

ARTIFICIAL INTELLIGENCE AND THE PROMOTION OF ADVERTISING BUSINESS IN NIGERIA

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Abstract

The evolution of technology has brought a radical shift in the business world. It has revolutionised the way we create and consume media messages especially advertising. Artificial intelligence is the most important technologies in the world today that has influenced everything we do today especially advertising and marketing. Platforms like ChatGPT have changed how advertising are created. This study examined the effects of AI in promoting advertising business in Nigeria. The objective is to look at the benefits, prospects and challenges of adopting AI in the advertising industry. The study was anchored on Technological Acceptance Model (TAM) and Diffusion of Innovation theory. It also adopted the Library research method where data were gathered through relevant literatures such as journals, reports and websites. The study shows that AI no doubt has the potential to transform the advertising industry. It has significant impact in the advertising business but has come with lots of challenges. Though AI has really revolutionised the advertising and marketing industry, human beings still have a special touch which AI cannot replace. Human beings need to be in charge of creating advertising and not rely totally on machines.

Keywords: Impacts, Artificial intelligence, promotion, advertising, business

Introduction

Artificial intelligence (AI) encompasses a wide range of technologies, such as computer networks, pattern recognition, computer vision, deep learning, speech recognition, and many more. While AI technologies are perhaps too complex for the general public to comprehend, marketers can nevertheless take advantage of them without getting bogged down in the details. A lot of companies want to leverage the AI revolution to make their brand marketing strategies stronger. Any business may produce a fantastic "personalized customer experience" at a very minimal cost by utilizing AI. For this reason, according to Knowledge Nile (n.d.), 48% of sales and marketing teams base their operations on AI and machine learning approaches.

During the early 2000s, you had to print out a color guide, create a film (similar to a Polaroid film) of the approved design, and then personally submit the film and color guide to the newspaper house in order to publish an advertisement. To take part in a radio campaign in Nigeria, you have to send materials by

courier to the many radio stations spread throughout the country. If the campaign was to get underway right away, you would have to ship the supplies by air. Modern technical advancements allow you to break a campaign while relaxing in your living room. Ads are shared electronically these days via email and WhatsApp. In order to physically meet for client presentations, driving and occasionally flying was required (Adefowokan, 2023).

There was nothing else to put it together. In addition to holding virtual meetings with clients, we can now share our displays so that anyone, anywhere in the world, can view the presentation. The rapid increase in virtual meetings may have been caused by the COVID-19 lockout, but this was always going to happen as companies look for more effective ways to conduct business. These are but a few instances of the ways in which technology has affected Nigerian advertising and marketing. In the world of advertising, Artificial Intelligence (AI) is undoubtedly the most fascinating technological advancement. The global advertising industry has given it a lot of attention, and as technology advances, this interest is anticipated to increase even more.

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There are still a lot of unsolved questions underneath all the excitement:

How does artificial intelligence affect the advertising process, and what does it mean specifically in terms of AI advertising? Yu (2021). Artificial intelligence, or AI, is the transfer of human intelligence to machines. In other words, machines or systems designed to replicate human intelligence and carry out preprogrammed activities are referred to as artificial intelligence (AI) (Triumph-Aruchi & Aniebo, 2023). Generally speaking, it makes predictions and judgments on its own by using pattern recognition and data analysis. It makes reference to the computer-aided analytical program, which aims to develop automated systems that satisfy the requirements for being labeled as intelligent. Entering data to perform intelligent being tasks in a way that maximizes success rates is the responsibility of the automated system.

Demis Hassabis, the founder of Deep Mind, a Google AI startup, defined artificial intelligence as the art of making machines intelligent (Ahmed, 2015). It is the most widely accepted description since the term "artificial intelligence" (AI) is more general and used to describe a greater variety of signals. This suggests that AI technology can perform tedious or difficult tasks more independently. Customers' interactions with digital marketing will most likely shift as a result (Pradeep et al., 2018). Artificial intelligence's introduction has gradually changed Nigeria's digital marketing environment, changing the marketing landscape.

Rather, judgments are based exclusively on factual and statistical analysis; technological tools and procedures do not show any signs of affective decision making syndrome that could influence the issue area (Kask, 2014). By continuously monitoring and projecting the target consumer's upcoming purchasing decisions, artificial intelligence (AI) is utilized in showcasing to increase consumer "venture".

Artificial Intelligence has changed marketing dramatically in the present and will eventually change it entirely. Ingenious technology known as artificial intelligence uses a large amount of input and output training data to generate algorithms for self-learning. Automated systems analyze the pattern and independently

develop the algorithm. Today's internet market is fiercely competitive, with constantly changing consumer trends. Advertising must therefore be successful and accurate. Every click and every impression matters in online paid advertising. AI is a game-changer for businesses trying to accomplish important goals. The term artificial intelligence (AI) became widely used a few years ago. Although artificial intelligence (AI) has long been used in a number of marketing disciplines, including programmatic advertising, modeling, and predictive analysis, the industry did not fully grasp the implications of AI until the advent of Chat GPT and other generative AI tools (Adefowokan, 2023). Since then, a number of concerns have surfaced, mostly around job losses, ethical quandaries, and creativity. Technology, in my view, not only generates new employment prospects and jobs, but it also replaces employment (people). AI is frequently seen as more of a danger to employment. However, fields like fraud detection, precise targeting, audience monitoring, consumer journey analysis, and highly optimized and customized content benefit greatly from artificial intelligence (AI). As with anything significant and transformative, there are benefits and drawbacks to take into account. On the other hand, problems in communicating in a distinctive way and building a close emotional connection with the audience are brought up. There are also potential ethical issues and biases. Despite these initial challenges, artificial intelligence is a friend rather than a danger.

The field of artificial intelligence (AI) has seen rapid advancements in recent years, leading to a growing number of businesses utilizing AI applications. Media, advertising, e-commerce, education, and other sectors are among them. Gao (2023). Technology has brought about a significant transformation in the corporate sector. It has drastically changed how we create and consume media messages, especially advertising. Artificial intelligence, one of the most important technical developments of our time, has an impact on all facets of contemporary life, including marketing and advertising. Thanks to websites like ChatGPT, the way ads are created has changed. AI-generated models, sounds, and images are being used by businesses in their TV and online advertising campaigns to reduce

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their advertising costs (Siele, 2024). Examining the advantages, opportunities, and difficulties of applying AI to the advertising sector is the goal. This study examined the effects of AI in promoting advertising business in Nigeria.

Statement of Problem

Despite the rapid advancement and adoption of Artificial Intelligence (AI) in the global advertising industry, the extent to which AI has impacted the advertising business in Nigeria remains underexplored. Why AI promises to revolutionise advertising through enhanced targeting, cost efficiency and improve customer engagement, there is limited empirical evidence on how this benefits are being realized within the Nigerian context.

This research therefore, examine the influence of AI in promoting advertising business in Nigeria, the aim is to analyse the benefit, challenges and prospect of adoption AI in the advertising industry in Nigeria.

Overview of Advertising Businesses in Nigeria

Different authors and practitioners have described advertising to reflect their understanding of the concept. The American Marketing Association (AMA), defines advertising as “any paid form of non-personal presentation of ideas, goods or services by an identified sponsor”.

According to Nwosu (1996), “Advertising is the non-personal communication of information, usually paid for and usually persuasive in nature, about products, services or ideas by identified sponsors through various media”. Advertising has a rich history that has spanned through centuries, with primitive form of advertising existing in Nigeria long before the modern era. In fact, the town crier’s early morning gong signal, which alerted villages to impending announcement, is one of the earliest form of advertising. (Bel-Molokwu, 2000). This showcased the innovative ways in which people have sought to communicate messages and promote goods and services in the earliest time.

Ogbodo (1990), also affirms that the origin of advertising in Nigeria can be traced back to the town crier, one of the earliest form of mass communication, where messages were disseminated to large audience, marking the

beginning of advertising in the country in rudimentary yet effect form.

Advertising in Nigeria has grown from its earliest beginning of using the town crier to advert goods and services and alert villages of impending announcements to become a big industry in Nigeria. Advertising business in Nigeria has come a long way from its early days, evolving in response to technological advancement and socio-economic changes. Today, it is a vibrant and dynamic industry poised for continued growth and innovation.

Real advertising in Nigeria started during the colonial period, during this period the print media, particularly newspapers were the main advertising channels. Following independence in 1960, local business started to emerge, prompting the need for local advertising. The establishment of Nigerian own advertising also began during this period.

The oil boom in the 1970s brought significant economic growth leading to increased consumer spending and expansion of the advertising industry. Within, this period more local and international brands invested in advertising to capture the growing market.

The advent of radio and television stations, opened new avenues for advertisers. The Nigeria Television Authority (NTA) and various radio stations became major platforms for advertising. Also, the privatization and deregulation of broadcast industry in 1992 led to the emergence of private radio and television stations thereby increasing competition and providing more advertising options. With the proliferation of advertising industry in Nigeria, there was need for the industry to be regulated. This led to the establishment of Advertising Practitioners Council of Nigeria (APCON) in 1988. This body was to regulate and standardize advertising practices, ensuring professionalism and ethical standard in the industry.

The 1990s and 2000s saw a surge in creative advertising, with agencies producing more sophisticated and culturally relevant campaigns. This period marked the rise of notable advertising agencies. The rapid increase in internet and mobile phones revolutionised the advertising landscape. Digital advertising, including social media, search engines became increasingly important.

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Also social platforms like Facebook, Instagram, Twitter(X) and TikTok became crucial for reaching younger and tech-savvy audience.

Today brands are increasingly adopting Integrated Marketing Communication (IMC) strategies to ensure consistency across various channels, combining traditional and digital media for maximum impact.

AI is increasingly playing a significant role in the advertising business by enhancing the effectiveness and efficiency of advert campaigns. By integrating AI, advertisers can create more engaging, efficient and effective campaigns, leading to better consumer engagement.

Overview of Artificial Intelligence

John McCarthy defined artificial intelligence in 1956 as a science and technology that uses intelligence to solve problems for people. Artificial intelligence, then, is a technology that has been trained to exhibit human intelligence while making decisions. (2019, Syam and Sharma). Research on artificial intelligence in advertising has been requested (Lee & Cho, 2020; Taylor, 2019). The creation of computer systems and devices together with programming methodologies that possess three primary characteristics—intelligent communication, intelligent recognition, and recommendation-making—is referred to as artificial intelligence. AI includes machine learning (ML), deep learning (DL), natural language generation (NLG), natural language processing (NLP), and any other application that satisfies the requirements to be categorized as an AI method. AI is anticipated to enhance the production of mass customized advertising material, enhance audience segmentation, enhance real-time bidding processes, and monitor online campaigns (Liao, 2017).

Another way to think about artificial intelligence is as intelligent systems and software that mimic human mental faculties through computational programs. These systems and software can learn, plan, execute logical deduction operations, draw conclusions to process large amounts of data, model behavior and thought processes, make decisions based on spoken language

comprehension, and perform diverse business tasks (Muhlhoff, 2020)..

Even if artificial intelligence technology is tremendously effective for certain specific activities, it is now quite limited and far from matching the extremely diverse cognitive capacities of humans. Artificial intelligence technology still has shortcomings (Udoh, Nsude Oyeleke & Ezeali, 2022). For instance, Chui, Manyika, and Miremadi (2018) reaffirmed a few of the limitations of AI, including the necessity for human assistance with data labeling, issues with explanation, learning generalization, and bias in data and algorithms.

Use of Artificial Intelligence in Promoting Advertising Business in Nigeria

The advertising industry and the way brands engage with consumers are undergoing a dramatic transformation due to the increasingly pervasive integration of Artificial Intelligence (AI). The advertising industry is one of several that artificial intelligence is changing, along with other businesses and procedures. Artificial intelligence will make advertising more dynamic, personalized, and data-driven. The following are the results of these changes in the advertising industry¹.

1. Data-Driven Insights: Large-scale data collection and processing, including location-based data, demographic data, and customer behavior, can be facilitated by AI-powered analytics. In order to ensure maximum impact and relevancy, this data assists advertisers in making well-informed decisions about where and when to display their ads. With the help of AI algorithms, marketers can better understand audience segmentation and customize their messaging to appeal to particular customer profiles..

2. Digital Personalization: AI enables highly targeted advertising, presenting pertinent content to target audiences. AI algorithms are capable of targeting advertising campaigns according to demographics, behavior, and preferences by evaluating data from a variety of sources, including social media, mobile devices, and location-based data.

Artificial intelligence (AI) algorithms are able to optimize advertising campaigns to fit the context and preferences of viewers and audiences by using real-time data, such as

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traffic patterns, weather, and social media trends. Because of the increased relevancy of the message and the more engaging experience it provides, there is a greater chance of consumer contact and action, which in turn enhances the chances of engagement and conversions.

3. **Dynamic Creative Optimization:** AI-powered systems are able to evaluate data in real-time to identify which creatives work best in various settings and at various times. This enables marketers to dynamically modify their content to satisfy the needs of particular audiences, guaranteeing that their campaigns are consistently engaging and new.

4. **Real-Time Targeting:** Advertisers can use geolocation data to send highly tailored advertisements in real-time with artificial intelligence technologies. Advertising campaigns can be customized to meet the interests and behaviors of customers in a particular location by utilizing mobile devices and GPS technology. This allows for the provision of pertinent promotions and the enticement of consumers to take rapid action.

5. **Measurement and Attribution:** Advertisers may now more precisely assess the success of their advertisements thanks to AI-powered analytics. Artificial intelligence systems have the ability to link particular ad spots to conversions or interactions by monitoring consumer response, foot traffic and eyeball data, and purchase behaviors. Advertisers may learn a lot about campaign performance and return on investment from this data-driven study of ad spend.

6. **Fraud Detection and Security:** AI will be essential to advertising since it can identify any fraud and guarantee media integrity and value delivery. By using AI algorithms, the industry can detect and stop dishonest practices like ad stacking, safeguarding the interests of advertisers and enhancing ecosystem transparency. Media proprietors need to be aware that the new Data Protection Act protects customer privacy and prevents unauthorized use of data

Benefits of AI in Advertising

AI's capacity to support targeted and individualized marketing efforts is one of the main advantages of incorporating it into digital marketing strategy. Businesses may enhance

the customer experience by better segmenting their audience, identifying individual likes and habits, and offering tailored content and recommendations by utilizing AI-powered data analysis and machine learning algorithms (Khatri, 2021). Companies can increase the relevance and efficacy of their digital marketing campaigns by using sophisticated customization to customize their messaging to target audience segments (Zaman, 2022).

Marketers may utilize artificial intelligence (AI) to extract useful customer insights from large datasets and use predictive analytics. Businesses can more accurately forecast customer behavior, spot new trends, and anticipate market demands by utilizing AI-driven predictive modeling (Chaitanya et al., 2023). In order to take advantage of new opportunities in the digital environment, this helps marketers refine their approach, make data-driven decisions, and allocate resources more wisely (Nair & Gupta, 2020). AI also makes it easier to extract useful information from unstructured data sources like customer reviews, internet discussions, and social media interactions. This gives advertisers further insight into the attitudes and preferences of their intended audience.

Artificial intelligence plays a critical role in improving consumer experience and engagement in the context of digital marketing. Businesses can offer individualized and real-time customer care, respond to inquiries, and assist customers with their purchase process by utilizing chatbots and virtual assistants that are powered by natural language processing (Stone et al., 2020). Additionally, conversational marketing—which enables companies to engage in more direct and interactive communication with their clients, strengthening client connections and increasing brand loyalty—is made possible by AI. Businesses can build stronger relationships with their audience and eventually raise levels of engagement and customer satisfaction by leveraging AI to give tailored content, product recommendations, and interactive experiences (Abakouy et al., 2023).

In addition, adopting AI into advertising can be cost effective. AI can help identify and reach specific segments, ensuring that advertising are more relevant to consumer's preference and behaviours, thereby increasing engagement. AI

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can analyse local data to prove insight into consumer trend and behaviours specific to Nigeria, helping advertisers tailor their strategies to local markets, it can also assist in creating compelling and culturally relevant advert contents, from generating ideas to producing text, images and videos that resonate with Nigerian audience.

AI powered chat-bot can enhance customer's interactions, leading to better customer satisfaction and loyalty. It has the capacity to detect and prevent advert fraud ensuring that advertising budgets are not wasting on invalid traffic and fraudulent activities.

Adopting AI-powered tools in advertising will give Nigeria businesses a competitive edge by making their campaign more effective and efficient.

Challenges of AI in Advertising

Adopting AI in the advertising business in Nigeria can be challenging, the followings are some of the challenges:

Limited infrastructure: Inadequate technological infrastructure, including unreliable internet connectivity and lack of advanced computing resources can affect the effective implementation of AI in advertising in Nigeria.

Data Privacy Concerns: The ethical use of personal information raises privacy problems due to AI's capacity to collect and analyze enormous volumes of data. Ensuring compliance with data protection and regulations and addressing consumer concern about data privacy can be challenging.

Algorithm Bias: AI systems may unintentionally reinforce prejudices, resulting in biased content promotion or advert targeting. It needs to be channeled to understand and respond to the unique cultural and social context within Nigeria, which can be complex and diverse.

Advert Fraud: Advanced artificial intelligence (AI) has the potential to produce phony clicks or impressions, squandering advertising funds and distorting campaign performance indicators.

Content Quality: AI can automate the development and curation of information, but it can still be difficult to guarantee that the

material is interesting and of high quality because AI is not always able to comprehend context, cultural quirks, or human emotions.

Advert Blocking: As users of ad-blocking software grow more proficient, marketers need to figure out how to show tailored ads in a way that isn't obtrusive or obnoxious.

Adversarial Attacks: Ad targeting and content recommendation AI systems are vulnerable to adversarial attacks, in which malevolent individuals trick the system by providing it with false inputs.

Regulatory Compliance: Businesses that use AI-powered systems for advertising have to deal with a complicated web of laws covering consumer rights, data privacy, and advertising standards.

The initial investment required for AI technology and skill personnel can be challenging for many businesses, especially small and medium enterprises. There is also shortage of professionals with necessary expertise in AI and analytics, making it difficult for businesses to adopt and manage AI systems effectively.

Some businesses and stakeholders may be reluctant to adopting new technologies due to lack of understanding or fear of job displacement.

Prospect of AI adoption in Nigeria advertising

Artificial intelligence (AI) holds great potential for promoting advertising businesses in Nigeria. Some prospects of adopting AI in advertising in Nigeria include:

- 1. Personalized Advertising:** AI can analyze data and consumer behavior to create personalized ads that target specific audiences, leading to more relevant and effective advertising campaigns.
- 2. Optimized Ad Campaigns:** AI algorithms can help optimize ad campaigns by analyzing performance metrics in real-time and making adjustments to maximize ROI.
- 3. Improved Targeting:** AI can help businesses target their ads more effectively by identifying and reaching

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the right audience segments based on demographics, interests, and behaviors.

4. **Automation of Processes:** AI can automate repetitive tasks such as ad placement, content creation, and audience segmentation, freeing up human resources to focus on more strategic initiatives.
5. **Data Analytics:** AI can analyze large amounts of data to provide valuable insights into consumer trends, preferences, and behavior, which can inform advertising strategies and content creation.
6. **Enhanced Customer Experience:** AI-powered chatbots and virtual assistants can provide personalized customer service and engagement, improving the overall customer experience with the brand.
7. **Cost Efficiency:** By automating processes and optimizing ad campaigns, businesses can reduce costs associated with advertising while increasing the effectiveness of their campaigns.
8. Overall, the prospects of adopting AI in promoting advertising businesses in Nigeria are promising, as it can help businesses reach their target audience more effectively, improve their ROI, and enhance the overall customer experience.

Empirical Review

Yu (2021) studied “The Role and Influence of Artificial Intelligence on Advertising Industry”. While noting the social and industrial impacts on the pace and direction of AI development, the study offers significant and pertinent insight into artificial intelligence technology and its implications for the future of business and society. Artificial intelligence has penetrated every aspect of the advertising sector, contributing to its growth, replacing labor-intensive manual labor where necessary, and increasing industry productivity. The study makes the point that, given some of the ethical issues and privacy concerns, the market still has to be aware of the drawbacks of artificial intelligence. Departments that are relevant should look at these problems more.

Gao, Wang, Xie, Hu and Hu (2023) examined “Artificial Intelligence in Advertising: Advancements, Challenges, and Ethical Considerations in Targeting, Personalization, Content Creation, and Ad Optimization”. This ground-breaking study offers a thorough analysis of artificial intelligence's use in advertising, paying particular attention to four crucial components: targeting, personalization, content creation, and ad optimization. We explore these areas in depth to show how AI has the ability to completely transform the advertising industry. We also talk about the urgent moral questions raised by the present uses of AI in the advertising industry. Through a comprehensive analysis of the literature, this study, which is based on computational advertising, demonstrates the inherent connections between these four essential elements of AI advertising using the VOS viewer software: Which advertisements are shown to which individuals is determined by the combination of targeting and personalization. AI is utilized in content creation to produce interesting advertising content when it comes to personalization. In the meantime, Advertising Optimization optimizes return on investment by modifying adverts display according to the findings of the first three factors. This study offers a fresh perspective on artificial intelligence (AI) applications in the advertising sector, enabling the moral and effective application of AI technology to produce better advertisements.

Triumph-Aruchi, Aniebo and Akarika (2023) studied “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

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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.

Olaide, Samaila and Adegbola (2023) investigated "Artificial intelligence: A new trend and strategy for marketing and advertising success and performance (Study of MTN Nigeria PLC, Lagos). The study examines the impact of artificial intelligence on marketing success and performance as a strategic meeting point between marketing and technology in achieving business goals. The study specific objective was to examine the effect of artificial intelligence on marketing success and performance. The study adopted survey research method using primary and secondary source of data. A total of 80 staff of MTN were chosen for the study using purposive sampling with 70 questionnaires returned. The data was analyzed using 24 version of statistical package for the social science. Today's marketing requires the use of new trends of technology like artificial intelligence as a creativity and innovations in the world of business and marketing, BMW, MTN, AMAZON, FACEBOOK, GOOGLE and NETFLIX adopted artificial intelligence in their marketing activities and operations to achieve their marketing goals and performance. The study concluded that, artificial intelligence is a new trends in marketing and advertising world as a strategy to achieve marketing success and performance. It is recommended that ,policy makers must formulate a policy for AI adoption as a digital business models ,government and ministry of communications, innovations and digital economy must create awareness for the adoption of AI in the business operations ,government should strengthened the digital space for the success of the

technology, AI must be made to be trusted through research and development, there should be optimum data security and protection for overall success of AI implementation in marketing.

Theoretical Framework

The study is anchored on two theories - Technological Acceptance Model (TAM) and Diffusion of Innovation theory (DOI).

Technological Acceptance Model (TAM)

The model is a framework used to understand how user come to accept and use technology. The theory was developed by Fred Davies in 1989. The model suggests that two primary factors influences the users decision about how and when to use new technology;

1. Perceived Usefulness (PU): This explains the degree to which a person believes that using a particular system will enhance their job performance.
2. Perceived Ease of Use (PEOU): This explains the degree to which a person believes that using a particular system will be effortless, requiring minimal mental and physical effort.

This factors influences user's attitude towards the technology (attitude towards using) which in turn affects their behavioural intention to use. This leads to the actual use of technology. Understanding TAM helps organization design and implement technologies that users are more likely to accept and use, leading to a better adoption rate and more successful technological implementation.

Technology Acceptance Model (TAM) describes a three-step process wherein external factors (features of system design) elicit cognitive responses (perceived usefulness and ease of use), which in turn form an effective response (intention/attitude toward using technology), thereby influencing use behavior.

Technology Acceptance Model (TAM) could be applied to understand how users (advertisers, marketers, consumers) perceive and accept AI driven advertising technologies. TAM suggests that perceived usefulness and perceived ease of use are the key determinants of users intention to use a technology. In the context of the impact of AI in promoting advertising, marketers and

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advertisers would evaluate AI tools based on how useful they are in promoting and improving advert targeting and personalisation, as well as how easy they are to integrate into existing workflows. By understanding these perceptions business can better implement AI in advertising and tailor their strategy to maximise acceptance and adoption.

Diffusion of Innovation theory

The Diffusion of Innovation theory developed by Everett Rogers in 1962, examines how, why and at what rate new ideas and technologies spread through cultures. The theory outlined the process through which an innovation is communicated overtime among the participants in a social system. The components of the theory includes;

1. Innovation: An idea, practice, perceived as new by an individual or other units of adoption.
2. Communication channels: The means by which information about the innovation is transmitted to members of a social system.
3. Time: The period in which the innovation is adopted by individuals within the social system.
4. Social system: The group of individuals who together adopts the innovation.

Categories of Adopters

1. Innovator: These are the first individuals to adopt an innovation. They are willing to take risk and the first to try new innovation.
2. Early adopters: These individuals adopt new ideas early but with caution. They are typically opinion leaders and respected in their various communities.
3. Early majority: They adopt innovation after a varying degree of time. They are deliberate and typically have above average social status.
4. Late majority: These individuals adopts an innovation after the average participants. They are skeptical and have below average social status.

5. Laggards: The last to adopt an innovation. They lag behind in adopting innovations and new ideas.

Stages of Adoption process.

1. Knowledge: The individual should be aware of the innovation/technology and have understanding of how it functions.
2. Persuasion: The individual forms a favourable or unfavourable attitude towards the innovation/technology.
3. Decision: The individual engages in activities that leads to adopt or reject the innovation.
4. Implementation: The individual puts the innovation into use.
5. Confirmation: The individual seeks reinforcement for the innovation decision and may continue or discontinue the use of innovation based outcomes and feedbacks.

Understanding Diffusion of Innovation theory helps organization, marketers and advertisers, design strategies that will help promote new products and ideas, facilitating their acceptance and widespread adoption.

Applying the theory to the impacts of AI in promoting advertising;

1. Innovators refers to the first people to use AI in advertising, experimenting with AI generated contents.
2. Early adopters are those opinion leaders who see the potential of AI in advertising and start using it in gaining a competitive advantage.
3. Early majority: As the use of AI in advertising become more established, the early majority starts to adopt it, driven by the desire to stay current and effective.
4. Late majority are the category of people who adopts the use of AI only when it becomes industrial standards. They are skeptical about the use of AI at first.
5. Laggards are the last to adopt AI in advertising. They may view it as being too complex or unproven.

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Diffusion of Innovation Theory examines how new ideas or technology spread through a population. In the context of AI in promoting advertising business in Nigeria, it suggests that the adoption of AI tools for advertising will follow a pattern where innovators and early adopters will first embrace AI driven advertising techniques, followed by the majority and eventually the laggards. AI impact in advertising is about revolutionizing targeting, personalization and optimization, essentially making adverts more effective and efficient which aligns with the principles of diffusion of innovation theory in terms of adoption and spread across the market.

Discussion of Findings

There is moderate/average level of application of AI in the promotion of advertising business in Nigeria. The use of AI in the promotion of advertising business in Nigeria is effective.

AI has the potential to transform the advertising industry. This is supported by the submission of Qin & Jiang (2020), who opined that AI has the potential to fundamentally disrupt the advertising industry, affecting every aspect of the business. Professionals worldwide place a premium on AI and machine learning in advertising and marketing (Guttman, 2018). The industry discourse reveals an overwhelming favorable attitude regarding the use of artificial intelligence in advertising (Yu, 2021).

Conclusion

To sum up, digital marketing strategy uses artificial intelligence in a variety of ways. It gives companies a lot of advantages to improve their online visibility, interact with their audience, and produce quantifiable outcomes. AI enables marketers to more accurately and effectively manage the complexity of the digital ecosystem through the use of a variety of tactics, including automation, improved customer experiences, personalized marketing, and predictive analytics. AI integration into digital marketing plans will surely impact marketing in the future as technology advances. By doing this, companies will be able to capitalize on their marketing campaigns, adjust to shifting consumer tastes, and succeed over the long run in the digital age.

The study shows that artificial intelligence (AI) has the potential to completely transform the advertising industry. It has had a significant impact on the advertising sector, but there have also been many challenges. Artificial intelligence has changed the marketing and advertising industry tremendously, yet AI cannot replace the human touch.

Recommendations

1. Advertising should not be entirely automated; instead, humans should be in charge of its development.
2. Artificial intelligence (AI) should be used to enhance consumer experience, tailor marketing campaigns, and boost operational effectiveness when implementing digital marketing strategies.
3. Artificial intelligence (AI) promises to provide relevant and personalized information because of its capacity to analyze massive volumes of data, predict customer behavior, and automate tedious tasks.
4. Chatbots with AI capabilities can also assist customers by responding to inquiries and ensuring a consistent user experience.
5. Artificial Intelligence (AI) has the potential to improve marketing automation operations' efficacy by raising open rates and consumer engagement.
6. Guidelines and standards for ethical AI use in advertising should be established, to ensure that AI systems are designed to minimize biased and promote fair practices.
7. Mechanism for continuous monitoring and evaluation for the use of AI should be established. This will help to assess their impact, address challenges and make improvement as needed.
8. Cost effective AI tools should be developed to meet the need of both small and medium enterprise.

All things considered, judicious application of AI in digital marketing can lead to a richer, more fruitful, and customized customer experience.

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