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# Researching user experience with artificial intelligence application for customer care services on e-commerce platform

**Nguyen Thi Phuong Giang[1], Do Manh Hung[2], Ton Thi Thuy Huong[3], Huynh Thi Quyen[4], Nguyen Thi Thom[5], Tran Bao Tran[6], Thai Dong Tan[7*]**

[1,2,3,4,5,6,7]Faculty of Commerce and Tourism, Industrial University of Ho Chi Minh City. No. 12 Nguyen Van Bao, Ward 4, Go Vap District, Ho Chi Minh City, Viet Nam

Email Address: [1]nguyenthiphuonggiang@iuh.edu.vn, [2]21009401.hung@student.iuh.edu.vn, [3]21055181.huong@student.iuh.edu.vn, [4]21014451.quyen@student.iuh.edu.vn, [5]21079401.thom@student.iuh.edu.vn, [6]21009461.tran@student.iuh.edu.vn, [7]tantd24031@pgr.iuh.edu.vn
*Corresponding author

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## ABSTRACT

This study is conducted in the context of the booming development of e-commerce shopping in Vietnam. The rising demand for online shopping has resulted in increased pressure on workforce optimization and automation of customer service processes on e-commerce platforms. To meet the need for online customer care and response, significant resources in manpower, time, and cost are required. Therefore, to optimize costs, reduce response time, and enhance customer care, applying artificial intelligence to customer service has become a top choice. The purpose of this study is to explore the factors that directly affect the customer service experience using artificial intelligence on e-commerce platforms in Vietnam. This aims to help businesses understand customer feedback and psychology to develop strategies to improve and advance this artificial intelligence application model. This study provides an overview of the factors directly influencing the customer experience in AI-driven customer service on e-commerce platforms. Based on this, it offers managerial implications to enhance the quality of customer service for online businesses operating on e-commerce platforms in Vietnam.

## INTRODUCTION

In recent years, e-commerce has become an indispensable part of the global economy, and Vietnam is no exception. The rapid development of technology and the internet has fueled the explosive growth of e-commerce platforms, creating a highly competitive market. From the early days when the concept of "e-commerce" was unfamiliar to many and online shopping was not yet widespread, Vietnam's e-commerce sector has consistently established its position within the digital economy and according to the 2023 Vietnam E-commerce Report published by the Department of E-commerce and Digital Economy, the retail e-commerce market in Vietnam reached $20.5 billion in 2023, marking a 25% increase compared to 2022. This impressive figure has placed Vietnam among the top 10 countries with the highest e-commerce growth rates globally.

Vietnam is witnessing a booming growth rate in e-commerce, with an annual growth rate of approximately 16.3%, and is projected to reach $39 billion by 2025 (Statista, 2023). The increasing competition among e-commerce platforms requires businesses to continuously enhance service quality to meet consumers' growing expectations. Beyond product quality, user interface, and pricing, customer service is now recognized as an essential factor for sustainable business growth.

The advent of Artificial Intelligence (AI) and smart technologies represents a significant turning point in human development. More high-tech products are emerging, including those that utilize AI, offering numerous solutions for businesses. These technologies streamline processes and provide 24/7 support to users, especially in customer service.

With more businesses entering the e-commerce space, the challenge of customer retention becomes more prominent. Enhancing product quality and user interface alone is no longer sufficient; companies must provide a seamless shopping experience and ensure customer inquiries are promptly addressed 24/7. To achieve this, many companies are adopting AI in customer service to automate interactions, provide quick responses, and offer product recommendations that match customers' needs. According to Gartner, by 2025, 80% of customer interactions will be managed by AI.

Implementing AI in customer service not only helps businesses retain customers but also enables cost optimization. According to a recent study, utilizing AI in customer service not only improves responsiveness but also allows businesses to reduce costs by up to 30%, while simultaneously enhancing the customer experience (Nguyen & Tran, 2021). Additionally, research by Le and colleagues (2022) found that AI can boost productivity by up to 40%, particularly in handling repetitive tasks and automating customer service processes in the e-commerce industry.

With the vast amount of data generated from online transactions, AI aids businesses in analyzing and understanding customer behavior. This enables companies to make more informed business decisions and develop new products and services tailored to the market. A study by Tran and Le (2022) indicated that AI enhances product and service personalization, thereby creating added value for customers and increasing customer satisfaction.

Vietnam's e-commerce market is increasingly integrated with the global economy. To compete with international companies, Vietnamese businesses need to adopt advanced technologies such as AI. According to a PwC report (2023), 72% of companies believe that AI will be a key competitive advantage in the future.

Implementing AI in customer service is not merely a trend but a critical requirement for Vietnamese e-commerce businesses to compete and achieve

sustainable growth in the digital era. Researching and effectively utilizing AI, such as in studies on "Researching user experience with artificial intelligence application for customer care services on e-commerce platform" will enable businesses to enhance customer experience, optimize costs, and drive revenue growth.

In alignment with the purpose of this study the following research questions (RQs) were addressed: (1) What factors influence user experience when using artificial intelligence applications in customer service on e-commerce platforms? (2) How do these factors impact customer satisfaction and the effectiveness of customer service? (3) What recommendations should be made to improve user experience and optimize customer service through the application of technology?

Research on the application of Artificial Intelligence (AI) and recommendation systems has become a central focus in the e-commerce field. These systems not only personalize user experiences but also address significant challenges such as data sparsity, cold start problems, and scalability. Methods like Collaborative Filtering, Content-Based Filtering, Matrix Factorization, and Hybrid Approaches have been implemented to optimize recommendation quality and accuracy, significantly enhancing customer satisfaction (Ejjami, 2024) (Enhancing-User-Experien…).

In the context of Vietnamese e-commerce, the explosive growth of online shopping requires businesses to continuously improve customer care services. AI has proven to play a critical role in automating processes, reducing response times, and providing 24/7 support. Studies have shown that using AI not only boosts productivity but also personalizes products and services, thereby improving customer satisfaction (Nguyen & Tran, 2021; Tran & Le, 2022)

Additionally, AI-powered chatbots are increasingly popular, efficiently handling customer inquiries automatically. These chatbots not only minimize operational costs but also provide deeper insights into customer behavior, enabling businesses to make more informed strategic decisions (Kasilingam, 2020; Przegalinska et al., 2019). Recent studies also emphasize challenges related to transparency and data security in AI deployment. To balance personalization with privacy, businesses must adopt regulatory frameworks like GDPR and technologies such as Federated Learning to ensure customer trust (Nguyen et al., 2022)

In conclusion, the application of AI in e-commerce not only enhances user experiences but also fosters sustainable business growth, enabling companies to compete effectively in the modern business environment.

## LITERATURE REVIEW

### Relevant background theory

"Customer Experience" is a marketing model that follows customer equity. It can be defined as the perceived or sensory experience of a customer, resulting from their observation and participation in real-life situations. This perception enhances customers' evaluations of product and service quality (Schmitt, 1999 & 2012). For instance, companies offering intangible services or real-life products can create memorable experiences for users, leaving a lasting impression (Tsaur et al., 2007; Pine & Gilmore, 1998). CE serves as a primary stimulus, deeply influencing customers' psychological perception and significantly affecting their subsequent usage behavior and decision-making (Hsu & Tsou, 2011).

A chatbot is a conversational interface on smartphones (through platforms like Facebook Messenger) that interacts with users, assisting in reading reviews, browsing

and researching products, comparing items, accessing saved coupons, making purchases, tracking orders, and earning loyalty rewards (Kasilingam, 2020). Chatbots are automated programs used for text-based or chat communication with humans (Przegalinska et al., 2019; Radziwill & Benton, 2017; Sivaramakrishnan et al., 2007). Currently, chatbots provide 24/7 services across various fields, including sales, support, and marketing. Specifically, chatbots are frequently used in sales (41%), followed by support (37%), and marketing (17%). They have significantly increased average sales revenue by 67%, with 26% of total sales transactions handled through chatbot interactions (Forbes, 2019a). “Chatbots using machine learning algorithms and natural language processing (NLP) interact with customers automatically. These chatbots handle a large volume of customer inquiries quickly, reducing wait times and improving service efficiency.”

Customer satisfaction is a psychological state or feeling derived from customers’ experience when they evaluate that experience. Customer satisfaction influences intentions to continue using a product or service (Oliver, 1980). According to Kotler (2001), satisfaction is the degree of emotional state a person derives from comparing the outcome of a product/service with their expectations.

Spears and Singh (2004) define purchase intention as a conscious action or intent to make an effort to buy a product. Online purchase intention, specifically, focuses on consumers' willingness or intention to purchase products through online platforms (Pavlou, 2003). It is believed that customers are more likely to shop on online platforms when they provide comprehensive information such as product/service categories, search functions, pricing, online payment systems, and simulation tools (Liao & Wong, 2008; Chen et al., 2010; Liao et al., 2012, 2014).

An e-commerce platform is an online system where buyers and sellers conduct transactions of goods and services via the Internet. E-commerce platforms allow various vendors to participate and provide products and services to customers in a centralized manner. E-commerce platforms can be categorized into B2B (business-to-business), B2C (business-to-consumer), and C2C (consumer-to-consumer) (Chaffey, 2022).

AI is a field of computer science focused on developing systems capable of performing tasks that typically require human intelligence. These tasks include speech recognition, computer vision, natural language processing, and decision-making (Russell & Norvig, 2020).

## Theoretical Model

Theory of Reasoned Action (TRA): TRA suggests that behavioral intentions, which influence actual behavior, are determined by individual attitudes and subjective norms. Attitude reflects an individual's evaluation of the outcomes of the behavior, while subjective norms relate to social pressure from those around them. TRA emphasizes that both attitudes and subjective norms are essential in shaping behavioral intentions (Fishbein & Ajzen, 1975).

The Theory of Planned Behavior (TPB): Expands upon the Theory of Reasoned Action by adding the element of "perceived behavioral control." TPB asserts that behavior is predicted based on three factors: attitude toward the behavior, subjective norms, and perceived behavioral control, which reflects an individual's sense of control over the behavior.

Innovation Diffusion Theory (IDT): Explains how innovations are accepted and spread within society. IDT identifies that acceptance depends on factors such as relative

advantage, compatibility, ease of use, and social consensus, categorizing users into different groups such as innovators and laggards.

The Trust in Technology Theory: Explains how users form trust in technology and the impact of this trust on the acceptance and use of technology. According to this theory, trust in technology is based on factors such as reliability, which relates to the stability and accuracy of the technology; security and privacy, reflecting the ability to protect personal data; control, meaning the feeling of having control over the technology; and transparency, which pertains to clarity in operations and data handling. This trust is crucial in alleviating anxiety and doubt, thereby encouraging the acceptance of new technology.

Unified Theory of Acceptance and Use of Technology (UTAUT): The UTAUT integrates factors from several previous technology acceptance models, including the Technology Acceptance Model (TAM), the Theory of Planned Behavior (TPB), and the Innovation Diffusion Theory (IDT). UTAUT identifies four main factors that influence technology acceptance and use: performance expectancy, effort expectancy, social influence, and facilitating conditions.

The Technology Acceptance Model (TAM) is a significant theory in the study of technology acceptance. TAM explains that the acceptance and use of technology primarily depend on two key factors: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Perceived Usefulness (PU) refers to the extent to which users believe that using the technology will enhance their job performance. Perceived Ease of Use (PEOU) refers to the extent to which users feel that using the technology is easy and does not cause inconvenience. TAM posits that these two factors influence the Attitude Toward Using (AT) technology, which in turn affects the Intention to Use (ITU) and the actual behavior of the users.

Extended Technology Acceptance Model (ETAM): Adapted to study the acceptance and use of artificial intelligence (AI) chatbots. It is an extension of the original Technology Acceptance Model (TAM), developed by Davis in 1989. The ETAM model includes the following key factors: Perceived Usefulness (US): The extent to which users believe that using an AI chatbot will improve their performance; Perceived Ease of Use (EOU): The user's assessment of the simplicity and convenience of using an AI chatbot; Social Influence (SI): The impact of others on the decision to use an AI chatbot; Trust in an AI chatbot (TR): The extent to which users believe in the ability and reliability of an AI chatbot. All these factors influence the Intention to Use AI Chatbots in customer service on e-commerce platforms (Kabir and Islam, 2021).

## Research hypotheses

### Information Trust with AI

Trust plays an important role in users' acceptance and use of new technologies such as AI in customer service on e-commerce platforms. According to Corritore et al. (2003), trust is a key factor in the widespread adoption of any new technological intervention. Trust in recommender systems, including AI chatbots, plays an important role in determining whether users intend to continue using this technology. When users perceive the information provided by AI as trustworthy and accurate, their intention to adopt and maintain the use of these technologies will increase (Xiaofan Yu et al., 2024). This trust not only makes users feel more secure when interacting with new technology but also encourages them to use that technology frequently because users believe that AI can provide effective solutions to their problems (Dharun Lingam Kasilingam, 2020). Users' trust in the accuracy of the information provided by AI will strongly

reinforce their trust in AI recommendations, thereby creating a more positive response to customer service on e-commerce platforms (Ye et al., 2020). Therefore, based on the above studies, the following hypothesis is proposed.

H1: Information trust with AI affects users' intention to continue using AI.

**Ease of Use**

In the context of increasingly developing information and communication technology, ease of use (EOU) becomes an important factor in improving user experience with AI applications in customer care services. EOU is understood as the degree to which users expect a system to be easy to use, which can minimize the effort required when interacting with new technology (Davis, 1989; Venkatesh, 2000). When users feel that a system is easy to use, they not only feel satisfied but also intend to continue using the service in the future (Mohd Nasim Uddin et al., 2024). Garcia et al. (2020) have shown that perceived ease of use not only increases satisfaction but also promotes the desire to use in the future. The research results of Ashfaq et al. (2019) are also consistent with this view, when they argue that simplicity and intuitiveness in technology services are closely related to customer acceptance and engagement. Therefore, based on the predicted hypotheses, we can hypothesize that:

H2: Ease of use (EOU) will have a positive influence on the intention to continue using AI in customer service.

**User Attitudes Toward AI**

Attitudes play an important role in shaping the intention to use AI applications for customer service on e-commerce platforms. Ajzen and Fishbein (1980) define attitude as an individual's positive or negative evaluation of performing a particular behavior. In the context of technology, attitude reflects users' feelings and evaluations of the usefulness and value of AI features in customer service (Inman & Nikolova, 2017). Many studies have demonstrated a positive relationship between attitude and intention to use technology (Xiaofan Yu, Yi Yang, and Shuang Li (2024)). Specifically, in the e-commerce field, Gabriele Pizzi et al. (2023) showed that consumers' positive attitudes toward artificial intelligence (AI) lead to higher intentions to purchase and use services. Esch et al. (2020) also found that AI technology is perceived more positively and is associated with purchase intention on e-commerce platforms. This can be explained by the ability of AI to provide a more personalized and efficient shopping experience (Pillai et al., 2020). When users have a positive attitude towards AI features such as virtual assistants or intelligent recommendation systems, they tend to use these services more, leading to increased interaction and engagement with the e-commerce platform (Belleau et al., 2007; Wu et al., 2016). From this, it can be concluded that users' positive attitudes towards AI applications in customer care services have a significant impact on their intention to use and interact with e-commerce platforms. The above arguments lead to Hypothesis:

H3: Attitude influences users' intention to continue using AI

**Usefulness**

Usefulness (US) plays an important role in shaping the intention to use AI applications for customer service on e-commerce platforms. Davis (1989) defines US as the extent to which an individual believes that using a particular system will improve their job

performance. In the context of AI-based customer service, US is reflected in the ability to provide instant support, solve problems effectively, and save users' time (Bhattacherjee, 2001). Many studies have shown a positive relationship between US and intention to use technology (Gabriele Pizzi et al., 2023; Mohd Nasim Uddin et al., 2024). In the e-commerce field, Mohd Nasim Uddin et al. (2024) also asserted that when users perceive high usefulness from AI features such as virtual assistants or intelligent recommendation systems, they tend to use these services more, leading to increased engagement and commitment to the e-commerce platform. Similarly, in the study on online shopping intention supported by artificial intelligence, the role of perceived usefulness in driving the intention to use AI was emphasized (Nguyen Thi Kim Chi, 2024). Based on these, we propose the following hypotheses:

H4: Usefulness affects users' intention to continue using AI

**Personalization**

Based on previous studies, personalization plays an important role in shaping users' intention to use AI applications in customer care services on e-commerce platforms. Personalization allows retailers to provide individualized services and products to each user, to meet their specific needs (Anand & Shachar, 2009). Through the use of personal data, intelligent service systems can develop a deeper understanding of customers (Demirkan et al., 2015; Peters et al., 2016), thereby creating better user experiences based on recommendations tailored to individual needs and preferences (Wang & Chen, 2023). Patel et al. (2024) argue that e-commerce customers expect personalization in the products and services that companies offer. The ability of AI assistants to provide personalized recommendations, content, and unique experiences to each user leads to positive attitudes, encouraging them to continue using these technologies and increasing the likelihood of attracting new customers. The arguments of Haleem et al. (2022) indicate that AI assistants are designed to use a large amount of customer data to meet their preferences and needs, thereby enhancing their shopping journey, satisfaction, and brand loyalty. From this, the following hypothesis is proposed:

H5: Personalization affects users' intention to continue using AI.

**Information Quality**

AI-based chatbots are capable of providing information that is superior to humans, providing recommendations on brands, specifications, trends, and product quality with greater variety and informativeness (Lee et al., 2022; Ngai et al., 2021; Ruan & Mezei, 2022). The application of AI in chatbots helps consumers receive more information about their activities on e-commerce platforms (Ping, 2019). In particular, the quality of information provided by chatbots can directly affect consumers' purchase intention for e-commerce platforms (Misischia et al., 2022). The accuracy of information generated by AI is also an important factor affecting usage intention. Huang and Rust (2018) found that users have high confidence in the performance of AI in automated and analytical tasks, especially those requiring accuracy and logic. This is consistent with Gray et al.'s (2007) view that users associate AI with abilities such as self-control, morality, memory, and planning - factors that are closely associated with accuracy. Accurate information from AI can increase users' confidence (Jerez-Fernandez et al., 2014; Zhang & Schwarz, 2013), which in turn leads to positive

responses and higher intentions to use. Based on this reasoning, we hypothesize the following:

Information quality is an important concept mentioned in the Information Systems Success Model by DeLone and McLean in 1992. Many studies have shown that information quality plays a decisive role in user satisfaction. Specifically, Teo et al. (2008) and Veeramootoo et al. (2018) emphasized that access to complete, accurate, and up-to-date information is important for user satisfaction.

In chatbot services, users often spend a lot of time and effort searching for product information, the latest offers, or looking up user manuals. According to the study by Islam et al. (2021), in the context of e-commerce, AI chatbots are required to provide information that is not only accurate but also tailored to the individual needs of each user. Information quality is considered one of the most important components to measure the success of a system (DeLone and McLean, 2003), and has a positive impact on user satisfaction (Chung & Kwon, 2009).

Research by DeLone and McLean (2003) has shown that information quality is an essential factor that affects user satisfaction and technology adoption decisions. If AI chatbots provide accurate and valuable information, users will tend to trust the capabilities of this technology, leading to them appreciating its usefulness in the customer care process.

Recent studies such as Alshurideh et al. (2021) show that information quality has a direct link with customer satisfaction and intention to use technology, especially in the context of customer care services. In addition, a recent study by Jin et al. (2023) has shown that clear and understandable information from chatbots can significantly improve user experience and increase perceptions of the usefulness of the application. When users feel that the information provided is useful and trustworthy, they will be more likely to use AI applications. From the theoretical foundations and practical evidence mentioned above, the research team decided to hypothesize:

H6: Information quality affects users' intention to continue using AI
H10: Information Quality Affects Satisfaction
H11: Information quality positively affects usefulness

**Social influence**

Based on previous studies, social influence (SI) plays an important role in shaping users' intention to use new technology. According to Venkatesh et al. (2003), SI is defined as the extent to which an individual perceives that important others believe that they should use the new system. In the context of AI application for customer care services on e-commerce platforms, SI can significantly impact users' intention to use. Research by Gatzioufa & Saprikis (2022) shows that SI has a significant impact on individuals' adoption and use of chatbots. Lopez-Nicolas et al. (2008) emphasized that SI considers the influence of environmental factors, such as the trust of relatives and friends, on consumer behavior. This is consistent with the UTAUT theory of Venkatesh & Davis (2000) and Venkatesh & Bala (2008), which suggests that SI plays a role in shaping an individual's intention to adopt technology. However, it should be noted that some studies such as Kašparová (2023) found that SI has a negative impact on behavioral intentions towards business analytics tools. Therefore, in the context of AI application for customer care services on e-commerce platforms, further research is needed to determine the extent and direction of SI's influence on users' intention to use.

H7: Social influence affects users' intention to continue using

**Satisfaction**

User satisfaction, a general psychological state reflecting the level of satisfaction with a service experience, plays an important role in determining subsequent usage behavior. According to the expectancy-confirmation model (ECM), satisfaction is considered a key factor influencing the intention to continue using a service, especially in the field of information technology and electronic services (Bhattacherjee, 2001; Liao et al., 2007). Research by Kuo and Yang (2011) also demonstrated that satisfaction is a key factor in maintaining long-term customer relationships in the field of e-commerce. When customers feel satisfied with an AI service, they are likely to return and continue using the service, and may participate in future promotions and transactions. Similarly, Tam et al. (2020) emphasized that satisfaction with AI-provided services is likely to have a positive effect on consumers' continuance intention.

Customer satisfaction with the use of technological services, such as chatbots, is positively related to their interactions on social media platforms (Casaló et al., 2011, 2017b; Bhattacherjee, 2001). This satisfaction is not only reflected in customers' continued use of the service but also strongly influences their sharing and communication behavior in online communities (Wang et al., 2023; Li et al., 2024). This reinforces the notion from social exchange theory (SET) and resource exchange theory (RET), that when customers perceive value and benefits from a service, they are willing to engage in exchange activities such as knowledge sharing, discussion, and learning from others (Nguyen et al., 2024). Satisfaction with using chatbots can motivate customers to not only share their personal experiences but also make suggestions for improvements, as well as support other users in the same online community. This is evident in the latest research by Zhang et al. (2024), who highlighted that chatbot platforms that provide greater satisfaction tend to receive more positive feedback from users, especially in creating social relationships and mutual learning. Furthermore, satisfaction is considered a strong predictor of continued social interaction behavior (Johnson et al., 2023). Therefore, the research team hypothesizes:

H8: User satisfaction positively influences continuance intention to use AI.

H9: Satisfaction affects social influence.

Based on the synthesis of previous studies along with new studies and consulting with experts, the authors have proposed the following research model (Figure 1). With the research objective of "Researching user experience with artificial intelligence application for customer care services on e-commerce platform".

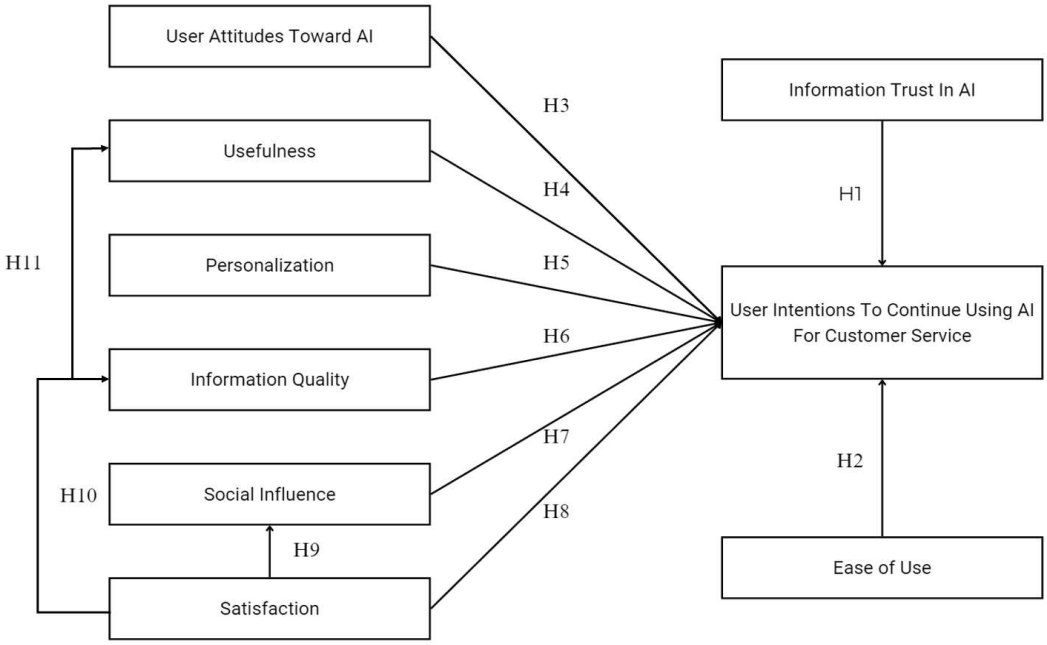


Figure 1. Proposed Research Model

## RESEARCH METHODOLOGY

### Qualitative research method

The authors used qualitative as the main method in the preliminary study. With the exploratory nature, the ideas were directly explored to simulate the preliminary questionnaire, explaining the meaningful correlation between the scales.

The authors conducted a group discussion with 20 people, including 5 office workers, 5 students of Nguyen Trung Truc High School, 9 students and 1 lecturer of the Faculty of Commerce and Industry of Ho Chi Minh City University of Industry to give comments on the scale.

Through the discussion, there were many different opinions on the issue raised before. Many individuals expressed different views on the factors of Trust (TU), Ease of Use (EOU), Attitude (AT), Usefulness (US), Personalization (PE), Information Quality (IQ), Social Influence (SI), Satisfaction (SA) affecting users' intention to continue using AI. Finally, the results obtained by the authors after the discussion are as follows:

Users intend to continue using AI because of the influence of the following factors, specifically: Trust (1), Ease of use (2), Attitude (3), Usefulness (4), Personalization (5), Information quality (6), Social influence (7), Satisfaction (8).

### Quantitative research method

With this research method, the authors collected documents from many different sources from articles, scientific research topics at home and abroad along with other documents related to the research topic. A 5-level Likert scale was used to measure the values of the variables. The research was conducted after the questionnaire was edited, the official research was conducted using quantitative research methods

with online information collection techniques using an auto-fill questionnaire within the area of Ho Chi Minh City.

**Sampling method and sample size determination**

During the research process, the method used by the authors is non-probability sampling. The sample was collected by a convenience method (non-probability) for users in Ho Chi Minh City through an online survey. For this survey, the sample was collected through Google Form by sending a questionnaire link so that users could receive the link and access the answer, after completing the answer, just click the "send" button to get the response form. To control the quality of the data, only send the link to those who agreed to answer in advance and are able to answer the questionnaire correctly. When taking the survey, users must respond to Yes/No questions so that the questions can be screened and quantified according to the Likert scale. The author used Cohen's formula (1992) to determine the sample size. Cohen (1992) suggested that the minimum sample size needed in a study depends on the independent variables in the research model or the number of arrows pointing to the structure in the partial least squares path model. This study has 8 independent variables, so the sample size needed is at least 130 observations. However, to increase the accuracy of the research results, the authors took a sample of 323 observations. Of the 350 questionnaires collected, 27 were discarded because of missing data. Therefore, data from the remaining 323 questionnaires were used for data analysis. The collected data were processed using SmartPLS 4 software.

**Data collection methods**

Secondary and primary data are data that play an important role in the research process. Information sources extracted from newspapers, books, websites, etc. are contents that are related to secondary data. It is indirectly accumulated from available sources: pre-processed data and raw data. Some of their advantages are easy access, low cost and time saving. For the topic, secondary data is used by receiving information from articles, scientific research that has been tested to ensure the authenticity and integrity of the data. It is formed with the purpose of clearly understanding, analyzing and proposing essential solutions for the topic.

Primary data is obtained through popular forms such as surveys, preliminary interviews, online questionnaires, or telephone. The topic is based on questionnaires and preliminary interview methods to collect information. Preliminary interviews gave the author an objective and in-depth view of different aspects. Next, the information collected was used to adjust and create a more complete questionnaire. Finally, direct and online surveys collected some data to help the research topic have a more comprehensive overall view.

## RESULT

### Descriptive Statistics of the Research Sample

After collecting the survey responses. The team proceeded to clean the data and analyze the influencing factors. Some preliminary statistics on the research sample through demographic criteria such as gender, age, occupation, number of online purchases, number of reviews read. Through the process of cleaning and analyzing data, it can be seen that the most common age group participating in the survey is from 18 to 24 years

**Table 1.** Descriptive statistics of the study sample

| Criteria | | Number of subjects | Percentage |
|---|---|---|---|
| Gender | Male | 138 | 40.00 |
| | Fmal | 199 | 57.70 |
| | Other | 8 | 2.30 |
| Age | Under 18 | 27 | 7.80 |
| | 18 - 24 years old | 283 | 82.00 |
| | 25 - 34 years old | 20 | 5.80 |
| | 35 - 44 years old | 15 | 4.30 |
| Occupation | Students | 22 | 6.40 |
| | Students | 248 | 71.90 |
| | Workers | 75 | 21.70 |
| Read reviews | Do not read | 20 | 5.80 |
| | Read once | 68 | 19.70 |
| | Learn many times | 257 | 74.50 |
| Purchases / month | 0 times | 10 | 2.90 |
| | 01 time | 114 | 33.00 |
| | 03 times | 118 | 34.20 |
| | Too much | 103 | 29.90 |

Source: Synthesized from Google Form analysis data

old, accounting for 82%. The survey also has diversity in age groups: under 18 years old (7.8%), 25-34 years old (5.8%), 35 - 44 years old (4.3%). Female gender accounts for more than half of the number of survey participants (57.7%), the rest are male (40%) and other 2.3%. About 71.9% of the survey participants are students, the rest are working people and students. Through the data, we can see that most customers shopping on e-commerce platforms read reviews from 01 time to research very carefully before deciding to buy. Up to 74.5% of customers read reviews many times before deciding to buy. 19.7% of customers read at least 01 review before making a decision. And from the data we can see that customers often have shopping behavior on e-commerce platforms quite a lot 34.2% of customers buy products on e-commerce platforms 3 times / month. and up to 29.9% of customers do not remember the number of times they shop and use e-commerce platforms. Open up a new development, new opportunities

## Testing the reliability and convergent validity of the research scale

Through data processing, based on the results of the Reliability scale reliability table and Convergence, it can be seen that the scales all meet the requirements of Convergence value and Reliability reliability.

**Table 2.** Aggregate Reliability Assessment

| Construct | Cronbach's Alpha (CA) | Composite Reliability (CR) | Average Variance Extracted (AVE) | Outer Loading |
|---|---|---|---|---|
| AT | 0.869 | 0.870 | 0.910 | 0.717 |
| EOU | 0.871 | 0.909 | 0.911 | 0.718 |
| IQ | 0.883 | 0.888 | 0.919 | 0.740 |
| ITA | 0.934 | 0.935 | 0.944 | 0.653 |
| PE | 0.829 | 0.835 | 0.886 | 0.660 |
| SA | 0.831 | 0.835 | 0.887 | 0.663 |
| SI | 0.883 | 0.889 | 0.914 | 0.681 |
| TU | 0.845 | 0.847 | 0.896 | 0.682 |
| US | 0.849 | 0.866 | 0.897 | 0.686 |

Through Table 3, it can be seen that the square root of AVE meets the requirement of being greater than the value of the latent variables inside. In addition to assessing the discrimination by the Fornell - Larcker criterion table, there are still many doubts. In 2015, Henseler, Ringle and Sarstedt proposed a method to accurately assess discrimination. The Heterotrait-monotrait ratio (HTMT) criterion is mentioned as a new method to overcome the doubts of the Fornell - Larcker criterion table method. The HTMT index value is below 0.85, which will ensure the discrimination between the latent variables in the model. And if the HTMT index is greater than 0.85, the factor does not achieve discrimination and needs to be reconsidered.

**Table 3.** Correlation matrix between conceptual structures according to the Fornell - Larcker criterion table.

| | AT | EOU | IQ | ITA | PE | SA | SI | TU | US |
|---|---|---|---|---|---|---|---|---|---|
| AT | 0.847 | | | | | | | | |
| EOU | 0.224 | 0.848 | | | | | | | |
| IQ | 0.351 | 0.459 | 0.860 | | | | | | |
| ITA | 0.491 | 0.523 | 0.610 | 0.808 | | | | | |
| PE | 0.358 | 0.299 | 0.352 | 0.479 | 0.813 | | | | |
| SA | 0.383 | 0.307 | 0.496 | 0.534 | 0.309 | 0.814 | | | |
| SI | 0.339 | 0.218 | 0.421 | 0.567 | 0.400 | 0.480 | 0.825 | | |
| TU | 0.368 | 0.422 | 0.547 | 0.551 | 0.333 | 0.397 | 0.364 | 0.826 | |
| US | 0.412 | 0.224 | 0.343 | 0.483 | 0.347 | 0.336 | 0.365 | 0.314 | 0.828 |

Through Table 4, it can be seen that the HTMT indexes are all below 0.85, which means that the variables in the structural model all achieve discrimination. Table 4, Correlation matrix between conceptual structures by the Heterotrait-monotrait ratio (HTMT) index method

**Table 4.** Correlation matrix between conceptual structures by the Heterotrait-monotrait ratio (HTMT) index method

| | AT | EOU | IQ | ITA | PE | SA | SI | TU | US |
|---|---|---|---|---|---|---|---|---|---|
| AT | | | | | | | | | |
| EOU | 0.250 | | | | | | | | |
| IQ | 0.396 | 0.521 | | | | | | | |
| ITA | 0.543 | 0.557 | 0.670 | | | | | | |
| PE | 0.421 | 0.347 | 0.404 | 0.538 | | | | | |
| SA | 0.445 | 0.356 | 0.574 | 0.602 | 0.368 | | | | |
| SI | 0.387 | 0.236 | 0.474 | 0.619 | 0.462 | 0.554 | | | |
| TU | 0.430 | 0.491 | 0.632 | 0.618 | 0.397 | 0.473 | 0.414 | | |
| US | 0.478 | 0.254 | 0.380 | 0.530 | 0.407 | 0.396 | 0.415 | 0.367 | |

## Structural Model Evaluation

Testing the mediating variable: Specific Indirect Efects to evaluate each indirect relationship separately.

**Table 5.** Results of Specific Indirect Efects

| | **Original sample (O)** | **Sample mean (M)** | **Standard deviation (STDEV)** | **T statistics** | **P values** |
|---|---|---|---|---|---|
| SA -> SI -> ITA | 0.106 | 0.106 | 0.022 | 4.835 | 0.000 |
| IQ -> SA -> SI | 0.238 | 0.239 | 0.040 | 5.950 | 0.000 |
| IQ -> US -> ITA | 0.046 | 0.045 | 0.014 | 3.173 | 0.002 |
| IQ -> SA -> SI -> ITA | 0.053 | 0.053 | 0.013 | 4.030 | 0.000 |
| IQ -> SA -> ITA | 0.050 | 0.050 | 0.020 | 2.551 | 0.011 |

The mediating variable acts as a third variable that intervenes in the relationship between two other variables. This relationship is formed according to a causal chain, in which the independent variable affects the mediating variable, and the mediating variable continues to transmit this impact to the dependent variable (MacKinnon et al., 2007; Nitzl et al., 2016). According to MacKinnon et al. (2007), Nitzl et al. (2016), the mediating variable is considered as a third factor that intervenes in the relationship between two other factors. Accordingly, the independent variable affects the mediating variable, and the mediating variable will affect the dependent variable. This impact can be called an “indirect effect”.

Through the Specific Indirect Effects results table, there are 5 separate indirect relationships including: SA -> SI -> ITA; IQ -> SA -> SI; IQ -> US -> ITA; IQ -> SA -> SI -> ITA; IQ -> SA -> ITA.

The significance level (P value) of all relationships in the table is less than 0.05, with the relationships SA -> SI -> ITA; IQ -> SA -> SI; IQ -> SA -> SI -> ITA; having P value = 0.000, the remaining relationships also have a small significance level (P value) of 0.002, 0.011 corresponding to the relationships: AT -> IQ -> US -> ITA; IQ -> SA -> ITA, this shows that all relationships are statistically significant.

On the other hand, the indirect effect coefficient of the relationship IQ -> SA -> ITA is 0.050 and IQ -> US -> ITA is 0.046, which shows that the SA variable has a stronger mediating effect than the US variable.

Through the testing process of the Bootstrapping technique, the reliability of the research model can be confirmed. Using the Bootstrapping technique with a sample size of n=5000 observations, the authors tested the research hypotheses and the results are listed in the table below. All hypotheses were accepted because the significance level or statistical value reached the required level of T > 1.96, and P < 0.05.

**Table 6.** Hypothesis testing results

| | Original sample | Sample mean | Standard deviation | T statistics | P values | Result |
|---|---|---|---|---|---|---|
| AT -> ITA | 0.133 | 0.133 | 0.039 | 3.420 | 0.001 | accept |
| EOU -> ITA | 0.227 | 0.233 | 0.053 | 4.315 | 0.000 | accept |
| IQ -> ITA | 0.172 | 0.169 | 0.045 | 3.837 | 0.000 | accept |
| IQ -> SA | 0.496 | 0.496 | 0.046 | 10.700 | 0.000 | accept |
| IQ -> US | 0.343 | 0.343 | 0.057 | 6.052 | 0.000 | accept |
| PE -> ITA | 0.098 | 0.098 | 0.039 | 2.480 | 0.013 | accept |
| SA -> ITA | 0.101 | 0.100 | 0.038 | 2.643 | 0.008 | accept |
| SA -> SI | 0.480 | 0.480 | 0.048 | 10.068 | 0.000 | accept |
| SI -> ITA | 0.221 | 0.221 | 0.040 | 5.558 | 0.000 | accept |
| TU -> ITA | 0.117 | 0.117 | 0.039 | 3.043 | 0.002 | accept |
| US -> ITA | 0.134 | 0.132 | 0.037 | 3.642 | 0.000 | accept |

## DISCUSSION

### Discussion of research results

In the context of rapid advancements in Artificial Intelligence (AI) technology, its application in customer care services on e-commerce platforms is becoming increasingly prevalent. Businesses are leveraging AI to enhance user experience, streamline customer service, and foster higher levels of engagement. The research presented here explores how users' perceptions of AI technologies in customer care impact their intention to continue using such services. Understanding these factors is crucial for businesses aiming to improve customer satisfaction and loyalty.

The study examined various factors that may influence users' intention to continue using AI in customer service, including: (1) Trust, (2) Ease of use, (3) Attitude, (4) Usefulness, (5) Personalization, (6) Information quality, (7) Social influence, and (8) Satisfaction. These factors are rooted in well-established theories such as the Technology Acceptance Model (TAM) (Davis, 1989), the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, 2003), and the Expectation Confirmation Theory (ECT) (Bhattacherjee, 2001).

Belief in AI information has an influence on the intention to continue using it with a normalization coefficient of 0.117 and P Value = 0.002 (< 0.05). This result indicates that users trust the accuracy, security, and truthfulness of the information provided by AI, thereby promoting their intention to continue using it. Previous studies (Gefen, 2000) have also demonstrated that trust is an important factor in building a long-term relationship between users and technology.

Ease of use has a strong impact with a normalization factor of 0.227 and P Value = 0.000 (< 0.05). Users feel that AI is easy to operate, user-friendly, and doesn't require

a lot of technical knowledge to use. The highest normalization factor among the factors shows that this is the prominent factor affecting the intention to use. According to the TAM (Technology Acceptance Model) theory, the ease of use factor often promotes rapid technology adoption.

Attitude has an influence with a normalization coefficient of 0.133 and P Value = 0.001 (< 0.05). The results show that users have a positive attitude towards AI thanks to its ability to solve problems effectively. Attitudes are shaped by previous experience and a general sense of the benefits of technology, which contributes to enhancing the intention to continue using it. According to Bhattacherjee (2001), a positive attitude often leads to repetitive behavior.

Usefulness had a positive effect with a normalization coefficient of 0.134 and P Value = 0.000 (< 0.05). Users find that AI brings practical value, saves time, and improves the customer service experience. This is a testament to the fact that usefulness is a core element in AI systems, in line with the TAM theory, where usefulness is a determining factor in the intention to accept the technology.

Personalization has an effect with a normalization factor of 0.098 and P Value = 0.013 (< 0.05). AI has the ability to personalize the service based on user preferences and behavior, helping to create a sense of closeness and connection. Vesanen's (2007) research has demonstrated that personalization enhances satisfaction and loyalty to technology.

The quality of information was affected by the normalization coefficient of 0.172 and P Value = 0.000 (< 0.05). Users appreciate the accuracy, completeness, and relevance of the information provided by AI. According to the Information Systems Success model (DeLone & McLean, 1992), information quality is a determinant of satisfaction and intention to continue using.

Social influence has an impact with a normalized coefficient of 0.211 and P Value = 0.000 (< 0.05). Users feel influenced by the social environment, such as friends, colleagues, or online communities, about whether to use AI in customer service. This result is consistent with UTAUT Theory (Venkatesh et al., 2003).

Satisfaction affects with a normalized coefficient of 0.101 and P Value = 0.008 (< 0.05). Users are satisfied when the AI meets or exceeds their expectations in assisting and resolving issues. This is consistent with the Expectation Confirmation Theory (Bhattacherjee, 2001), where satisfaction is a key determinant of technology reuse behavior.

Additionally, the study revealed several interactions among independent variables. Information quality was found to positively impact both satisfaction and usefulness, which are key drivers of user intention to continue using AI. Furthermore, user satisfaction was shown to positively affect the social influence factor. These interactions suggest that enhancing the quality of information provided by AI can lead to higher satisfaction, which in turn can influence the broader social context and users' perceptions of the technology.

The results from this study provide valuable insights into the factors that influence users' intention to continue using AI in customer care services. Ease of use, social influence, and information quality emerged as particularly influential, with users placing high importance on these factors. This study contributes to the growing body of research on AI applications in e-commerce, offering practical implications for businesses seeking to improve customer service experiences. Future research can explore deeper into the causal relationships between these factors and investigate additional variables that may influence long-term engagement with AI technologies.

## Comparison with previous studies

This research paper is based on previous research works to build a new theoretical model, in order to analyze the factors that affect the user experience with the application of AI in customer service. The analysis results from SmartPLS software show that our research paper has many similarities as well as some significant differences from previous studies. Specifically:

Belief in AI information affects users' intention to continue using AI in customer care on e-commerce floors. Research by Nguyen et al. (2021) shows that "Trust in AI technology plays an important role in shaping consumer usage intent". This is compatible with the research results of Diyan Lestari (2019) but emphasizes that "Trust is not the only factor that determines acceptance".

Ease of use affects users' intention to continue using AI in customer care on e-commerce floors. In a previously published study by Venkatesh et al. (2022) it was shown that "The ease of use of AI applications has a strong impact on user adoption". Accordingly, Lin & Chen (2021) concluded that "Users tend to accept technology when they feel that it is easy and convenient to use it".

Attitudes affect users' intention to continue using AI in customer care on e-commerce floors. Recent research by Alateeg et al. (2023) highlights that "positive attitudes towards AI not only drive usage intent, but can also influence how users interact with the technology." Research by Sultan Saleh Alateeg et al. (2023) has made it clear that attitudes do not always lead to action "Positive attitudes do not guarantee that users will move from intention to actual action, unless safety and utility factors are guaranteed".

Usefulness affects the user's intention to continue using AI in customer care on the e-commerce floor. According to research by Chang et al. (2023), "Perceived usefulness from the use of AI in customer service is directly related to satisfaction and future usage intentions" and research by Tran & Nguyen (2022) says: "Usefulness is a key factor determining the intention to continue using AI in customer service". Therefore, this hypothesis is consistent with previous studies.

Personalization influences a user's intention to continue using AI in customer care on e-commerce floors, which is compatible with the results of the Lee & Lee (2021) study that found that "Providing a personalized experience through AI not only enhances user satisfaction, but also significantly increases the likelihood that they will return to use it services". Accordingly, Gupta et al. (2023) also stated that "Personalization is not only an additional factor, but also a prerequisite for improving satisfactiThe quality of information affects the intention of users to continue using AI in customer care on e-commerce floors. According to a study by Islam et al. (2022), "High information quality increases the perceived value of customer service using AI, thereby leading to higher satisfaction and intention to continue using" and the Shin & Jeong study (2022) also said that "Information quality not only affects the user experience but also determines the extent to which trust and the ability to reuse AI in customer care services". (additional)

Social influence affects users' intention to continue using AI in customer care on e-commerce floors. Previous research by Al-Emran et al. (2022) emphasized that "Social influence has a role in motivating users to continue using technology services". This is in line with the research results of Nguyen et al. (2020) that "When friends, family, or communities encourage the use of AI, users tend to trust and continue to use AI-based services on e-commerce platforms". Thus, this hypothesis is similar to previous research.

Satisfaction affects users' intention to continue using AI in customer care on e-commerce floors, this conclusion is in line with the research work of Nguyen et al. (2022): "Customer satisfaction with AI technology can lead to them continuing to use the service in the future". In another study by Gupta et al. (2022), the authors concluded that "user satisfaction is directly related to the decision to continue using AI, especially in highly personalized service areas such as customer care."on and engagement with AI".

## Management implications

Through the analysis of the Original Sample column (Beta coefficient), the research team clearly identified the level of influence of each factor on user experience with AI applications in customer care services on e-commerce platforms. Based on these findings, the team proposed a number of management suggestions to support businesses in effectively managing e-commerce platforms.

**Ease of use**

Based on the EOU1 - EOU4 questions and the average score from the evaluation table, the company can draw many important governance implications to improve service, optimize user experience, and enhance customer satisfaction. First of all, the clarity and ease of interaction with AI (EOU1, Mean: 3,786) needs to be improved through simplifying the interface and language to make it easier to understand, especially for users with little experience with technology. AI responses should be designed to be concise, accessible, and limit communication complexity. In terms of the ability to provide useful information when dealing with complex questions, although AI has been well assisted, the company should still upgrade its contextual processing capabilities with advanced machine learning algorithms and natural language processing (NLP) technology to improve the quality of responses. As for the level of chat fun (EOU3), users are not yet completely satisfied, so the company should integrate gamification elements or make the responses more flexible and engaging, helping to maintain interest and create a more dynamic interactive experience. Finally, in terms of response speed (EOU4), although it is already at a relatively high level, the company still needs to optimize its technical infrastructure to minimize latency and ensure that the chatbot responds quickly, especially in situations that require immediate handling. Overall, improving the ability to handle complex questions, improving interactivity and fun, and optimizing response speed and interface design will help Chatbot become a more useful and engaging tool, thereby increasing customer satisfaction and loyalty.

**Social Influence**

The next factor that has a major impact on users' intention to continue using AI for customer service is social influence. Based on the SI1 - SI5 questions and the corresponding GPA, businesses can apply management implications to promote the adoption and use of AI. With influencer incentives (SI1), users are positively influenced by reputable or influential figures. Businesses should partner with experts, celebrities, or thought leaders in promotional campaigns to increase trust and encourage the use of AI. For the belief that important people also use AI (SI2), businesses need to create a sense of community, encourage users to share experiences to spread through word of mouth. The use of AI based on general trends (SI3) shows the influence of society in the decision to use it. Businesses should position AI as part of the digital transformation trend, highlighting its pioneering role in modern technology. Similarly, the expert

support for AI (SI4, Mean: 3,783) is an important factor, businesses need to take advantage of reviews and testimonials from experts to improve reliability. Finally, the use of AI driven by social trends (SI5, Mean: 3,746) requires businesses to step up marketing campaigns to reinforce the image of AI as a future customer communication tool. In conclusion, businesses need to focus on social impact factors, expert recognition, and community building to promote the use of AI, contributing to the modern digitalization trend.

**Information quality**

The Information Quality factor ranks third in the ranking of factors affecting users' intention to continue using AI for customer service on e-commerce platforms. It is considered an important factor in the user's decision to use AI or not. Businesses need to focus on improving user trust and optimizing the information provided through AI. The IQ1 score (3,675) shows that users are still skeptical about the clarity of information, so businesses need to improve the communication style of AI, ensuring that information is more concise, easy to understand, and clearly structured. The application of natural language processing (NLP) technology will help AI respond more human-like, creating comfort and trust for users. With an IQ2 score (3,669), users feel that the information is incomplete, so businesses should integrate a comprehensive knowledge database and update it regularly to ensure that AI provides accurate and detailed information, especially with complex questions. An IQ3 score (3,672) shows that information from AI is not really good at supporting decision-making, so businesses need to provide personalized suggestions and actionable information such as product comparisons or specific recommendations. Finally, the IQ4 score (3,762) reflects that users believe that the information from the AI is up-to-date but not completely certain. To build trust, businesses need to ensure real-time information updates and clear notifications about the accuracy and frequency of updates. Overall, improving the clarity, completeness, and accuracy of information, combined with helpful suggestions, will help AI become more reliable, assist users more effectively, and enhance long-term engagement.

**Usefulness**

The next factor that affects users' intention to use AI on e-commerce platforms is Usefulness. To maximize the benefits from this factor, businesses need to ensure that AI systems truly deliver significant value in solving customer problems. Based on the US1 - US4 questions, businesses can draw important governance implications to optimize the use of AI, thereby improving user experience and business efficiency. With an average score of 3,858 for providing useful information and services, AI is considered quite useful but still needs improvement. Businesses should continuously update and expand their databases so that AI provides more accurate and comprehensive information, increasing customer satisfaction. AI's ability to suggest information quickly is appreciated by users, but optimizing the AI algorithm to shorten response times and increase the accuracy of suggestions will help enhance the experience. In addition, AI needs to be improved to increase efficiency in the online shopping process (Mean 3,824) through features such as personalized product suggestions, payment process automation, and post-purchase support. Finally, despite being rated useful (Mean 3,824), the AI needs to upgrade its natural language understanding and more personalized responses to better assist in specific situations. Therefore, businesses should focus on improving their ability to provide accurate

information, personalize product suggestions, and optimize the shopping process to increase efficiency and user satisfaction.

**Attitude**

The user attitude factor towards AI is a fifth factor influencing the intention to continue applying AI for customer service on e-commerce platforms. A positive attitude often comes from satisfaction and trust in AI's ability to solve problems effectively. Businesses can draw important implications about the use of AI technology in customer service, in order to improve efficiency and customer satisfaction. With an average score of 3,805 on positive attitudes towards AI technology, businesses need to focus on increasing customer awareness and acceptance by educating them about the benefits of AI in customer service, thereby building trust and peace of mind when using these services. Regarding the attractiveness of AI-generated suggestions (average score of 3,854), businesses need to improve AI algorithms to provide personalized suggestions, tailored to customer preferences and needs, thereby enhancing the value and attractiveness of suggestions. Regarding the ability of AI to help customers find the right product (average score of 3,851), businesses should invest in optimizing the ability to identify and analyze customer needs, thereby providing more accurate product suggestions. Finally, with a score of 3,864 on the effectiveness of AI in assisting in product search, businesses need to continue to expand AI's product search and recommendation capabilities, and integrate AI with other systems such as customer behavior analysis to make more accurate and timely suggestions. These improvements will not only enhance the effectiveness of AI in customer service, but also help build long-term customer trust and satisfaction.

**Trust in AI information**

The influencing factor ranked 6th in the Original Sample value (Beta coefficient) is the factor of trust in AI information. Belief in something greatly determines whether or not to continue using a certain service. Businesses need to improve AI services to enhance the user experience. First, it is necessary to prioritize improving the reliability of information by updating it regularly and checking the data accurately. Next, it is recommended to personalize the user experience and expand the capabilities of AI to meet more needs. In addition, it is necessary to ensure the safety of users with security measures such as data encryption and compliance with international standards. Ultimately, businesses need to improve response times and connect AI to other support channels to better resolve complex issues. These improvements will help increase user trust and satisfaction.

**Satisfaction**

User satisfaction is an indispensable factor in the factors affecting the intention to continue using AI for customer service on e-commerce platforms. When users have a positive experience with AI, they will feel satisfied and in turn tend to maintain their use of the service. Based on the SA1 - SA4 questions and the corresponding average scores, businesses need to focus on improving the effectiveness of the chatbot to better meet customer needs. For the question "Can the chatbot provide intelligent answers to my questions" (SA1, Mean: 3,771), this score shows that users feel that the chatbot can answer intelligently but still needs to improve the accuracy and depth of the answers. Businesses need to invest in continuous updates and learning to improve their ability to understand and answer diverse questions, which increases satisfaction. With the question "Can Chatbots solve the problems I encounter" (SA2, Mean: 3,743),

businesses need to ensure that Chatbots are capable of solving a variety of customer problems, and provide a clear response mechanism and quickly forward to support agents when necessary to increase trust from users. Meanwhile, the question "I am satisfied with the AI customer service experience" (SA3, Mean: 3,786) shows that customers have a positive feeling about AI services, and businesses should continue to improve personalization and responsiveness to increase customer confidence when using Chatbot. Finally, with the question "I am satisfied with the customer service experience via Chatbot" (SA4, Mean: 3,762), even though customers are satisfied, businesses still need to ensure stable performance and reduce waiting time to increase satisfaction and ensure an efficient transfer between Chatbot and human support when necessary. In conclusion, businesses need to optimize Chatbot intelligence, improve problem-solving, and ensure a seamless customer experience to maintain high trust and satisfaction from customers.

**Personalization**

From the data of the Hypothesis Results Test table, it can be seen that the "Personalization" factor is determined to have little impact on the user's intention to continue using AI for customer service. Businesses need to understand this so that they can have plans to review and improve, develop, and select the most suitable customer care processes for their businesses. Based on the PE1 - PE4 questions and the corresponding average score from the assessment table, businesses can refer to and choose to develop factors that are suitable for the business. Enhancing the user experience and optimizing the use of AI-based personalization suggestions, users are willing to share data if businesses ensure transparency about how data is used and strong security measures in place. Regarding the fact that users like to try new styles thanks to AI (PE2), businesses should improve the AI algorithm to provide creative suggestions, helping users discover new trends. The question of AI's ability to meet users' individual needs (PE3, GPA: 3,885) shows that users appreciate AI's ability to personalize experiences, so businesses need to continue to improve their ability to understand user preferences and provide more relevant suggestions. Finally, with the question of AI assistants providing product information according to personal preferences (PE4), businesses need to enhance the AI assistant's ability to provide relevant product information, integrating with the user's shopping history and preferences to enhance the accuracy of suggestions. Focusing on these factors will help businesses generate customer satisfaction and loyalty through a personalized and secure shopping experience.

## Limitations and future research directions

**Limitations**

In this study, although a lot of valuable data and information has been collected, there are still some limitations that need to be noted: *Limited research subjects*, the study mainly focuses on users in certain age groups and geographic areas, mostly students living in Ho Chi Minh City, which may not represent all users on e-commerce platforms. This may affect the generalizability of the results. *Data collection method*, the group uses a questionnaire survey method that can lead to biased data collection because respondents may be dishonest or only give opinions that are consistent with expectations. *Research time*, The research was conducted over a certain period of time, not reflecting changes in user behavior and perception over time. In addition to the factors mentioned in the topic, there are many external factors that have not been

mentioned in the research. Finally, the group's contributions and suggestions in the management implications are only subjective based on the research. Therefore, depending on the business, there will be different development directions.

**Future Research Directions**

To overcome the above limitations and expand the understanding of user experience with AI in customer service, future research can focus on the following directions: *Expanding the research subjects*, surveys can be conducted on a wider scale with diverse users from different ages, genders and geographical areas to get a more comprehensive view of user experience with AI. *Using multiple research methods,* to get more useful information values, ensure higher reliability, and gain deeper understanding of user psychology and behavior. The next research group should combine qualitative and quantitative research methods, such as in-depth interviews, focus groups, etc. *Survey on the impact of culture*, the impact of culture, the cultural factors of a country will also have certain influences on the intentions of users, thereby determining appropriate approaches and adjustments for each specific target group. *Long-term monitoring*, conduct longitudinal studies to track changes in user behavior and attitudes over time, helping businesses adjust their customer care strategies in a timely manner.

## CONCLUSION

This study aims to identify factors and the extent to which those factors influence users' intention to continue using AI for customer care services on e-commerce platforms. Based on this theory and previous studies, the research team has built a research model that proposes eight factors: (1) Trust, (2) Ease of use, (3) Attitude, (4) Helpfulness, (5) Personalization, (6) Information quality, (7) Social influence, and (8) Satisfaction.

The model has been tested and analyzed with a sample of 323 survey responses from Vietnamese youth. The findings show that all eight factors in the proposed research model have a positive impact on users' intention to continue using AI for customer care services on e-commerce platforms. The factors have different impacts on users' intentions, the influence of the factors can be arranged in order from large to small according to the level of influence as follows: Ease of use (EOU) has the strongest impact on users' intention to use, the second largest influence is social influence (SI), followed immediately by information quality (IQ), followed by usefulness (US), attitude (AT), trust in AI information (TU), satisfaction (SA) and finally personalization (PE) has the least impact on users' intention to continue using AI for customer care services on e-commerce platforms. Based on the results collected by the authors, this research paper makes a positive contribution to practice, creating a premise to support the planning, building appropriate strategies to develop and apply AI to customer care services on e-commerce platforms. The findings from the research help managers better understand how factors affect users' decisions, thereby providing solutions to improve the customer care process, enhance customer experience, apply or improve AI systems to attract and retain customers. This research is also a useful criterion for businesses in considering and evaluating investment in AI technology to optimize customer experience, especially in the context of technology becoming an increasingly important factor in business. In addition, the research results have fully answered the research questions posed initially, and at the same time tested the interaction of independent variables. The results show that: Ease of use has the strongest positive impact on user intention. Information quality is the factor that has the most influence on other factors:

Usefulness, trust, and user satisfaction. In particular, ease of use also has a positive impact on user attitudes towards using AI. Thus, improving the perception of ease of use and information quality of AI will facilitate users to continue using AI in the long term, while promoting their trust and positive attitudes towards this technology.

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