EVALUATING EMERGING TRENDS IN ADVERTISING PRACTICE: THE AI PARADIGM

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Abstract

Artificial intelligence (AI) has recently garnered significant attention from advertising scholars due to its potential applications in the field. This research aims to contribute to this emerging field by identifying emerging trend in advertising practice within the AI paradigm and also examine the impact of AI on advertising effectiveness and consumer behaviour. The study adopts the Technological Determinism Theory which helps to explore how the emergence of AI is transforming advertising practices and how advertisers are adapting to and shaping this new technology. The qualitative research design was adopted employing a semi-structured interview method for data collection with a population of 101 and a sample size of 20 which was selected through purposive sampling. Findings showed that Ad personalization, voice search optimization, chatbots and predictive analytics are growing trends in advertising practice. This study concludes that artificial intelligence is both the present and future of advertising; with consumer expectations higher than ever before, it is imperative that brands must leverage AI to deliver the right messaging on the right platform thereby enhancing their ROI and improving their digital ad performance.

Keywords: Artificial intelligence, Disruptive technologies, Machine learning, Return on Investment, Digital advertising.

Introduction

Driven by the revolution in information and communication technology, the world is changing at an unprecedented rate and in today's rapidly evolving digital landscape, businesses are perpetually seeking innovative ways to engage customers, optimize campaigns, and drive return on investments (ROI). One of the most groundbreaking technologies to have emerged in recent years is Artificial Intelligence (AI). This technology is not just a buzzword; it's a fundamental shift in how digital marketing operates, offering unprecedented opportunities for personalization, analytics, and automation.

AI serves as the catalyst for machines to interpret data and execute tasks that traditionally require human cognitive functions. This transformative technology has been making waves across multiple sectors, including healthcare, education, finance, and entertainment. But how does it intersect with digital marketing? Digital Marketing is the process of promoting goods or services via online platforms, like websites, social media, email campaigns, and search engines. It's a critical component for any enterprise aiming to connect with and target prospective customers in today's digital-first world. Yet, the complexity of digital marketing is undeniable, given the need to design, manage, and evaluate multiple campaigns, sift through volumes of data, and fine-tune the consumer experience (Shankar, 2018).

AI has the capability to simplify and enhance various facets of digital marketing, making it more efficient and effective. Today, AI is one of the world's most promising new technologies and entails programs, algorithms, systems and machines that mimic intelligent human behavior (Huang & Rust, 2018). These technologies typically include machine

learning, natural language processing, and neural networks (among others), and allow machines to autonomously sense, comprehend, act, and learn via human– machine interaction (HMI) (Davenport, Guha, Grewal & Bressgott, 2020). AI is helping advertising and marketing teams to automate routine tasks, quickly collect and analyze huge amounts of customer data, predict future buying behavior, and much more. Social media platforms utilize AI to provide powerful targeting options that make social media ads so effective for brands. For example, Facebook's Deep Text AI application processes the text in posted content to determine a user's interests to provide more precise content recommendations and advertising. Therefore, this paper seeks to evaluate emerging trends in Advertising practice as regards to the use of AI.

Objectives of the study
1. To identify emerging trends in advertising practice within the AI Paradigm.
2. To evaluate the impact of AI on advertising effectiveness and consumer behavior

Theoretical Framework
Technological Determinism Theory

This theory was propounded by Marshall McLuhan in 1962. As captured in the Communication Capstone Spring Theory Workbook (2001), Technological Determinism states that media technology shapes how we as individuals in a society think, feel, act and how society operates as we move from one technological age to another. By implication, an improvement in the information communication technology produces a corresponding effect in the behaviours, conducts, programmes and activities of the society, her institutions and the people in it. Zaeid (2000) shares that in the thoughts of McLuhan, the fundamental shift in technology communication makes major transformations begin, not only in social organization, but also in human sensitivities; the social system is determined by the content carried by these means; without understanding the way media works, we cannot understand the social and cultural changes that are taking place in societies. In the case of this research, this theory is used to explore how the emergence of AI is transforming advertising practices and how

advertisers are adapting to and shaping this new technology. This theory also helped to examine the potential impact of AI in advertising.

Literature Review
Role of AI in Advertising

AI has now become an integral part of our daily lives. AI-based technologies heavily influence both our personal and professional lives, be it Alexa, chatbots or the recommendation tools on Netflix, Youtube and Spotify. AI can be considered as a revolutionary thing in the advertising and marketing sector. With AI, the procedure of creating ads, buying ads and targeting the right audience has become simple with less or no human intervention. It uses Machine Learning algorithms that can predict responses of customers and use it in ad platforms towards specific ads. In Fact, AI has totally taken over the world of advertising, and it has the capability of doing every task that brands require for advertising. Thanks to the internet and programmatic advertising, we now have the ability to reach consumers across hundreds of digital platforms. We also have the ability to target them based on hundreds and thousands of demographic and behavioral data points. We can even test hundreds or thousands of different ads to see what they respond to best.

AI can do all of these things and more. That's why forward-thinking companies are using AI to:

i. Allocate advertising budgets, both across channels and audiences
ii. Adjust advertising budgets automatically
iii. Find new advertising audiences and conversion opportunities
iv. Build richer audience profiles
v. Determine and hit campaign goals
vi. Gain insight into competitors' ad spend, creatives, and strategies
vii. Create ad copy
viii. Create visual ad creative
ix. Hyper-personalize ad messages and images to individual consumers
x. Hyper-personalize ad targeting
xi. Predict ad performance before launching campaigns
xii. And much more

Evaluating Emerging Trends in Advertising Practice: The AI Paradigm

The Best Strategy with Artificial Intelligence (AI) for advertising?

This really depends on the resources you currently have:

i. **Larger companies:** You likely have the budget to invest in more expensive programmatic advertising platforms. And you can hire the right consultants to get you started if you do not already have staff who can do so. Combine an ad management software with an ad copy generator like Rytr, Write sonic, or Copy.ai, and you will be set up for a higher ROAS in no time.

ii. **Smaller companies:** If you have limited time and a low budget, it would be best to get started with an ad copy generator. Rytr and Copy.ai both have forever-free plans that can help you create tons of ads in just a few clicks. And every alternative on this list has affordable monthly pricing for most businesses.

At the end of the day, AI is a powerful tool that can optimize any paid ad strategy. But, like every tool, what really matters is how you use it.

How does Artificial Intelligence (AI) in advertising differ from older technologies?

The fundamental difference and perhaps most important feature of AI is that it can analyze massive amounts of data in a short period of time. The most important resource in this digital world is data and what distinguishes AI from other technologies is that it has the ability to process massive datasets. Also, AI can make predictions and recommendations, unlike traditional software. With traditional software, humans need to make it work, and the outcome would be based on what has been programmed. If the programs need to be efficient, there has to be a proper software update by the developers. But with AI, there is no need for the developers to get involved. AI-backed systems can themselves improve the analysis of data, improve the predictions and in short, learn everything on its own.

Past developments a bit!

If we want to look into the past developments of how AI technologies emerged and impacted the advertising sector, we need to know what the ad sector was before AI. Before AI, people had to do a manual analysis of audience research, creation of ads and releasing campaigns based on an allocation of budget. The historical timeline of how AI slowly emerged and impacted the advertising industry can be summed up in the following table. These predictive analytics helped advertisers in moving their business merchandise in a much effective manner in accordance with the weather. For example, advertising of products such as umbrellas, warm clothes, etc. was broadcasted after having the weather forecasted in advance. This technological innovation was also the starting of targeting the ads in specific places such as wherever the local temperatures dropped below 67 degrees, ads for products for warmer clothes were targeted.

As can be seen from the timeline, in 1998, Amazon started using "collaborative filtering" that enabled recommendations for millions of users. These recommendations are now an essential aspect of every app that we use, be it Netflix, YouTube or suggestion of friends on Facebook. This usually occurs as consumer's data is clustered and interpreted by AI-based systems, and it produces recommendations in real-time. By 2013 and 2014, the ease of content creation and content marketing was enabled by AI that impacted the advertising industry in a positive manner. More and more advertising opportunities were created, and AI-enabled tools made it easier for doing laborious tasks of researching the target audience and targeting the ads. Programmatic digital ads quickly became the new normal for advertisers across the globe. Come 2015, and there emerged many more AI algorithms to improve the ability of search engines to provide better results. Even if the system could not process a particular search request, the algorithm made the relatable information available to refine the search. Through all this, the consumers, as well as advertisers, gained better results.

In 2016, with chatbots, speech recognition and recommendations, more and more advertisements were making their way on numerous platforms. With such developments, AI has truly changed the once difficult tasks of advertising and made quick decisions with its smartness. Every ad is customized according to the data collected by the consumer.

Use of Artificial Intelligence (AI) in strategy and planning

Artificial intelligence can support marketers in strategy and planning marketing activities by helping in segmentation, targeting, and positioning (STP). Besides STP, AI can help marketers in visioning strategic orientation of firm (Huang & Rust, 2017). Text mining and machine learning algorithms can be applied in sectors like banking and finance, art marketing, retail and tourism for identification of profitable customer segments (Dekimpe, 2020; Netzer, 2019; Pitt, 2020; Valls, 2018). A combination of data optimization techniques, machine learning and causal forests can narrow down the targeted customers also (Chen et al., 2020; Simester, 2020).

Use of Artificial Intelligence (AI) in product management

Artificial intelligence-based marketing analytics tool can gauge the suitability of product design to the customer needs and resultant customer satisfaction (Dekimpe, 2020). Topic modeling adds to the system capabilities to service innovation and designs (Antons & Breidbach, 2018). Preference weight assigned to product attributes during product search help the marketers to understand product recommending system and align marketing strategies for meaningful product management (Dzyabura & Hauser, 2019). Deep learning can personalize the point of interest recommendation and helps to explore new places (Guo, 2018). Artificial intelligence offers capabilities to customize offerings to suit to the customer needs (Kumar, 2019).

Use of AI in pricing management

Pricing involves factoring of multiple aspects in finalization of price and it is a calculation intensive job. Real time price variation based on fluctuating demand adds to the complexity of pricing task. Artificial intelligence based multi-armed bandit algorithm can dynamically adjust price in real time scenario (Misra, 2019). In the frequently changing pricing scenario like e-commerce portal, Bayesian inference in machine learning algorithm can quickly adjust the price points to match the competitor's price (Bauer & Jannach, 2018). According to Dekimpe (2020), best response pricing algorithms encapsulate customer choices, competitor strategies and supply network to optimize dynamic pricing.

Use of AI in place management

Product access and product availability are essential component of marketing mix for heightened customer satisfaction. Product distribution relies on networked relationship, logistics, inventory management, warehousing and transportation problems, which is largely mechanical and repetitive in nature. Artificial intelligence is the perfect solution in the case of place management by offering cobots for packaging, drones for delivery, IoT for order tracking and order refilling (Huang & Rust, 2020). Standardization and mechanization of distribution process adds convenience to both suppliers and customers. Besides utility in distribution management, AI also offers customer engagement opportunities in service context. Service robots programmed with emotional AI codes are handy in surface acting (Wirtz et al., 2018). Embodied robots greet and engage with customers, but human elements need to complement the service environment for customer delight. Automation of service process with AI offers additional opportunity for performance and productivity improvement (Huang & Rust, 2018).

Use of AI in promotion management

Promotion management entail media planning, media scheduling, advertising campaign management, search engine optimization etc. Promotion tactics are transforming from physical to digital. Digital marketing and social media campaigns made an inroad due to digital transformation across the globe. In the changed technological world, customer decide the content, place, and timing. AI offers personalization and customization of message as per the customer profile and likings (Huang & Rust, 2020). Content analytics can optimize value and message effectiveness. Customer likings and disliking can be tracked in real time with emotive AI algorithms. Netnography on social media content offers new avenues for marketers to align their marketing strategies as per the customer likings (Tripathi & Verma, 2018; Verma, 2014; Verma & Yadav, 2020).

Challenges of Artificial Intelligence (AI) in Advertising

Possible Inaccuracies in Data: AI-generated results are only effective if the data inputs are accurate. The data must represent all aspects of the customers, their behavior, and their journey. So, companies must invest in ways to verify the accuracy of the data being put into the AI models to ensure their effectiveness.

Lack of Creativity: AI can be an excellent tool for gathering data to inform ad campaigns; however, humans still need to brainstorm creative advertising content that generates buzz. For instance, consumers often gravitate to social media advertising that shows the brand's values and how it aligns with their own. Funny, trendy, and relatable ads are also popular among audiences. Right now, only humans can spearhead advertising content that is relatable and touching. An advertising campaign that is too reliant on AI can result in dull and disconnected advertising. However, it's important to note that while AI tools cannot spearhead creative campaigns, they can still be helpful in the creative process. For example, HubSpot's Content Assistant AI feature can generate blog ideas, blog outlines, marketing emails, and more to help steer marketers toward their goals.

Data Privacy: As mentioned earlier, AI can collect data to create more personalized ads. However, there is also the concern that AI algorithms and models can inadvertently collect sensitive information about consumers. Companies leveraging AI to collect data for advertising will have to mitigate the risk by deciding what consumer information to protect and how.

Application of Artificial Intelligence (AI) in the realm of Advertising

Humans have been producing a good bunch of advertisements, taken the feedback of that advertisement and then improved those advertisements according to the audience. If an organization can detect the right kind of AI tools and use it across search, content and all social media handles, specifically for curating ads, all this can happen in seconds or a few hours. The mechanism of AI allows advertising to happen in such a way that it can generate data and know what is working and what is not. It can also predict what all changes must be brought into the ad campaign to make it work. AI also has the ability to increase the return of spending on ads by being more efficient and reduce the need to employ staff. In Fact there is no need to supervise these tools. It can learn on its own by analyzing the data sets and through experimentation. As a summary, we can understand how AI is applied in the realm of advertising in three points.

- AI can analyze and act on a large scale of data, thereby increasing the revenue.
- Its tremendous insights and superior speed accuracy makes it more advantageous.
- It is faster, quicker and efficient- all this reduces cost.

Hence, it can be easily understood why more and more people have turned to AI for advertising purposes. It seems as though AI is a natural fit for this field, working on data at a larger scale and moving ahead on its own by learning on its own. Humans naturally would require days to complete all these work, and it would also be challenging to employ good people to work in this industry. Even though creative individuals are needed to thrive in the advertising industry, we cannot disregard the fact that AI can actually reduce costs, increase revenue and become advantageous as discussed before. AI will always be quick in improving campaigns and holding insights by processing the data. If we look around us, there are numerous areas and cases where AI has been in use successfully. Hence, the future of AI in advertising is not far off.

Methodological Approach

In carrying out this research, the main objective was to identify emerging trends in advertising practice as regards to the use of Artificial Intelligence and their impacts on advertising as well as consumer behaviour. Firstly, the qualitative research design was adopted and a semi-structured interview was conducted to gather data on the current usage of AI-based advertising techniques in the industry. This research design is best suited for this study as it allows for in-depth exploration and the use of methods like interviews can provide valuable insights into the attitudes and opinions of advertisers. Also, qualitative research methods are most appropriate as the sample size is small and the unique social setting of the participants.

The population of the study is 101 as provided by Advertising Practitioners Association of Port-Harcourt (APAPHC) Membership Register of 2023. The researchers purposively selected 20 persons to constitute the sample size in which 13 were male and 7 were female. An intensive one-on-one interview was carried out during the Advertising Practitioners Association of Port-Harcourt (APAPHC) Annual General Meeting to understand their perceptions of AI-based advertising practices, their level of adoption, and their impact on advertising effectiveness.

Discussion of findings

Research questions which guided the study as found in the introductory part of this paper are hereby addressed based on the data presented above:

What are the emerging trends in advertising practice within the AI Paradigm?

The finding is indicative that AI has become integral to the advertising industry, offering capabilities to fulfill various tasks required by brands. AI can effectively assist advertisers in writing and optimizing ad copy, purchasing and placing digital ads, managing and optimizing ad performance. Ad Personalization is a growing trend in advertising practice within the AI paradigm, with many businesses using algorithms to analyze consumer data and provide tailored ads. Again, Voice search optimization is becoming increasingly important for advertisers, as more consumers use voice assistants to search for products and services. Another emerging trend in advertising is the Chatbots are being used by businesses to provide personalized recommendations and assistance to consumers, improving customer engagement and satisfaction and predictive analytics is being used to analyze consumer data and predict behavior, enabling businesses to create more effective and targeted ad campaigns.

How does AI impact advertising campaigns and consumer behavior?

AI can significantly improve the effectiveness of advertising campaigns by enabling businesses to target the right audience with the right message at the right time. Personalization is a key area where AI can improve ad effectiveness, as it allows businesses to create more relevant and engaging ads that resonate with consumers. The study also found that AI can help businesses optimize ad placement, resulting in higher click-through and conversion rates as well as automate many aspects of the advertising process, reducing costs and improving efficiency. Finally, AI can provide valuable insights into ad campaign performance, enabling businesses to optimize future campaigns for better results.

Conclusion

The emerging trends in advertising practice within the AI paradigm offer exciting possibilities for businesses looking to improve the effectiveness of their advertising campaigns. Personalization, voice search optimization, chatbots, and predictive analytics are just a few of the current trends that are transforming the advertising landscape. With the help of AI, businesses can target the right audience with the right message at the right time, resulting in more effective ad campaigns and improved ROI. However, as the use of AI in advertising continues to grow, it is important for practitioners and researchers to consider the ethical implications and potential drawbacks of this technology. By leveraging the insights gained through this research, businesses and researchers can explore the full potential of AI in advertising while ensuring that it is used in a responsible and ethical way.

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