


Exploring the Association between the Consumer Attitude towards Artificial Intelligence (AI) in Marketing with Purchase Intention: Mediating Role of Satisfying Experience

Amin Mohammadnezhad *

Department of Management, Hakim Jorjani Institute of Higher Education, Gorgan, Iran.

*Corresponding Author Email: amin.mn.business@gmail.com

Abstract: Background and Aim: This study was designed to further focus on artificial intelligence marketing area by investigating the association between the consumer attitude towards artificial intelligence (AI) in marketing with purchase intention with considering the mediating role of satisfying experience.

Methods: The focus of this research was on Iranian consumers of digital products. The study aimed for a sample size of 450 participants. An online survey was administered to the chosen individuals, who were invited to participate through social media platforms. The questionnaire was crafted to gather information on key variables relevant to the study, such as attitudes, purchase intentions, and satisfaction experiences. Both descriptive and inferential statistics were applied to analyze the data, with Pearson correlation and structural equation modeling using Lisrel serving as the inferential statistical techniques for drawing conclusions.

Results: Results revealed that consumer attitude significantly affected purchase intention ($T=8.327$). Moreover, consumer attitude significantly affected satisfying experience ($T=5.669$). Furthermore, satisfying experience affected purchase intention ($T=7.624$). Finally, satisfying experience has significantly mediated the relationship between consumer attitude and purchase intention ($P<0.001$). Results of model fit indicated that the research model has good fit.

Conclusion: Considering the findings of the study, entrepreneurs engaged in the establishment of AI-driven online enterprises will find significant advantages in utilizing its insights to enhance the effectiveness and efficiency of their business model development. Artificial Intelligence is considered a significant catalyst for contemporary advancements, serving as a robust technical resource for the development of products and services. Consequently, this study aims to enhance the understanding of relationship marketing by examining the factors influencing adoption intentions in the AI market, utilizing both symmetric and asymmetric analytical approaches to yield various insights.

Keywords: Artificial Intelligence, Marketing, Consumer Attitude, Purchase Intention, Satisfying Experience

Introduction

Contemporary organizations are encountering significant competition within the global marketplace, necessitating the adoption of advanced technologies to thrive in this challenging environment. In such a

competitive landscape, the majority of an organization's value is derived from its intellectual capital, with the true competitive edge resting on the caliber of talent that the organization can attract (Bag et al., 2022; Mehta et al., 2022). Innovative technologies are profoundly influencing the human resource management domain, shifting local viewpoints to a more global perspective. Over recent decades, remarkable advancements have been made in areas such as data mining, the Internet of Things, and artificial intelligence, where data plays a crucial role (Chen et al., 2021; Nichifor et al., 2021). Notably, the field of machine learning has experienced a paradigm shift due to the vast amounts of available data, leading to the replacement of traditional algorithms with deep learning technologies in recent years. Furthermore, one of the most vibrant sectors within machine learning is the creation of new multimodal models capable of comprehending and processing information from diverse and heterogeneous sources (Gursoy et al., 2019; Rabby et al., 2021). These sources encompass both structured and unstructured data, including images, audio, and text. Artificial intelligence, a subset of computer science, aims to develop intelligent machines that can perform tasks requiring human-like intelligence. Essentially, artificial intelligence simulates human cognitive functions in computers, enabling machines to think and behave similarly to humans. This definition extends to all machines that replicate human mental processes, allowing them to engage in activities such as problem-solving and learning (Kim et al., 2022; Trawnih et al., 2022).

The Global Robotics Report indicates that global sales of service-oriented artificial intelligence have surged by nearly 85% over the last five years. Furthermore, the growth rate of the global AI customer service market is projected to outpace that of traditional manual customer service by a factor of seven, potentially reaching \$126 billion by 2025 (Alnaser et al., 2023; Gümüş & Çark, 2021). It is anticipated that market revenue will be significantly bolstered by smart customer service solutions, which are expected to assist humans in managing up to 80% of routine sales challenges. Artificial intelligence is transforming sales processes across various sectors. Notably, AI leverages advanced voice analysis capabilities to guide sales strategies and, through data analysis, can forecast customer preferences. Additionally, it can enhance customer experience by offering personalized product recommendations and optimal pricing (Beyari & Garamoun, 2022; Li et al., 2020). Numerous studies have highlighted the advantages of incorporating artificial intelligence into marketing and sales strategies. In this context, technology acceptance theory posits that individuals' engagement with technology is shaped by their intention to utilize it, alongside factors such as perceived ease of use and usefulness. Furthermore, individuals' attitudes play a crucial role in this process. The perception of innovation can enhance user experience and motivate individuals to adopt artificial intelligence systems (Nicolescu & Tudorache, 2022; Song et al., 2022). When these systems demonstrate an ability to comprehend users' needs and preferences, the likelihood of their utilization increases. Additionally, perceived ease of use, which encompasses the simplicity of learning, understanding, and effectively employing a technology, significantly influences the intention to engage with artificial intelligence. Research findings indicate that individuals who regard artificial intelligence as both highly beneficial and relatively user-friendly are more likely to promote the adoption and integration of such technology into their activities (Jiang et al., 2022).

Conversely, in the realm of fifth generation marketing, artificial intelligence is recognized as a crucial component for future transformations. It has the capability to develop valuable algorithms by categorizing data related to consumer needs, behaviors, fears, and aspirations. Artificial intelligence marketing leverages this technology to process vast quantities of data associated with the marketing mix, thereby generating insights (Chen et al., 2021; Nazir et al., 2023). This knowledge is subsequently utilized by artificial intelligence marketing to execute and streamline various marketing functions, including the generation of market intelligence. Experts identify personalization, customization, innovation, and enhancements in marketing effectiveness and efficiency as key anticipated outcomes of integrating artificial intelligence into marketing strategies. Furthermore, a significant shift in approach, driven by the adoption of artificial intelligence methodologies, pertains to customer communication (Hoyer et al., 2020; Soares et al., 2022). Gaining a comprehensive understanding of consumer needs necessitates the collection, storage, and thorough analysis of data. Given the overwhelming volume of data, it becomes challenging for human intelligence to analyze and optimally leverage the findings. To address this challenge, organizations can implement artificial intelligence within their customer relationship management systems. Through the analysis of customer-related data, including their behaviors, interests, biases, and purchasing tendencies, artificial intelligence is capable of conducting sophisticated analyses and precise segmentation (Huang & Rust, 2022; Van Esch & Cui, 2021). This enables the prediction of consumer needs and preferences. Armed with such insights, organizations can effectively address customer requirements and deliver unique value. Furthermore, in light of constraints such as time, budgetary limitations, and the human resources necessary for prompt responses and online engagement, the implementation of AI-driven communication and response systems emerges as a highly efficient and effective solution. By leveraging the capabilities of an AI-integrated customer relationship management system, organizations can secure a significant competitive edge, enhance their market presence, and ultimately boost both their financial and non-financial outcomes (Ameen et al., 2021; Sung et al., 2021). Notable companies like Google and Amazon exemplify the successful application of artificial intelligence in customer-related processes. This study was designed to further focus on artificial intelligence marketing area by investigating the association

between the consumer attitude towards artificial intelligence (AI) in marketing with purchase intention with considering the mediating role of satisfying experience. The conceptual model of this study was presented in Figure 1.

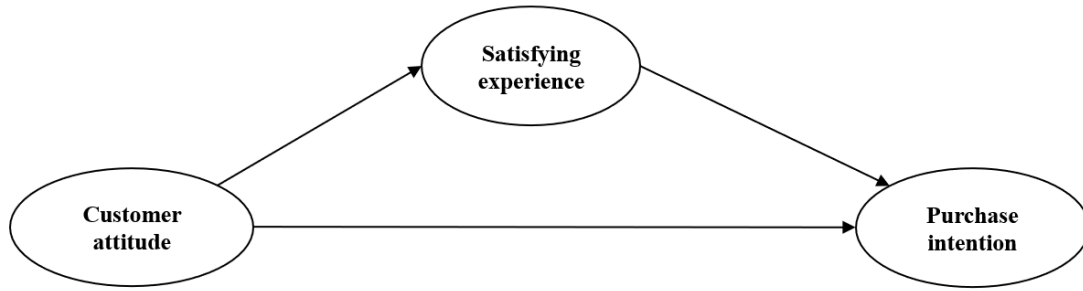


Figure 1. Conceptual model of the study

Methods

The focus of this research was on Iranian consumers of digital products. To achieve a representative sample, a probability sampling method utilizing random sampling was employed for participant selection in the questionnaire distribution. A list of potential respondents was sourced from a third-party provider, which offered a random assortment of individuals who had previously shown interest in digital products. The study aimed for a sample size of 450 participants. An online survey was administered to the chosen individuals, who were invited to participate through social media platforms. Participants were briefed on the study's objectives and guaranteed anonymity and confidentiality. The questionnaire was crafted to gather information on key variables relevant to the study, such as attitudes, purchase intentions, and satisfaction experiences. By implementing a probability sampling technique with random selection, this research sought to enhance the representativeness of the sample and mitigate potential biases. Individuals who consented to participate in the study and completed the consent form were given access to an online questionnaire link via the same platform, with a request to complete it within a week. This methodology was designed to enhance the representativeness of the sample while minimizing potential biases in participant selection. The study utilized a range of statistical methods, including mean and standard deviation, to analyze the gathered data. The data from the completed questionnaires were organized using the statistical software SPSS, which generated descriptive statistics regarding demographic information and the items related to each variable, such as the percentage of female respondents and the mean score reflecting consumer attitudes. Inferential statistics, particularly regression analysis, were employed to explore the relationships between independent and dependent variables, which were subsequently tested to confirm the hypotheses. Of the 450 questionnaires distributed, 433 responses were collected, yielding an effective response rate of 96.2%. Both descriptive and inferential statistics were applied to analyze the data, with Pearson correlation and structural equation modeling using Lisrel serving as the inferential statistical techniques for drawing conclusions.

Results

Descriptive data are presented in Table 1. Descriptive results show that in general the level of consumer attitude towards artificial intelligence (AI) in marketing was higher than the average. However, purchase intention and satisfying experience were at medium level. The results of Kolmogorov-Smirnov tests revealed that all variables were normally distributed (all $P > 0.05$). Results of Independent t tests showed that there were no significant differences between men and women in all variables of the study.

Table 1. Descriptive Data

	Consumer Attitude	Purchase Intention	Satisfying Experience
Mean	3.21	2.57	2.41
SD	0.98	0.84	0.88

Bivariate relationships between consumer attitude, purchase intention and satisfying experience are demonstrated in Table 2. Results revealed significant direct relationship between consumer attitude and purchase intention ($P < 0.001$). Moreover, consumer attitude was directly and significantly associated with satisfying experience ($P < 0.001$). Finally, satisfying experience was directly and significantly associated with purchase intention ($P < 0.001$).

Table 2. Results of Bivariate Relationships between Variables

	1	2	3
1. Consumer Attitude	-		
2. Purchase Intention	r=0.832 P<0.001	-	
3. Satisfying Experience	r=0.563 P<0.001	r=0.751 P<0.001	-

Table 3 and Figure 2 show the results of structural equation modelling. Results revealed that consumer attitude significantly affected purchase intention (T=8.327). Moreover, consumer attitude significantly affected satisfying experience (T=5.669). Furthermore, satisfying experience affected purchase intention (T=7.624). Finally, satisfying experience has significantly mediated the relationship between consumer attitude and purchase intention (P<0.001). Results of model fit are presented in Table 4 and indicated that the research model has good fit.

Table 3. Results of Structural Equation Modelling

Path	β	T-value
1 consumer attitude => purchase intention	0.830	8.327
2 consumer attitude => satisfying experience	0.569	5.669
3 satisfying experience => purchase intention	0.749	7.642
	Z	P-value
4 consumer attitude => satisfying experience => purchase intention	6.674	P<0.001

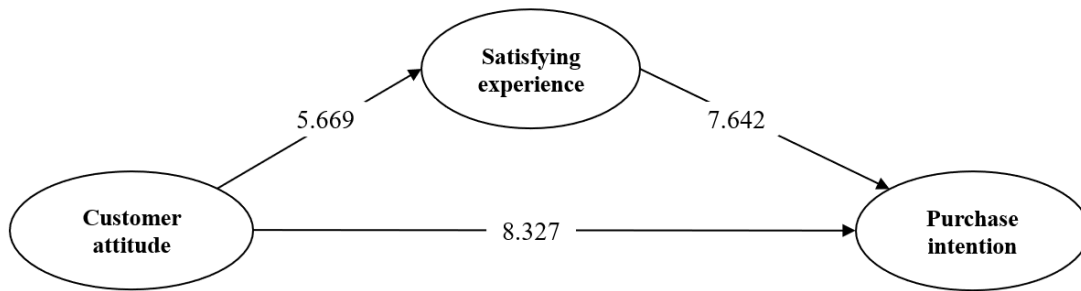


Figure 2. Structural Equation Modelling in the form of T-Values

Table 4. Results of Model Fit

Index	Optimal Range	Obtained Value	Conclusion
RMSEA	< 0.08	0.07	Good fit
X ² / df	< 3	2.96	Good fit
RMR	Closer to 0	0.02	Good fit
NFI	> 0.9	0.96	Good fit
CFI	> 0.9	0.97	Good fit

Discussion

This article explores the association between the consumer attitude towards artificial intelligence (AI) in marketing with purchase intention with considering the mediating role of satisfying experience. Results revealed that consumer attitude significantly affected purchase intention. Moreover, consumer attitude significantly affected satisfying experience. Furthermore, satisfying experience affected purchase intention. Finally, satisfying experience has significantly mediated the relationship between consumer attitude and purchase intention.

This finding indicates that a positive consumer experience encourages customers to make repeat purchases due to their ingrained psychological buying patterns. Furthermore, this outcome implies that habitual behavior may alleviate customer doubts regarding products and services, thereby increasing their likelihood of repurchasing (Puntoni et al., 2021). Information derived from AI systems acts as synthesized stimuli that aid the system in learning and adapting to identify the most effective and optimal methods for generating responses. In contrast, traditional programs are designed with specific code to perform tasks without the capacity for

modification or learning. It is our belief that the response to stimuli within the context of AI systems warrants further exploration through theories specifically developed for human behavior (Wang et al., 2023).

The analysis of customer engagement through artificial intelligence can significantly enhance various service aspects for businesses by offering real-time data insights. AI empowers organizations to efficiently process extensive volumes of customer reviews via machine learning algorithms, thereby facilitating the conversion of visitors into purchasers (Yau et al., 2021). Companies can monitor real-time customer data to refine their services across multiple domains. Additionally, AI assists businesses in managing customer engagement by ensuring the timely availability of suitable products and services. In the context of the 21st century, AI technology is essential for the effective operation of businesses (Yin & Qiu, 2021). Furthermore, organizations should focus on personalized marketing strategies on social media platforms to attract consumers, as the adoption of digital transformation can help identify customer engagement on these platforms. Consequently, AI technology can enhance companies' capabilities to improve customer conversion rates on social media. Interactions on social media platforms significantly influence consumer behavior and motivate purchases of products or services. Furthermore, digital marketing serves as a critical factor in the implementation of AI technology to analyze real-time consumer data.

Technological innovations play a crucial role in enhancing marketing strategies. It is essential for a company to prioritize the fulfillment of customer needs by providing high-quality products and services, thereby ensuring a gratifying purchasing experience. When marketers establish robust relationships with customers throughout their shopping journey, it creates a clear representation of a fulfilling consumer experience (Zimmermann et al., 2023). Additionally, digital technologies allow organizations to gain comprehensive insights into the customer journey. A positive customer experience is an integral component of the shopping process. Consequently, this research indicates that businesses can effectively attain elevated conversion rates by ensuring that their current customers remain satisfied with valuable offerings (Bhagat et al., 2023).

A positive consumer experience significantly enhances the likelihood of customers making repeat purchases. The experience customers have after making a purchase is a crucial element that influences their decision-making process. Additionally, customer loyalty is largely shaped by their satisfaction with prior purchase experiences. In today's rapidly evolving business landscape, digital marketing presents a complex challenge. Organizations are required to leverage digital platforms for a variety of marketing activities, such as gathering consumer feedback and effectively managing digital marketing efforts through the use of artificial intelligence (Qin et al., 2022). The growing enthusiasm among customers for engaging with social media platforms has surged, driven by the widespread adoption of smartphones. As a result, it has become essential for businesses to monitor consumer perceptions of their products and services across social media. This shift has led to a significant increase in consumer engagement on these platforms, with many customers opting for online shopping. Our research indicates that a positive consumer experience plays a vital role in motivating customers to repurchase from the same brand (Daqar & Smoudy, 2019).

Conclusion

Artificial Intelligence is considered a significant catalyst for contemporary advancements, serving as a robust technical resource for the development of products and services. Consequently, this study aims to enhance the understanding of relationship marketing by examining the factors influencing adoption intentions in the AI market, utilizing both symmetric and asymmetric analytical approaches to yield various insights.

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