and Kumar (2021) revealed that the applications of chatbots among digital marketers are huge and amalgamation of chatbots with AI and machine is the new game changer.

The findings of Holmi (2021) indicate that majority of digital marketers have adopted the chatbots, and it brings tons of different organisational benefits which have helped to enhanced customer experience and at the same time help to gain more sales. Same study also discovered that the chatbots is popular and most frequently used by digital marketers. Based on these findings, we can conclude that chatbots is a very vital tool to use in catching the attention of consumers since it involves interactivity.

### **RQ 2: What is the level of exposure of AI tools among digital marketers?**

The researcher sought to find out the level of exposure to AI tools. The findings of Pradeep, *et al* (2018) reveal that (233) being 72% of digital marketers are exposed to AI and its prominent tools. This shows that majority of today's digital marketers are fully conversant and exposed to the tools of AI and are using them to improve their businesses and customers' experiences..

To support this findings, another study by Kaput (2016) indicate that marketers display good understanding of AI and its used in digital marketing as all the interviewed respondents (6) 100% agreed that they are conversant with the tools of AI. Some of the respondents revealed that digital marketing through platforms such as Amazon.com that uses automation exposed them to AI. This indicates an overwhelming level of awareness among digital marketers and consumers.

Another study by Thilagavathy and Kumar (2021) show that 72% of respondents agreed that they are aware of automated responses used by businesses to solve customer queries and also used in data collection, keeping the audience updated about products and services. The import of these findings is, to buttress the fact that a lot of businesses today are incorporating AI into their marketing strategies if they hope to remain relevant and competitive in the new marketing environment.

### **RQ 3: What is the role of AI in digital marketing and buying behaviour of consumers?**

This question is aimed at examining the influence of AI in digital marketing and consumer buying behaviour. The study of Alkhayyat and Muhamud (2022) revealed that the new experience brought by AI has influence on the buying

behaviour of consumers, as majority (77%) of the respondent agreed that they have exceptional experiences in the process. Researches conducted by Rust (2020), Mari (2019), Huang and Rust (2021) also indicate a positive impact of artificial intelligence technology, market automation on digital marketing and among consumers. Like any form of technology, significant influence and improvement were observed in the marketing companies under study and findings aligned to past literatures. It shows that marketers can increasingly align their efforts towards value-generating activities that improve the lives of consumers, allow for higher workplace satisfaction, and empower creative thinking for societal benefit at-large. This means that artificial intelligence influences the buying behaviour of consumers with exceptional experience especially with tools like the chatbots, automated content creation, and refining advertising.

Little (2001) states that through the personalisation of marketing activities, automated marketing decision assistance offers increased productivity, better decision making, higher returns on marketing spending and more consumer happiness and loyalty. This shows that AI can be used to improve the overall customer experience thereby influencing their buying behaviour. Marketers use this technology to improve the experiences of their customers, by processing customer data efficiently and providing customer preferences in a short time, and thereby influencing their buying behavior. AI has changed the way marketers interact with their customers, giving everyone a whole lot of exceptional experience and satisfaction.

#### **RQ 4: How is AI used in enhancing digital marketing?**

This question sought to find out how AI is used in enhancing digital marketing. Agarwal and Chauhan (2020) conducted a research on the role of AI in changing marketing trends, and the result reveals that AI technology improves marketing strategies significantly. Majority of the respondents (68%) said that the old way of doing marketing is gradually fading away with the integration of AI.

To support the above findings, study by Thilagavathy and Kumar (2021) also discovers that the integration of AI has brought about a whole lot of change and transformation in the marketing environment changing the way and manner marketing is done. A total of 87% of the respondents agreed that the emergence of AI has changed the world of digital marketing. AI is used to extract info, develop customised digital marketing experiences and building an exceptional customer experience during the buying process.

Digital marketing does not only helps marketers to reach consumers across the globe but also to measure their performance metrics. Artificial intelligence applications have significant effect on marketing practices. It is already

transforming the face of marketing. AI technology helps to optimise and speed up many different marketing tasks, improving customer experiences and driving conversions.

### **RQ 5: What are the ways companies use AI to improve their performance?**

This question is aimed at analyzing ways companies use AI to improve their performance. The findings of Alkhayyat and Muhamud (2022) showed that companies who understand the underlying AI technology and techniques that apply to the marketing tools are far more likely to run successful campaigns. The results reveal that AI is the modern way of marketing, making the process of digital marketing efficient, 59% of the respondent agreed that AI-based digital marketing, makes it even easier for businesses to reach the right customers at the right time.

The implication of these findings is that, companies who use AI in digital marketing have reported great improvements in their marketing strategies. Therefore, it has become critical that marketing managers learn the skills of artificial intelligence to remain competitive and facilitate positive outcomes in their businesses. The future of marketing relies on the improvement of technology in marketing systems and structures. It is expected that AI technology will completely take over the marketing sector to create customer tailored experiences and catapult marketing to very high levels. Therefore, it should be the desire of every marketing manager to incorporate artificial intelligence and market automation into their systems because the technology is being accepted globally.

To back this finding, the technological determinism theory which state that media technology shapes how we as individuals in a society think, feel, act, and how the society operates as we move from one technological age to another. This shows that media technology is gaining momentum today in our society by driving and deciding the way we do our business, and marketers do not have an option but to adjust and use it to improve their performances. Technology is slowly replacing human functions of marketing such as communication, making it easier to perform and improve on other tasks. The mode of virtual assistant ensures that every customer relates to the AI in the most human way possible. While this progress should be monitored closely, it is clear that digital marketing is gradually advancing for the better.

### **Conclusion**

Artificial Intelligence opens new doors for innovations, advertisement and administration. Promotion is a game of analysing the customer's brain and heart (Fagella, 2016). It is all about facilitating marketers' ability to create and distribute

value at a larger scale to the right people at the right time in the right way. As AI automates repetitive tasks, marketers can increasingly align their efforts towards value-generating activities that improve the lives of consumers, allow for higher workplace satisfaction, and empower creative thinking for societal benefit at-large.

The AI Marketing Era entails fundamental changes to the manner in which marketers interact with customers, the tactics, and tools they use to achieve their goals, the type of skills that are valued in the workplace, and the nature of their day-to-day responsibilities. Artificial intelligence carries the potential to change the nature of marketing drastically. The coming years would see noticeable changes and effect because of the use of AI.

### Recommendations

Based on the findings in this study, it is recommended that:

- (i) Marketers and companies who are yet to incorporate AI into their marketing strategies should do so in order to improve their performances and customers' experience.
- (ii) Also, since the study revealed the existence of AI and digital marketing, it is recommended that there should be a constant integration and adaptation of AI technology in digital marketing.

### References

- Agarwal, P. & Chauhan, S., (2020). Role of Artificial Intelligence in changing marketing trends. *Journal of Scientific and Engineering Research*. 11, (2) 7-15.
- Ahmed, K. (2015, September 16). Google's Demis Hassabis - misuse of artificial intelligence 'could do harm'. <http://www.bbc.com/news/business-34266425> Accessed: 16 December, 2022
- Alkhayyat. A & Muhammad. A (2022) The impact of Artificial Intelligence in digital Marketing. *School of Business, Society & Engineering*. 5,(8) 1-25
- Bucklin, R., Lattin J, Ansari, A, Gupta, S, Bell, D, Coupey, E, Little J, Mela, C, Montgomery, A, Steckel, J. (2002). Choice and the internet: From clickstream to research stream. *Matt let* 13 (3): 245-258.
- Camilleri, M. (2017). Understanding Customer Needs and Wants. *Journal of Business Research* 10 (2) 223-243
- Domo sixth edition report: <https://www.domo.com/news/press/domo-releases-sixth-annual-data-never-slept-infographic>. Accessed 05/01/23

- Flagella, D. (2016) Machine Learning Marketing. Expert Concensus of 51 Executives and Startups. <https://emerj.com/ai-market-research/machine-learning-marketing>.
- Heimbach, I. Kostyra, Daniel, S. Hinz, O. (2015). Marketing Automation. *Business and Information systems Engineering*. 57 (2). 102-110.
- Hinz, O. Hann, I. & Spann, M. (2011). Price Discrimination in e-commerce? An examination of dynamic pricing in Name your-own price markets. *Mis Q* 35 (10) 81-98.
- Holmi, J. (2021). Artificial Intelligence in digital Marketing: Now and in the Future. *Journal of Internal Business* 9, (5) 40-52
- Huang, M. & Rust, T., (2021). A Strategic Framework for Artificial Intelligence in marketing. *Journal of the Academy of Marketing Science*, 49 (1), 30-50.
- Kaplan, ., & Haenlein, M. (2010).Users of the world, Unite. The Challenges and Opportunities of social *Media Business Horizons*, 53,(1), 59-68.
- Kaput, M. (2016, November 1). The Marketer's Guide to Artificial Intelligence Terminology. <https://www.marketingaiinstitute.com/blog/themarketers-guide-to-artificial-intelligence-terminology> Accessed: 18 December, 2022
- Kask, K. (2014). semanticscholar. Retrieved from [www.semanticscholar.org: https://pdfs.semanticscholar.org/presentation/a873/8ca243dc433eaea8850843d67f27d92081b1.pdf](http://www.semanticscholar.org/presentation/a873/8ca243dc433eaea8850843d67f27d92081b1.pdf)
- Kolbjornsrud. V., Amico, R. & Thomas, J., (2016). The Promise of Artificial Intelligence -Redefining Management in the workforce of the future.
- Kutton, M. (2018). inside big data. Retrieved from [www.insidebigdata.com](http://www.insidebigdata.com): <https://insidebigdata.com/2023/03/01/data-linguistics-deep-learning-digital-age/>
- Little, J, (2001). Marketing automation on the internet. In: UC Berkeley 5<sup>th</sup> invit choice symp, Monterey
- Mari, A. (2019). The Rise of Machine Learning in Marketing Goal, Process, and Benefit of Artificial Intelligence-Driven Marketing.
- McCarthy, J. Minsky, M, Rochester, N. & Shannon, C. (1955). A proposal for the Dartmouth Summer Research Project on Artificial Intelligence. Accessed 29/01/23 <http://www-formal.stanford.edu/jmc/history/dartmouth/darmouth.html>

- Najafabadi, M. M., Villanustre, F., Khoshgoftaar, T. M., Seliya, N., Wald, R., & Muharemagic, E.(2015). Deep learning applications and challenges in big data analytics. *Journal of Big Data*, 2, (12) 1-21.
- Oxford Dictionaries. (2019). Artificial intelligence | Definition of artificial intelligence  
[https://en.oxforddictionaries.com/definition/artificial\\_intelligence](https://en.oxforddictionaries.com/definition/artificial_intelligence).
- Pradeep, A, , Appel, A, & Sthanunathan, S (2018) Artificial Intelligence for Marketing and Product Innovation: Powerful New Tools for Predicting Trends and Closing Sales. ProQuest ebook central.
- Rouse, M. (2018, May). Search Enterprise AI. Retrieved from *International Journal of Scientific & Engineering Research* Volume 11, (7), 77-83.
- Roski , J. Bo-Linn, W. & Andrews, T. (2014). Creating Value in Health Care Through Big Data: Opportunities and Policy Implications. *Health Affairs*, vol. 6, (12) 1115-1122.
- Rust, R., (2020). The future of Marketing. *International Journal of research in Marketing*. 37(1), 15-26
- Stempel, G & Westley, B (2000). *Research Methods in Mass Communications*. Englewood Cliffs, New Jersey, Prentice Hall.
- Thilagavathy , N. & Kumar, E. (2021). Artificial Intelligence on Digital Marketing - An Overview. *Journal. of Nveo-natural volatiles and essential oils* 32 (55) 9895-9908
- Turning, A. (2004). Computing machinery and intelligence (1950). The essential Turning. <https://doi.org/10.1093/oso/9780198250791.003.0017>