The Influence of AI in Marketing

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Abstract: The advent of Artificial Intelligence (AI) in marketing has sparked a transformative change. This paper delves into the burgeoning application of AI in marketing, examining its potential to enhance efficiency and sales while addressing the associated ethical concerns and customer privacy issues. Despite the potential drawbacks, such as data privacy violations and the erosion of consumer autonomy, the study explains the benefits of AI in personalizing customer experiences and streamlining decision-making processes, which can bolster customer satisfaction and drive sales performance. The research reveals that while AI may initially lead to dissatisfactory customer experiences and demotivation due to discriminatory classification, strict regulations and company controls can mitigate these issues, fostering trust and enhancing the benefits of AI in marketing. The paper also discusses the impact of AI on consumer autonomy suggesting that AI can facilitate more efficient decision-making without compromising consumer choice. The paper concludes that the integration of AI in marketing, when managed responsibly, can lead to a more personalized and efficient customer experience, resulting in increased purchase intentions and improved sales outcomes. It calls for future research to investigate the impact of customer characteristics on AI-assisted experiences and decision-making, the alignment of AI intelligibility with customer preferences, and the implementation of ethical programs in AI marketing.

Keywords: Artificial Intelligence, Customer Experience, Data Privacy, Consumer Autonomy, Ethical Considerations.

1. Introduction

It is predicted that the market value of Artificial Intelligence (AI) is possibly to be up to 24 billion dollars in 2030 compared with 5.1 billion in 2022 [1]. Many industries and companies have applied AI use, aimed at enhancing efficiency and sales. According to [2], compared to fewer than 5% in 2020, 40% of enterprises by 2024 are using AI applications, indicating a growing trend in the application of AI in marketing. AI in marketing means the cutting-edge strategy of employing AI to automate and enhance aspects of the marketing process. Under the advantages of AI use, customers tend to have more favorable experiences and decision-making processes due to personalized services. This leads to stronger purchase intention and may bring the companies more profits, thereby helping the company to have advantage in the market. However, AI may raise ethical controversies and concerns for customers. With extensive use of customer information in processing data, both marketing scholars and customers have expressed concerns about privacy issues of analytical approaches of AI [3]. Data privacy as one of the biggest issues integrating AI into operations, 83%

online users worldwide want to protect their digital privacy [4]. This concern, while understandable, can be solved by a higher technology level, thorough regulations and stronger control of companies, which leads to AI use boosting better customer experiences, decision-making processes and market positions for companies.

2. Customer experience

AI use in marketing firstly may dissatisfy customers, even leading to demotivation and vulnerable experiences. This is because there is possibly discriminatory use of classification in AI when targeting customers. As [5] have demonstrated, customers may feel misunderstood as a result of AI-related prejudice against ethnic and social groupings. They experience sentiments when they fear that AI may exploit a social category in a discriminating way to create biased predictions about them, that they will be socially excluded [6]. This is particularly predominant in occasions when they have restricted access to market resources. A case in point is that Fintech businesses are using digital data such as people registering on a website in order to forecast payment behavior and evaluate their credit. Due to informational asymmetries, people cannot often obtain the same information and this may finally lead to social inequalities [7]. Furthermore, the vulnerable customer group especially feel exploited due to AI's inherent characteristic of loss of transparency, feeling demotivated and helpless which mainly come from loss of control. Except being exploited, some customers feel dissatisfied owing to lacking of emotions of AI when interacting with it to recommend products and fail to get the emotional value [8]. Unsuitable and discriminatory target segment by AI may exploit consumers, misunderstand and alienate them, giving rise to dissatisfied experiences. However, with the implementation of strict and clear regulations of AI use, leading to increasing sense of safety, the personalized and engaged experience seemingly be one of the main advantages of AI marketing [9].

On the other hand, AI marketing seemingly increases the satisfaction of customers' experiences. The intelligence of AI usually results in favorable experiences for them including personalization or convenience [10,11]. Personalization in marketing referring to the degree to which information is bespoke to the demands of customers, benefit from the capability of data processing of AI [10]. By analyzing vast amounts of data, AI can recommend products and services that align with a customer's past purchases and expressed interests, saving them valuable time and effort in the search for relevant information. When looking through products such as on Taobao, the recommended products would be the similar products to customers' previous purchased ones. It is the result of AI algorithms working behind the scenes to predict and cater to individual preferences. These AI-driven systems not only streamline the shopping experience by suggesting products that align with customer preferences but also enhance customer satisfaction through seamless, human-like interactions with AI chatbots. These virtual assistants are providing immediate responses to queries and solving issues, thus saving customers time and elevating their overall experience. Companies are increasingly turning to AI to process the massive datasets at their disposal, aiming to anticipate customer desires with unprecedented accuracy. For instance, psychological qualities can be predicted from digital footprints, which present enormous prospects for psychological targeting by tailored advertising and convincing attraction [12]. Digital personalization commonly takes the form of "recommended for you" sections on websites such as Netflix, Pandora, and Amazon. These systems can not only recommend products according to customers' preferences when they look through information in shopping platforms but also are capable to provide fluent conversations with customers through tools, increasing their satisfaction. Customers' time may be largely saved by the systems as well as improving their satisfaction through answers from AI assistants. As the research shows, customer expectations are changing, 70% of them looking for broader application of AI in their dealings with businesses, longing for personalized experiences [12]. By using recommendation systems, AI conceivably makes lives more convenient with an enhanced experience. This shift in consumer behavior presents a

significant market opportunity for companies that are quick to adapt and integrate AI into their marketing strategies. Those who can successfully leverage AI to offer personalized experiences will not only meet but also exceed customer expectations, securing a competitive edge in today's fast-paced, technology-driven marketplace.

3. Autonomy

AI use can undermine consumers' sense of autonomy by depriving them of opportunities to explore diverse products, which means less freedom when making purchase decisions by people themselves. This is because AI-powered psychological targeting, recommender systems, and personalization serve as informative nudges, influencing customers' choices to a large extent. Customers' autonomy is extensively damaged by delegating decisions to AI systems at the information-gathering stage. People have strong feelings manipulated by it especially when the degree of algorithmic decision autonomy is high [6,13]. Customers then select less-preferred options to assert their liberty after they feel that a computer program can forecast their decisions based on their preferences. When people's independent needs are not met, their personal motivation declines, leading to resistance [6,14]. Besides, [6] report that lacking of autonomy is one of the reasons why consumers feel discrimination or oppression. In the end, it may harm human uniqueness and imperil human identity, which has negative effects on consumers' purchasing decisions.

Nonetheless, people may have faster and more efficient decisions when purchasing products by AI setting preferences for them. Gaining decisions from digital assistants, which effectively matches people preferences with available choices, largely avoids encountering the cognitive fatigue in decision-making. AI-driven digital assistants, such as the ones from e-bay with the aim of creating descriptive and predictive models, can analyze user preferences and match them with available products based on various criteria such as price, quality, and brand reputation [13]. This process of acquiring information from AI presumably not only boosts the personalized experiences, but also further promotes more efficient decisions. In people's decision-making process, delegation or autonomy is deemed a significant factor. Consumers who feel highly understood and be given autonomy during AI use may not only follow AI's recommendations more but also increase their purchase intentions [11]. They experience happiness and contentment with increased loyalty as well. In the meantime, they perceive a stronger consensus in their suggestion and decision-making system, which gives them more confidence in their selections and, ultimately, increases their pleasure with the algorithmic judgments [6]. It is believed that AI's customizability can help maintain consumers' autonomy and they may not feel replaced during the delegating process [11]. Therefore, when setting the suitable level of autonomy in AI recommendation, people will apparently not lose their sense of autonomy. In order to improve autonomy in decision-making processes, self-efficacy which means fulfillment, recognizing behaviors of good value and feeling sense of identity plays a vital role. This is due to the fact that it directly affects elements like expectations, emotional inclinations, incentives, and perceived possibilities. According to the research, people might feel more productive and content when they have a higher sense of self-efficacy when making decisions [6]. Consumer self-efficacy arguably is positively impacted by algorithmic decision autonomy and this positively influences consumer purchasing decisions. Moreover, people's willpower of not being controlled is crucial in the decision-making process. [7] claim that becoming aware of the act of choosing and not being restricted in AI choices are keys to experiencing autonomy. Hence, suitable algorithmic autonomy and strong awareness of people might guarantee people's autonomy, facilitating decision-making progress. AI's role in decision-making, with a focus on maintaining consumer autonomy and self-efficacy, can lead to a more satisfying and efficient purchasing experience. This approach not only leverages the power of AI to simplify choices but also respects and enhances the human element in decision-making, leading to a harmonious blend of technology and human autonomy.

4. Privacy concerns

Privacy concerns have long been a central issue in the discourse surrounding the use of AI particularly in consumer applications. However, with the right government policies and corporate controls in place, these concerns can be significantly mitigated, fostering greater trust in AI among the public. As [2] has put forward, ensuring data reliable and accurate is a major hurdle when using AI in marketing. According to [9,12], the biased information generating by AI is prevalent. Due to the loss of accuracy and credibility of data, customers seemingly have worse experiences and weaker purchase intentions. As [12] have suggested, customers' evaluations and decisions can be greatly impacted by how accurate the information is. This is because they feel captured when facing invasions of privacy, which weakens the effect of normal data procession, even reducing their intentions to share data and negatively affecting decision-making processes. In many people's views, AI will share their information with other parties, leading to fear and negative attitudes.

Nevertheless, privacy concerns may be alleviated by government policies and control of companies, increasing people's trust for AI. Privacy concerns are highly correlated with people's trust [5,11,14]. It is reported that trust can mediate the negative effects by enlarging firm transparency and control [15]. Purchase intent is not always the result of data privacy issues. Hence, companies should make numerous explanations related to AI credibility, increasing organizational consciousness to consumer privacy and the current asymmetry in information, in order to reduce consumers' data privacy concerns and boost their acceptance of AI use. According to [15], research has found that the issues of privacy are highly contextual and constrained by large amounts of limiting factors including the strength of privacy policies. This indicates that more policies should be taken to support AI development on the basis of companies' explanations and customers' trust. It's important to note that purchase intent is not solely determined by data privacy concerns. Therefore, companies must provide comprehensive explanations about the credibility of AI, enhancing their awareness of consumer privacy and addressing the information asymmetry that exists. Many organizations develop solutions to AI applications considering the benefit of public good in compliance with privacy regulations and public safety. This includes explaining how AI is used, the benefits it provides and the measures taken to protect personal data. A case in point is that the European Commission has released a proposal on AI regulation, aimed at improving the AI ecosystem and in general markets [13]. Considering AI trustworthiness in marketing is defined in the "Ethics guidelines for trustworthy AI" which include fairness, security and accountability, the future for AI use thus shows an ethical trend. As a result, privacy concerns will not be a problem to a large extent under joint efforts of companies and government in the future. Under privacy control by companies, policies and trust of customers, the negatives of privacy may be moderated. The future of AI use is not just about technological advancement but also about ethical considerations and the responsible handling of personal data. As companies and governments work together to address privacy concerns, the trust in AI is likely to increase, leading to a more ethical and responsible use of AI in various applications. This collaborative approach will ensure that the benefits of AI are realized while protecting the privacy rights of individuals, thus paving the way for a future where AI can be harnessed for the greater good while maintaining public trust.

5. Discussion

Although a growing trend of AI use is shown in marketing, some experts may argue that it is harmful for companies to apply AI due to over-reliance on AI. This is because organizations may lose differentiation advantage in competing exclusively with customized products, leading to a dilemma in the market. The use of AI may reduce the variety of products that consumers explore and purchase, which means that companies are less likely to expand their diversified product lines, thereby losing

market position to some extent [9]. This means that less possibility is provided to companies to enlarge diversified product lines and they lose market position in some way.

Nonetheless, AI has the potential to continuously improve the customer experiences thus helping companies to remain competitive. Organizations may be at a competitive advantage gaining more profits and increasing market share owing to sales of popular products among the customers. This is because AI transforming business models, sales processes and consumer behavior, is able to anticipate a purchase according to customer preferences accurately as discussed above. The changes in sales processes can be added with real‑time feedback to fit in the variability in customers' needs [16]. This offers a great opportunity to form customers' relationship to improve customer experience constantly, thus maintaining competitiveness. [17] claim that companies are investing in AI extensively so as to gain revenue in the future. For instance, Toyota has invested $4 billion devoted to AI and Baidu has raised $1.9 billion for AI providing financial and investment services based on customer preferences. Consequently, the function of AI prediction system seemingly exerts positive effects on companies to gain a competitive advantage in the fierce market. The use of AI in marketing and sales is pushing the boundaries of these fields. As AI continues to evolve, we are seeing the use of platforms permeating the sales as well as increased investment in AI innovations by sales technology players. Given the increasing complexity and speed of doing business in a digital world, these technologies are becoming essential tools. The pace of AI technology development is accelerating. Overall, although the use of AI may present some challenges, its potential to enhance the customer experience, enhance competitiveness and drive sales is enormous. As AI technologies advance and companies invest more in these technologies, the role of AI in marketing and sales will continue to grow, providing companies with new opportunities and competitive advantages.

6.   Conclusion

While the use of AI in marketing has some negative implications, such as the potential to invade customers' data privacy, less autonomy and create a dissatisfied experience, these issues are less important than personalized experiences and efficient decision-making processes. With comprehensive policies, control of companies and development of AI technology guaranteeing the safety use of AI in marketing, it extensively avoids the disclosure of data. In this way, customers generally increase their trust for AI used in target segment, recommendation systems and digital assistants. Trust, as the moderation of demotivated experiences and loss of autonomy, may boost the overall experiences and decision-making processes. This finally leads to stronger purchase intentions for customers and ideal sales performance for companies. Future research needs to explore more on how customers' characteristics affect experiences, decision-making processes and purchase intentions using AI. Additionally, to what extent AI intelligibility matches customers' preferences should be discussed. Finally, how ethical programs being implemented into organizations and AI marketing can be investigated. With prevalent use of AI in marketing, the demand of high-leveled skilled labor is larger, pushing individuals to be well-rounded.

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