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Article:	Ethical Considerations in Use of Artificial Intelligence in Digital Marketing
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ABSTRACT

Digital marketing has achieved new levels of success due to integration with Artificial Intelligence (AI). Digital marketers are now able to analyze the huge amount of customers' data with the help of AI. Likewise, AI can make decisions-based analysis which consequently helps the digital marketers to achieve their objectives. The purpose of this study is to highlight the ethical considerations in the use of AI in digital marketing primarily focusing on the process of transparency, customers' privacy, fairness, and accountability. In this study the concerned literature and case studies were reviewed to assess potential risks and make recommendations to improve the protection of customers' data. This study encompasses the uses of AI in digital marketing along with ethical considerations that while digital marketers benefit from AI in digital marketing they should also care for the customers' right to privacy, fairness in AI based algorithms, and transparency of the process and finally the perpetrators should be accountable to some entity.

Keywords: Digital Marketing, Artificial Intelligence, Ethics, Customers Data, Customers Privacy, AI Algorithms, Decision Making.

Introduction

With evolution of artificial intelligence (AI) and its inclusion in digital marketing, digital business have progressed leaps and bounds. In this new era of modernization, the digital marketers can gather data of customers about their choices, preferences. This huge amount of data then can be analysed using AI and based on this data AI can predict consumer behaviour and it can generate targeted campaigns which in return helps the digital marketers in achieving the desired results (Pazzanese, 2020). The AI has immense potential in digital marketing however the use of AI in digital marketing raise certain ethical concerns like privacy of customers' data, consent of customers before gathering their data and making decisions on their behalf, biasness in algorithms, transparency of the process.

The widespread of AI in almost every field of life especially in digital marketing marks the great shift towards data driven decision making and targeting campaigns The AI algorithms are based and trained on machine learning and they have the capability to process vast amount of customers. This analysis of customers' data provides insight about customers' likes, dislikes and purchasing behaviour. (Smith A. , 2021). By using this analysed data online businesses can generate targeted campaigns based on demographics, tune their pricing strategy which can enhance customers satisfaction level. The AI powered targeted advertisement has also made life easy for the digital marketers and advertisers. (Pazzanese, 2020). However the accompanying ethical challenge of privacy of the customers' data cannot be ignored.

The customers are also enjoying the dividends of this technology as they are shown the advertisements of their choice and favourite products / brands and most of the times AI based algorithms are helping them to make purchase decisions (Pazzanese, 2020). The ethical factor of consumers' consent is applied here that AI algorithms are making decision or helping the customers to make decisions but no consent of consumer is involved in this process. The use of pre fed AI algorithms target the consumers with the collected data and provides them with personalised advertisement and recommendations, thus affecting their decision-making capability (Christoph Luetge, 2018).

The ethical implications surrounding data privacy and informed consent are central to discussions about AI in digital marketing. Users often unknowingly provide access to their personal information, unaware of how it will be utilized (Zulqarnain, Rashid, & Riaz, 2023). Maintaining a balance between data-driven advertising and privacy of users necessitates transparent data policies and robust consent mechanisms ((Baloch, Hassan & Hassan., 2024, Rebecca Balebako, 2014). Protocols in the European Union, such as the General Data Protection Regulation (GDPR) serve as crucial frameworks, emphasizing the importance of informed consent and empowering individuals with control over their data.

AI-driven digital marketing possesses the potential to influence consumer decisions at an unprecedented scale. The AI analyses the consumers purchase behaviour and by using algorithms the consumers are bombarded with the different choices which blurs the line between users' authentic choice and AI manipulated choices (Christoph Luetge, 2018) (Fogg, 2003). Marketers face ethical dilemmas concerning the preservation of human autonomy and the ethics of persuasion. No matter how helpful and potential this technology is but it also raises a question about digital manipulation and that too without the consent of the consumer. Therefore ethics demands that the transparency and informed consent is necessary in this process to make the consumers empowered (Pazzanese, 2020).

The most basic ethical concern is the privacy of consumers and researchers suggest rigorous data protection techniques. Moreover they suggest that the informed consent is to be taken from the customers that their data is being collected for marketing purpose (Smith A. , 2021). The researchers also suggest that there should be transparency of the process i.e:- the consumers should be informed about the process of AI making decisions and in return it will also minimise the risk of biased results (Lee, 2020) . Additionally the factor of accountability procedures is also missing in the use of AI in digital marketers. For this purpose the researchers are of the view that firms and organisations using AI systems should be accountable to any entity and clear laws should be formulated to make the perpetrators accountable and mediation and compensation for the affected people (Johnson R. , 2023). If the digital business who are using IA are made accountable then it will build consumers' trust in the process.

Literature Review

The AI is becoming popular day by day in the world of digital marketing but ethical concerns on use of AI in digital marketing have also been raised which may cause unintentional consequences on individuals, society and the environment. (Pazzanese, 2020). These ethical concerns where AI is utilised to process consumers' data and create judgments and forecasts based on that data include transparency, privacy, fairness and accountability (A. A. Khan, June 2022).

The foremost important ethical concern in use of AI in digital marketing is Transparency. The consumers more frequently have no knowledge that they are being tracked and how their data is being collected and used for decision making by AI. Therefore, they are often called the "Black Boxes" which make it hard to understand for the users that how their data is being tracked and used for marketing. (Wigmore, August 2019). Therefore, transparency in AI is essential to understand how judgments are made on behalf of the consumers. It is also pertinent to mention here that who should make decision have access to the consumers' data and why? The lack of transparency leads to the suspicion of misuse of this data which causes the ethical conundrum (Murugan, 2023). It is therefore mandatory for the digital marketers to explain how the AI will be used to collect the information and target consumers in order to build trust and avoid transparency concerns.

The second ethical concern besides transparency that arises with the use of AI in digital marketing is privacy (W. Wang, August 2018). AI collects consumers' data and analyse it; this process is done using AI algorithms. The collected consumers' data can include their likes, dislikes, purchase behaviour, history, and demographic information. This data is utilised by AI to enhance consumers' experience by providing them with personalised or relevant recommendations. This collection of consumers' personal data can pose a substantial threat to their privacy. (Yi Zhang, April 2021).

The ethical considerations of fairness come into play when AI algorithms use biased data sets and make decisions based on those data sets. Fairness is widely recognised ethical concern in use of AI. AI systems can continue existing biasness and discrimination by using biased data set and achieved result would cause significant impact on certain groups due to unequal outcomes (A. A. Khan, June 2022). These types of algorithms are already in process in digital world for example hiring process algorithms perpetuate biasness against women (Huet, March 2022) and algorithms used in criminal judicial systems in many countries have racial biasness (Davies, December 20, 2017). To promote fairness, it is imperative to curtail

this trend of biased data sets and it can be achieved by making decision making process of an AI more transparent.

The element of fairness can also be achieved by making the digital marketers accountable. This is also the ethical concern that digital marketers are collecting the consumers' data, and they are not accountable to any entity (A. A. Khan, June 2022). AI structures are normally owned, and the algorithms of these systems are not available to the public, which make it difficult to hold someone accountable. The digital marketers should be held accountable for any breach in consumers' data and negative outcomes of decisions made by AI. They should justify the use of AI in digital marketing and moreover a process may be devised through which consumers' can challenge the decisions made by AI on their behalf. It is imperative to ensure social and technical accountability throughout the world of digital marketing. Accountability and transparency has a close relationship as without understanding of the AI system, it is very difficult to make informed decisions.

Research Method

The research aims to explore concerns regarding ethics in utilizing Artificial Intelligence (AI) in digital marketing, specifically focusing on transparency of the process, privacy of consumers' data and algorithms that make decisions on behalf of consumers. Employing a qualitative research approach, this study investigates academic databases and relevant case studies to investigate how AI is posing ethical challenges in its use in digital marketing. This research adopts a qualitative research design, allowing for an in-depth exploration of ethical concerns in AI-driven digital marketing. Qualitative methods are instrumental in capturing nuanced perspectives and contextual understandings.

Collection of data for this article is primarily conducted through academic databases, including "JSTOR, Google Scholar, Research Gate, and Scholarly Journals in the fields of marketing, ethics, and consumers' privacy". These sources provide scholarly articles, research papers related to the ethical implications of AI in digital marketing. Additionally, the study analyzes relevant case studies to understand practical implications. The selected case studies include TikTok's Personal Data Collection, Google's Location Tracking and Facebook's Facial Recognition Technology. These case studies offer real-world examples to contextualize theoretical discussions.

Data from academic papers and case studies helped in identifying ethical dilemmas, consumer privacy concerns, and decision-making processes influenced by AI in digital marketing. A detailed analysis of each case study is performed. This analysis involves examining the specific ethical issues, privacy implications, and consumer behavior changes resulting from AI-driven digital marketing strategies. Comparative analysis across the case studies aids in understanding the diversity of ethical challenges faced by different platforms.

Artificial Intelligence and Digital Marketing

Artificial intelligence in simple terms is defined as "the science of making machines that think like humans do and to execute the tasks from the simplest to the more complex" (Pattam, 2021). Unlike humans the AI can process huge amount of data to recognize patterns, make decisions and judge like humans do. Artificial Intelligence is based on three subsets or concepts which make the machine think and work like humans do. These three core concepts are "machine learning, deep learning and neural networks" (Pattam, 2021). Machine learning is the subclass of AI which enables the machine to learn and act as human do and it has two

types supervised learning and unsupervised learning. The supervised learning entails that machine needs some sort of supervision to learn from the data such as teacher student concept while unsupervised learning does not require a supervisor and machine learn by itself by segregating the data based on characteristics, features and patterns. Deep learning works like human brain; it is based on artificial neural networks which imitates like brain cells. Unlike human brain cells these neurons are not biological instead these neurons are built from human made codes. Using these neural networks; AI can imitate human brain to act according to the environment. (Verma , Sharma , Deb , Maitra, 2021).

Technological advancements such as artificial intelligence (AI) and big data analytics (BDA) have allowed the digital marketers or organizations to entice and maintain a customer loyalty (Verma , Sharma , Deb , Maitra, 2021). These advancements in technology provide a strong competition among the marketer by offering product and services to the customers according to their need and requirements. Moreover, these technologies have altogether altered the working of organizations globally by providing the customer centric approach, which leads to the growth of these organizations (Vetterli , Uebernickel, Brenner, Petrie & Stermann, 2016). Artificial Intelligence based on the real time data tacking; not only benefits the organizations to make decisions to meet the requirements of customers but also aids the organizations in attracting and retaining the customers. This data can include the purchase pattern, likes / dislikes and online behavior of the customers. Moreover, with the help of customers' data, artificial intelligence (AI) tools can predict their next move and presents them with the appropriate choices (Tjepkema, 2019). AI tools are useful in deducing the customers' expectations and providing the future course of action (Shabbir, J., & Anwer, T., 2018). The application of AI in digital marketing is explained in ensuing paragraphs.

AI In Planning of Digital Marketing Strategy

Artificial intelligence can assist the digital marketers in planning of their strategy by the process of segmentation, targeting and positioning. AI's ability to scrutinize huge data enables marketers to attain deep understandings of consumer attitude, preferences, and trends. This approach allows businesses to make knowledgeable decisions, ensuring that marketing strategies are aligned with the evolving needs of the target audience (Smith J. , 2020) .The algorithms in machine learning increases analytics in terms of predictions which provides marketers to predict trends and enhance campaign performance. Furthermore, AI facilitates the automation of repetitive tasks, allowing marketing teams to focus on creativity and strategy formulation. Chat bots powered by AI enhance customer interactions, providing personalized and timely responses. AI-driven tools also assist in dynamic content creation and ensure that marketing messages resonate effectively with the audience (Johnson M. , 2019).

Data Collection of Customers

In the context of AI, data refers to the unprocessed facts and figures that are gathered, handled, and examined to derive valuable knowledge and insights. Data is the fuel that drives machine learning algorithms and other AI technologies in AI. This data serves as the basis for training and enhancing AI models and it can comprise both structured data (databases and spread sheets) and unstructured data (like text, photos, and videos). Data plays a pivotal role in digital marketing strategies. Here are a few key aspects where data is crucial, for example, the data provides customers' insights to the sellers, and it helps in understanding the purchase behavior of the customers. For example: an e-commerce company uses data analytics to

analyze customer purchase history. By knowing what products are mostly bought together, the company can make targeted marketing campaigns and offer tailored product recommendations. The demographic data of the customers can help the sellers and advertisers to do the targeted advertisement. For example: Facebook analyses user interactions and interests. Advertisers can then use this data to display targeted ads to specific demographics, increasing the chances of user engagement and conversion. The user experience can be optimized by tracking user behavior, pages visited, and time spent on each page. By analyzing this data, marketers can optimize website design, layout, and content, ensuring a seamless and engaging user experience.

Case Studies

Facebook's Facial Recognition Technology

Facebook introduced facial recognition software that immediately recognised people in the album and asked the user to tag them which consequently linked the accounts to those people to the uploaded pictures. Using this technology, Facebook gathered millions of pictures with the user information, however Facebook did not sell this technology to any third party and used it on their website. However, this technology became a privacy and regulatory concern for the Facebook. A complaint was filed by American Civil Liberties (ACLU) in 2019 with the Federal Trade Commission (FTC) stating that “Facebook has violated users’ privacy by collecting and storing their biometric data including their face geometry without their consent” (Preeti Bharti and Byungjoo Park, 2023). Consequently, FTC penalised Facebook \$5 billion to resolve these complaints in 2019 which lead to the shutting down of the “Facial recognition system” by Facebook (Kashmir Hill and Ryan Mac, 2023). Jerome Pesenti vice president of artificial intelligence at Meta (Facebook’s newly named parent company) said that “every new technology brings with it potential for both benefit and concern, and the company wants to find the right balance. Therefore, Facebook is shutting down the facial recognition technology due to the many concerns in the society against this technology”. Facebook plans to delete the face scan data of more than one billion users in December 2023 however it will not remove the software that controls the system which is an advanced algorithm called “**Deepface**”. According to the Meta spokesman Jason Grosse, “Facebook has not ruled out incorporating facial recognition technology into future products.” (Kashmir Hill and Ryan Mac, 2023)

TikTok's Personal Data Collection

TikTok is a social media platform for making, distributing, viewing and searching short videos. This app is mostly used by young generation which allows them to express themselves through singing, lip synching, dancing, comedy in the form of short videos and also sharing these videos across the community. (D'Suzah, 2023) It is owned by Byte dance which is a Chinese company and “this app has been downloaded 1.5 Billion times globally and 122 million times in the United States” (Tews, 2020). In 2019 The Federal Trade Commission (FTC) filed a complaint against TikTok on violation of the Children’s Online Privacy Protection Act (COPPA). The FTC was concerned that TikTok has collected the personal data (characteristics, locations and close contacts) of the minors and sent the same data to the servers in China. TikTok agreed to pay a \$5.7 million settlement to the FTC in 2019 (Tews, 2020).

In a case study “Surveilling young people online: An investigation into TikTok’s data processing practices” conducted by Dylan Williams, Rys Farthing and Alex McIntosh in July 2021 found out that “TikTok’s terms and conditions are not presented in ways that maximise

meaningful, informed consent”. There are total eight documents in TikTok’s terms and conditions many of which are difficult to find. Only two terms and conditions documents are visible while creating a new account on the app. Moreover, the language used in these terms and conditions was not simple and these documents were so lengthy that most of the user agreed to the terms and conditions without reading the document. During this study when young TikTok users were asked that “if they had meaningfully consented to all this data collection, an alarming 67.8% of respondents suggested that they did not think that had offered meaningful consent” (Dylan Williams, 2021).

The case study of TikTok explains the importance of data privacy in the digital age. With its expanding circle more and more people are joining the digital world. The companies must ensure the privacy of users’ data and they must be transparent in data collection to build the confidence of users.

Google’s Location Tracking

Google has broken the consumers’ protection laws since 2014 by secretly recording the movement of its users. This data was then sold to the digital marketers to sell their advertisements based on the users’ geography and location. The complaints were launched against Google in 40 states of the United States and Google had to pay the fine of \$392 million to settle these complaints. (Allyn, 2022). According to Oregon Attorney General Ellen Rosenblum “For years Google has prioritized profit over their users”. Location data by Google is often obtained by the law enforcement agencies in criminal investigations to identify a suspect which is an important part of Google’s advertisement business. However, the state investigators called it “the most sensitive and valuable personal information Google collects”. This data helps the advertisers to target potential customers with advertisements based on their neighborhood. The ethical concern is that this data is being collected by Google without the consent of the users.

Ethical Implications in use of Artificial Intelligence

Transparency

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Privacy

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recommendations. This collection of consumers' personal data can pose a substantial threat to their privacy. (Yi Zhang, April 2021).

Fairness

The ethical considerations of fairness come into play when AI algorithms use biased data sets and make decisions based on those data sets. Fairness is widely recognised ethical concern in use of AI. AI systems can continue existing biasness and discrimination by using biased data set and achieved result would cause significant impact on certain groups due to unequal outcomes (A. A. Khan, June 2022). These types of algorithms are already in process in digital world for example hiring process algorithms perpetuate biasness against women (Huet, March 2022) and algorithms used in criminal judicial systems in many countries have racial biasness (Davies, December 20, 2017). To promote fairness, it is imperative to curtail this trend of biased data sets and it can be achieved by making decision making process of a AI more transparent.

Accountability

The element of fairness can also be achieved by making the digital marketers accountable. This is also the ethical concern that digital marketers are collecting the consumers' data, and they are not accountable to any entity (A. A. Khan, June 2022). AI structures are normally owned, and the algorithms of these systems are not available to the public, which make it difficult to hold someone accountable. They should justify the use of AI in digital marketing and moreover a process may be devised through which consumers' can challenge the decisions made by AI on their behalf. It is imperative to ensure social and technical accountability throughout the world of digital marketing. Accountability and transparency have a close relationship as without understanding of the AI system, it is very difficult to make informed decisions.

Recommendations

In the fast-paced world of digital marketing, Artificial Intelligence (AI) is revolutionizing the way businesses connect with their audience. However, this technological advancement comes with a set of ethical implications that marketers must carefully navigate. Following recommendations are forwarded to curb the ethical implications in use of AI in digital marketing.

Transparency in AI Algorithms:

Digital business should make their AI algorithms transparent by informing the consumers that how the AI algorithms are used to provide consumers with personalized advertisements and recommendations. Also by revealing the data source and the factors that are influencing algorithm decision, digital businesses can build consumers' confidence and trust in the process.

User Privacy Protection:

The data should be protected using rigorous process and procedures. Moreover the informed consent of the user should be obtained and more regulatory authorities like GDPR should come all around the world for protection of users' data and privacy.

Bias Mitigation:

Bias mitigation can be ensured by regular audits by regulatory authorities like GDPR. Moreover the algorithms should be powered and trained through diverse data sets to minimize

the chances of bias in the algorithms. Moreover the regularity authorities should come up with standard rules and regulations which should be applicable throughout the world.

Fair and Inclusive Marketing:

The digital businesses should promote fair and inclusive marketing while using AI by avoiding discrimination and stereotyping in targeted campaigns. Moreover regular check should be done by to update algorithms if any bias is found in algorithms.

Ethical Marketing Practices:

The digital businesses should avoid manipulative techniques like false advertising and deceptive techniques and use of AI can overcome these manipulative techniques if used in right direction and with good intent.

Continuous Monitoring and Evaluation:

Standard operating procedures of continuous monitoring and evaluation should be made and implemented by the digital business that are using AI to process and gather the data of consumers. This process will ensure the self-evaluation and audit. Moreover, it will ensure that the ethical implications are kept paramount in use of AI in digital businesses.

Conclusion:

Artificial intelligence has totally reshaped the digital marketing and the life of digital marketers and users have also become easy. With this ease of life, the responsible use of AI while keeping in mind the users' privacy, transparency, bias mitigation and fairness can ensure that ethical implications can be curbed to the minimum scale. The confidence and trust of consumers can be increased by using ethical practices in the digital marketing and it will help in maintaining consumers' oriented ecosystem.

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