

## The power of information: boosting users' chatbot through trust and satisfaction in Indonesian e-commerce

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### Abstract

*This study aims to investigate the influence of information quality on users' interest in chatbot usage in the context of e-commerce in Indonesia, with trust and customer satisfaction as mediators. The Structural Equation Modeling Partial Least Squares (SEM-PLS) analysis method is used in this research, with data collected from 360 respondents who are e-commerce users in Indonesia. The results of this study indicate that high information quality positively influences users' interest in chatbot usage. Additionally, consumer trust in the chatbot and the level of customer satisfaction also play a mediating role in this relationship. This research provides valuable insights for e-commerce companies in Indonesia to understand the factors influencing customer acceptance of chatbots, emphasizing the importance of ensuring high information quality, consumer trust, and customer satisfaction to enhance the interest in chatbot usage and improve service quality and customer experience.*

**Keywords:** Information Quality, Satisfaction, Trust, Customer Intention to Use Chatbots

### Introduction

The massive disruption of the digital era has transformed nearly every aspect of human life, particularly in shopping activities (Nanda, Xu, & Zhang, 2021). The presence of rapidly growing e-commerce platforms such as Shopee, Tokopedia, Bukalapak, Lazada, and Blibli in Indonesia has significantly altered consumption patterns and lifestyles Nugroho, Ravenska, and Zulvia (2021), Dewalska-Opitek, Bilińska, and Cierpiat-Wolan (2022), providing increasing convenience to society. With technological advancements and changing consumer behaviors impacting the intense competition among e-commerce platforms, each platform must have a strong, innovative competitive advantage strategy to maintain and win a broader market share (Kim, Kim, Im, & Choi, 2021; Pollák, Konečný, & Ščaulovs, 2021; Yu, Zhao, Zhou, & Ren, 2022). One approach that e-commerce platforms can adopt to gain a competitive advantage is through providing a service network accessible anytime and anywhere for consumers. The provision of such services can create a sense of attachment and dependence on the e-commerce platform D. Liu, Shi, Kang, Egamberdiev, & Bakhareva (2022), Giao, Vuong and Quan (2020), making consumers continue

to use the platform even amid intense competition.

One of the common challenges faced by various e-commerce platforms is the inability to provide a service network that meets consumer needs, such as the chatbot feature, a chat-based service with 24/7 customer service (Gupta, Kushwaha, Badhera, Chatterjee, & Gonzalez, 2023; Naqvi, Hongyu, Naqvi, & Kun, 2023; Rajaobelina, Prom Tep, Arcand, & Ricard, 2021; Shafi, Jawalkar, Kadam, Ambawale, & Bankar, 2020). This service is crucial for consumers as it provides direct access related to product availability, product conditions, and ongoing transactions. It is acknowledged that providing 24/7 customer service (Chatbot) incurs significant costs (Singh, Ramasubramanian, & Shivam, 2019). Furthermore, consumers using this feature often do not find solutions to their transaction-related issues on the e-commerce platform, leading them to abandon the feature (Selamat & Windasari, 2021). In essence, an optimized chatbot is not only used as a customer complaint platform but also as an effective marketing tool.

Through the adoption of information technology such as Artificial Intelligence (AI), e-commerce platforms have the potential to provide services needed by consumers more efficiently and effectively. AI-based chatbots have significantly better capabilities in providing information beyond human capacity and can offer brand recommendations, product specifications, product trends, and product quality with a higher level of variability and informativeness (Lee, Pan, & Hsieh, 2022; Ngai, Lee, Luo, Chan, & Liang, 2021; Ruan & Mezei, 2022). Through the adoption of AI in chatbots, consumers become more informed about their activities on the e-commerce platform (Ping, 2019). Furthermore, the quality of information provided by chatbots can have implications for consumer purchasing interest in the e-commerce platform (Misischia, Poecze, & Strauss, 2022). Therefore, understanding comprehensively the factors that can influence interest in using this feature needs to be empirically examined.

User interest in using the chatbot feature on e-commerce platforms is highly influenced by the quality of information provided by the chatbot. Good information quality includes several crucial aspects, such as accuracy, relevance, and information availability (Liu et al., 2023). When the chatbot can provide accurate and relevant answers to user questions, it increases user interest in using the chatbot system (Nguyen, Chiu & Le, 2021), as consumers feel the chatbot can provide useful assistance. Additionally, sufficient and easily accessible information availability is also a determining factor, as users want to feel that they can quickly obtain the information they need (Hsiao & Chen, 2022). Thus, good information quality in using chatbots on e-commerce will increase user interest in continuing to use the service and improve the online shopping experience for consumers.

The relationship between information quality and user interest in chatbot usage has been confirmed by several previous studies, including (Binekas & Belgiawan, 2023; Hsiao & Chen, 2022; Nguyen, Chiu, & Le, 2021; Tisland, Sodefjed, Vassilakopoulou, & Pappas, 2022). These studies suggest that there is a significant positive relationship between the quality of information provided by e-commerce platforms through their chatbot features and consumer interest in continuing to use those services. However, there are inconsistent research results. Yang (2021) revealed that regardless of the quality of information

provided by the chatbot feature, it may not necessarily lead consumers to continue using the chatbot feature. Furthermore, in the context of consumers searching for desired products, they are more inclined to use the direct search feature provided by e-commerce platforms rather than the chatbot feature (Ikumoro & Jawad, 2019). To address the inconsistency in these research findings, the study introduces mediating variables that can accommodate the relationship between information quality and user interest in using the chatbot feature. The mediating variables used in this study are trust and satisfaction.

The roles of trust and customer satisfaction as mediating variables are comprehensively explained through the grand theory found by Ajzen (1991), known as The Theory of Planned Behavior. This theory posits that individual behavior can be predicted through three main factors: attitude, subjective norm, and perceived behavior control (Ajzen, 1991). In this context, user attitude toward the chatbot, subjective norm influenced by social views, and perceived control over chatbot usage will play a key role in shaping user interest. Additionally, Ajzen (1991) explains that trust and satisfaction are also considered mediators that can influence the relationship between information quality and user interest, enhancing understanding of how these factors interact in the context of chatbot usage.

High-quality information provided by chatbots on e-commerce platforms plays a key role in building user satisfaction. When chatbots can provide relevant, accurate, and useful answers to user queries, it creates a positive experience for consumers. Consumers who are satisfied with this interaction are likely to have an increased interest in continuing to use the chatbot feature. The relationship between information quality and customer satisfaction is also confirmed by studies conducted by Ruan and Mezei (2022), Niu and Mvondo (2024), and Sensuse et al., (2019), indicating that quality information from chatbots can influence consumer satisfaction. Furthermore, this satisfaction creates a strong sense of confidence in the chatbot's ability to provide positive solutions and recommendations (Huang & Chueh, 2021).

Thus, the Theory of Planned Behavior explains how the quality of information from chatbots contributes to shaping user interest in continuously utilizing the chatbot feature on e-commerce platforms. Consequently, customers who experience satisfaction with this feature are likely to use it continuously. The relationship between satisfaction and consumer interest in using chatbots also aligns with research conducted by Tisland et al., (2022), Huang and Chueh (2021), and Dhiman and Jamwal (2022).

High-quality information provided by chatbots on e-commerce platforms has a significant impact on building user trust (Yen & Chiang, 2021). When users perceive that a chatbot delivers accurate, relevant, and useful information, they are more likely to trust the chatbot. This aligns with research conducted by Nguyen et al., (2021), Filieri, Alguezaui and McLeay (2015), Masri, You, Ruangkanjanases, Chen, dan Pan (2020), Ponte, Carvajal-Trujillo, & Escobar-Rodríguez (2015), indicating that quality information has a positive and significant impact on consumer trust because trust is a key element in user behavior. Masri et al., (2020) elaborate in their study that users who trust are more inclined to accept suggestions or recommendations provided by the chatbot. When users have trust in the information provided by the chatbot, it triggers their interest in

continuously using the chatbot feature as a reliable source of information and carrying out activities on the e-commerce platform with greater confidence (Meyer-Waarden et al., 2020; Hsiao & Chen, 2022). Therefore, the quality of information provided by chatbots not only influences user trust but also positively affects user interest in using chatbots in the context of the online shopping experience. This is also confirmed by research conducted by Kasilingam (2020), Murtarelli, Collina, and Romenti (2023), and Sitthipon, Siripipattanakul, Phayaphrom, Siripipattanakul and Limna, (2022), indicating that consumer trust can have a positive and significant impact on the interest in using chatbot features.

According to the Theory of Planned Behavior (TPB) by Ajzen (1991), human behavior is influenced by three main factors: beliefs about the outcomes of behavior, beliefs about social norms, and beliefs about self-control. An individual's attitude toward an object is influenced by how they evaluate the attributes of that object, whether it is good or bad, harmful or beneficial (Zhang, Zhang, & Wang, 2022). Subjective norms, involving social pressure from others, also play a crucial role in shaping individual attitudes (Memon, Azhar, Haque, & Bhutto, 2020). The individual's intention to perform a behavior is a key factor in its execution (Ajzen, 1991). Perceived control, referring to how easy or difficult it is to perform a behavior, also influences direct behavior (Khan & Azam, 2016).

Beliefs about social norms create perceived social pressure, and beliefs about control create a sense of self-efficacy in controlling behavior (Xu et al., 2022). The influence of attitude and subjective norms on intention is influenced by perceptions of control over behavior (Xu et al., 2022). In general, the more positive the attitude and subjective norms, and the stronger the perceived control, the greater the individual's intention to perform the intended behavior (Ajzen, 1991). If individuals feel they have sufficient control over the behavior, they are likely to execute their intention when the opportunity arises (Ajzen, 1991). Therefore, intention is considered a key factor influencing behavior (Ajzen, 1991).

The study will focus on five leading e-commerce platforms in Indonesia, based on data released by Databoks (2023): Shopee, Tokopedia, Bukalapak, Lazada, and Blibli. These five e-commerce platforms will be the research subjects used to understand consumer behavior related to the use of chatbot features on e-commerce platforms. The study has several significant novelties, including the combination of two mediating variables not previously explored in research and the integration of two mediating variables correlated with the Theory of Planned Behavior. Thus, this research provides deeper insights into the influence of chatbot information quality on user intention to use chatbots in e-commerce. Furthermore, it can assist e-commerce platforms in enhancing their customer service and maintaining competitive edge. Through this research, it is expected to contribute significantly to understanding consumer behavior related to chatbot usage in e-commerce, identifying areas where e-commerce can improve chatbot service quality, enhance customer satisfaction, and retain customer loyalty. By filling knowledge gaps in this area, this research can also provide a foundation for further studies in this field.

Going deeper, Quality of information, trust, and intention to use are interrelated elements that play a central role in shaping consumer behavior, especially in the context of online platforms and services (Rai, Tang, Yin, & Du,



2022). Information quality refers to the reliability, accuracy, and credibility of the information available to consumers (Rai et al., 2022). When consumers perceive the information, they encounter as high-quality, it builds trust (Tseng, Chang, & Zhu, 2021). This aligns with the research conducted by Haider and Sundin (2022), stating that trust, in turn, is the belief or confidence that consumers have in the information, the information source, or the platform providing it. This trust is crucial in influencing consumers' intention to use products, services, or platforms (Haider & Sundin, 2022). When consumers trust the information they encounter, they tend to have a positive intention to use the product or service (Kong, Wang, Hajli, & Featherman, 2020). Therefore, there is a strong relationship where high-quality information enhances trust, which, in turn, positively impacts consumers' intention to use the product or service.

Consumers often rely on trust as a mediating factor in their decision-making process. The relationship between information quality, trust, and intention to use can be seen as a sequential process. Initially, consumers assess the quality of the information they encounter; if they perceive it as credible and accurate, trust is formed (Shin, 2021). This is supported by previous research conducted by Zhou et al., (2021), explaining that this trust then becomes a significant influence on consumers' intention to use products, services, or platforms. Therefore, for businesses and online platforms, ensuring the quality of the information they provide is crucial because it not only builds trust but also encourages consumers to have a positive intention to use their products or services. Hence, the hypotheses that can be formulated for this research are as follows:

*H1: Information Quality significantly and positively influences Intention to Use.*

*H2: Information Quality significantly and positively influences Trust.*

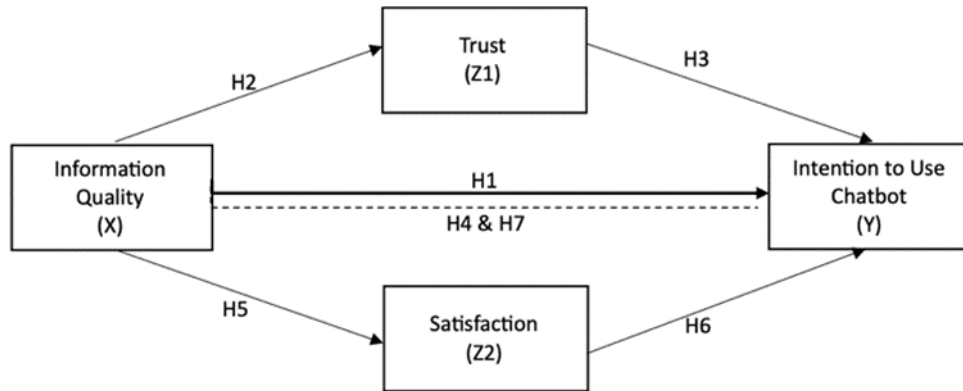
*H3: Trust significantly and positively influences Intention to Use.*

*H4: Trust mediates the relationship between Information Quality and Intention to Use.*

Quality information has a close relationship with the level of customer satisfaction and intention to use a product or service. High-quality information, such as the accuracy, relevance, and timeliness of information provided to consumers, can positively contribute to customer satisfaction (Barusman, 2019). Consumers tend to feel satisfied when they receive information that meets their needs and provides a clear understanding of the offered product or service (Nguyen, Pham, Tran, & Pham, 2020). This is supported by Annaraud dan Berezina (2020), who state that this satisfaction can then influence consumers' intention to continue using the product or service. When consumers are satisfied with the quality of information they receive, they are more likely to continue using the product or service and may also recommend it to others (Annaraud & Berezina, 2020). Therefore, information quality plays a crucial role in building and maintaining customer loyalty and increasing the intention to continue using the offered product or service.

Furthermore, information quality can also influence consumers' perceptions of a product or service. Accurate and useful information can shape positive perceptions, which, in turn, can enhance customer satisfaction and their intention to use the product or service (Alalwan, 2020). Thus, ensuring the quality of information provided to consumers is a crucial step in influencing the level of satisfaction and the intention of consumers to continue using the product or

service offered by the company. Therefore, the hypotheses in this study are:  
*H5: information quality significantly and positively influences intention to use.*  
*H6: satisfaction significantly and positively influences intention to use.*  
*H7: satisfaction mediates the relationship between information quality and intention to use.*



**Figure 1. Conceptual Framework**

## Research Methods

This study employs a quantitative-explanatory approach with the population of focus being users of chatbot features on e-commerce platforms throughout Indonesia. The exact size of this population cannot be determined precisely. To determine the sample size, this study applies purposive sampling technique, referring to the formula explained by (Hair, Risher, Sarstedt, & Ringle, 2019). The formula multiplies the number of variable categories by the numbers 5, 10, 15, and 20. Following this formula, the total number of samples taken in this study is 360 respondents. Selection criteria for respondents include individuals residing in various regions in Indonesia, aged at least 17 years, having an account on at least one e-commerce platform (Shopee, Tokopedia, Bukalapak, Blibli, and Lazada) actively for the past year, and having used the chatbot feature on e-commerce at least once.

Data collection in this study uses a questionnaire distributed online through the Google Form platform with a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The data analysis method used in this research includes descriptive statistical analysis and Structural Equation Modeling (SEM-PLS) analysis, assisted by the SmartPLS 4 software. There are three stages performed in SEM-PLS analysis, namely outer model analysis, inner model analysis, and hypothesis testing (Hair et al., 2019).

**Table 1. List of Indicators Employed for The Study**

Variabel	Indicators	Reference
Information Quality	The information provided by this chatbot can be trusted.	Teo, T.S.; Srivastava, S.C.; Jiang, L. (2008)
	This chatbot provides accurate information.	
	The information provided by this chatbot is easy to understand.	
	This chatbot provides up-to-date information.	

Trust	The information provided by this chatbot is presented in an engaging format.	Gefen, D.; Karahanna, E.; Straub, D.W. (2003)
	I have received sufficient information from this chatbot.	
	This chatbot provides me with the necessary information promptly when I need it.	
	I believe that this chatbot can be trusted.	
	I have no doubt about the honesty of the information provided by this chatbot.	
Satisfaction	I am confident that this chatbot service has the ability to protect user data.	Teo, T.S.; Srivastava, S.C.; Jiang, L. (2008)
	Overall, I trust this chatbot.	
	This chatbot has met my expectations.	
	This chatbot efficiently meets my needs (such as finding information, conducting transactions).	
	I am satisfied with this chatbot.	
Intention to Use Chatbot	Overall, I am satisfied with this chatbot.	Bhattacharjee, A. (2001)
	I intend to use this chatbot in the future.	
	I will always try to use this chatbot when I need it.	
	I highly recommend this chatbot to others.	

## Result and Discussions

In this study, SEM-PLS, with the assistance of SmartPLS 4 software, was used for data analysis. The research model was evaluated through three different stages, including outer model analysis, inner model analysis, and hypothesis testing for the study constructs. The outer model analysis was conducted to assess the validity and reliability of latent variable constructs. Validity was determined by examining the factor loading values, where indicators were considered valid and strong if the loading factor coefficients exceeded 0.6, with the condition that other loading factor values for the measured construct variables also exceeded 0.6. As seen in Table 1, the reflective measurements in this study indicated high validity, evident from the significant correlation values for each item in all variables, all of which displayed factor loading values exceeding 0.60 related to the evaluated construct variables. Therefore, it can be concluded that all research items are valid and strongly related.

The validity test results were further supported by the Average Variance Extracted (AVE) test, which determines that indicators in this study are considered valid if the AVE values exceed 0.50, in line with previous research by Hair et al., (2019) and Ghazali and Latan (2012). In this study, all variables, namely service quality, product innovation, customer satisfaction, and customer loyalty, showed AVE values exceeding 0.50, confirming their validity.

**Table 2. Validity and Reliability**

Variables	Items	Loading Factor	Cronbach's Alpha	Composite Reliability	AVE	Interpretation
Information Quality	X1.1	0.826	0.922	0.938	0.682	Valid
	X1.2	0.863				Valid
	X1.3	0.806				Valid
	X1.4	0.797				Valid
	X1.5	0.830				Valid
	X1.6	0.855				Valid

Trust	X1.7	0.804	0.844	0.896	0.683	Valid
	Z1.1	0.797				Valid
	Z1.2	0.860				Valid
	Z1.3	0.873				Valid
Satisfaction	Z1.4	0.772	0.854	0.896	0.698	Valid
	Z2.1	0.846				Valid
	Z2.2	0.737				Valid
	Z2.3	0.879				Valid
Intention to Use Chatbots	Z2.4	0.871	0.880	0.926	0.807	Valid
	Y1.1	0.867				Valid
	Y1.2	0.921				Valid
	Y1.3	0.907				Valid

Reliability assessment can be measured through examining the values of Cronbach's alpha and composite reliability. If the Cronbach's alpha value exceeds 0.6 and the Composite Reliability value exceeds 0.7, it can be stated that the constructs labeled "101" are reliable. A comprehensive examination of Table 2, which displays the composite reliability and Cronbach's alpha values for all variables, reveals that all variables covering Information Quality, Trust, Satisfaction, and Intention to Use Chatbots can be considered reliable, as they all show values exceeding 0.7.

Furthermore, the analysis delves into the inner model, aiming to test the significance of the constructs and the R-Square of the research model. R-Square is a metric used to assess how much independent variables influence the dependent variable. The quality of a model is determined based on the R-Square value, with a value of 0.67 indicating a strong model, 0.33 indicating a moderate model, and 0.19 indicating a weak model. Upon examining Table 2, it becomes clear that the R-Square value for customers' intention to use chatbot (Y) is 0.700, slightly below the threshold of 0.67, categorizing the model as strong. This means that customers' intention to use (Y) can only explain 70% of the variation in Information Quality (X), Satisfaction (Z1), and Trust (Z2). On the other hand, Satisfaction (Z1) shows an R-Square value of 0.453, exceeding the threshold of 0.33, indicating that this is a moderate model. This suggests that Information Quality (X) can be explained by Customer Satisfaction (Z1) to some extent, covering 45.3% of its variation.

**Table 3. R-Squared**

Variable	R-Squared	R-Square Adjusted
Intention to Use Chatbot	0.700	0.698
Satisfaction	0.453	0.452
Trust	0.714	0.713

Hypothesis testing functions to determine whether a hypothesis can be accepted or not. This assessment is based on the evaluation of path coefficients at a significance level of 5%, indicating a probability significance level of  $\leq 0.05$  ( $\alpha=5\%$ ). In Table 4, the results show that the significance values for the influence of Information Quality (X) and Customers' Intention to Use (Y) are 0.044 each, which is less than 0.05 (H1). Therefore, H1 is considered Supported. The analysis of the influence of information quality on satisfaction (Z1) and trust (Z2) reveals



significance values of 0.000, 0.000, which are also less than 0.05, resulting that H2 and H5 are Supported.

Additionally, the examination of the impact of satisfaction (Z1) and trust (Z2) on customers' intention to use chatbots (Y) produces p-values of 0.000, all of which are less than 0.05. Therefore, both H3 and H6 are Supported. The results of the mediation test for satisfaction show that satisfaction can mediate the relationship between information quality and customers' intention to use (H4:  $p = 0.000 < 0.05$ ) and trust in the relationship between information quality and customers' intention to use chatbots (H7:  $p = 0.000 < 0.05$ ). Therefore, H4 and H7 are also Supported.

**Table 4. Hypothesis Testing**

Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values	Explanation
H1: X -> Y	0.168	0.169	0.083	2,018	0.04	Supported
H2: X -> Z1	0.673	0.677	0.049	13,663	0.00	Supported
H3: Z1 -> Y	0.601	0.606	0.069	8,693	0.00	Supported
H4: X -> Z1 -> Y	0.405	0.409	0.048	8,368	0.00	Supported
H5: X -> Z2	0.845	0.846	0.021	40,179	0.00	Supported
H6: Z2 -> Y	0.546	0.550	0.051	8,554	0.00	Supported
H7: X -> Z2 -> Y	0.326	0.324	0.087	3,738	0.00	Supported

In the context of chatbot usage, the quality of information provided by chatbots can influence customers' attitudes toward using chatbots. When chatbots deliver high-quality information, customers are likely to have a positive attitude toward using them because they perceive benefits from the interaction (De Cicco et al., 2020). Conversely, if the information quality is low, customer attitudes may turn negative, making them reluctant to use chatbots (De Cicco et al., 2020). These findings align with research by Trivedi (2019), which indicates that information quality has a positive and significant impact on customers' attitudes toward using chatbots. This is attributed to the fact that when customers feel the information received from chatbots is highly accurate, relevant, and sufficient, they tend to develop a positive attitude toward using chatbots (Trivedi, 2019).

Moreover, good information quality will also enhance customer satisfaction (Afthanorhan, Awang, Rashid, Foziah, & Ghazali, 2019). Customers are likely to feel satisfied with the chatbot usage experience (Afthanorhan et al., 2019). Research by Nuryanti, Hutagalung, Nadeak, Abadiyah, dan Novitasari (2021) suggests that information quality has a positive impact on customer satisfaction. Additionally, Sanny, Susastra, Roberts, and Yusramdaleni (2020) found in their study that customer satisfaction can influence customer attitudes in using chatbots. This is because customers who are satisfied with their interactions using chatbots are likely to have a positive attitude toward chatbot usage (Nuryanti, Hutagalung, Nadeak, Abadiyah, & Novitasari, 2021; Sanny, Susastra, Roberts, & Yusramdaleni, 2020).

This relationship is further explained by the subjective norm in the Theory of Planned Behavior (TPB), which refers to the influence of others' views on an

individual's behavior (Ajzen, 1991). In the context of chatbots, subjective norm may include the experiences and opinions of other customers regarding the quality of information provided by chatbots. Therefore, if customers hear that using chatbots yields positive benefits in terms of information quality and satisfaction, the subjective norm can encourage them to use chatbots.

The clarity, accuracy, and responsiveness of chatbots in addressing customer queries significantly impact the customer experience (Sidaoui, Jaakkola, & Burton, 2020). High-quality information can build customer trust in chatbots, subsequently enhancing their intention to use them (Yen & Chiang, 2021). This aligns with research by Behera, Bala, and Ray (2021), indicating that information quality has a positive and significant effect on customer trust. Supported by Kasilingam (2020) in their study, customer trust influences the intention to use chatbots. This is because chatbots capable of providing accurate and relevant answers to customer queries positively impact customer trust (Behera et al., 2021). Trust then becomes a key factor in increasing customers' intention to continue using chatbots as a means of interaction and service (Kasilingam, 2020).

Furthermore, this relationship is explained through the Theory of Planned Behavior (TPB). Ajzen (1991) explains that within the TPB, chatbot qualities such as clarity, accuracy, and quick response influence users' positive attitudes toward chatbots. Additionally, subjective norm (others' views) and perceived behavioral control also play a role. Therefore, chatbot quality and user experience affect user trust and satisfaction in interacting with this technology.

## **Conclusion**

Based on the presented research, it can be concluded that the quality of information provided by chatbots significantly influences the customer experience in interacting with this technology. High-quality information creates a positive attitude toward chatbots, enhances customer satisfaction, and has a positive impact on the intention to use chatbots. These factors are interconnected and mutually influence each other in the context of chatbot usage. In this case, customer satisfaction may mediate the relationship between information quality and the intention to use chatbots.

Furthermore, customer trust in chatbots is also greatly influenced by the quality of information provided. Chatbots capable of delivering information with clarity, accuracy, and quick response can build customer trust. This trust then becomes a key factor in increasing the intention of customers to continue using chatbots as a means of interaction and service. In other words, customer trust can mediate the relationship between information quality and the intention to use chatbots. Additionally, in connection with the Theory of Planned Behavior (TPB), chatbot information quality, subjective norm, and perceived behavioral control play a key role in shaping customers' attitudes, subjective norms, and intentions toward using chatbots. All these factors together significantly influence user behavior in interacting with chatbot technology. Therefore, the development of chatbots capable of providing high-quality information, enhancing trust, and meeting customer subjective norms can significantly impact the success of chatbot usage and improve customer satisfaction.

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## References

- Afthanorhan, A., Awang, Z., Rashid, N., Foziah, H., & Ghazali, P. (2019). Assessing the effects of service quality on customer satisfaction. *Management Science Letters*, 9(1), 13-24.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Alalwan, A. A. (2020). Mobile food ordering apps: An empirical study of the factors affecting customer e-satisfaction and continued intention to reuse. *International Journal of Information Management*, 50, 28-44.
- Annaraud, K., & Berezina, K. (2020). Predicting satisfaction and intentions to use online food delivery: what really makes a difference?. *Journal of Foodservice Business Research*, 23(4), 305-323.
- Barusman, A. R. P. (2019). The effect of security, service quality, operations and information management, reliability & trustworthiness on e-loyalty moderated by customer satisfaction on the online shopping website. *International Journal of Supply Chain Management*, 8(6), 586-594.
- Behera, R. K., Bala, P. K., & Ray, A. (2021). Cognitive Chatbot for personalised contextual customer service: Behind the scene and beyond the hype. *Information Systems Frontiers*, 1-21
- Bhattacharjee, A. (2001) Understanding information systems continuance: An expectation-confirmation model. *MIS Q.* 2001, 25, 351–370.
- Binekas, H., & Belgiawan, P. F. (2023). Factors Influence Satisfaction and Continuance Intention of Chatbot Users. In 3rd International Conference on Business and Engineering Management (ICONBEM 2022) (pp. 102-116). Atlantis Press.
- Databoks. (2023). 5 E-Commerces Dengan Pengunjung Terbanyak Kuartal I 2023. <https://databoks.katadata.co.id/datapublish/2023/05/03/5-e-commerce-dengan-pengunjung-terbanyak-kuartal-i-2023>
- De Cicco, R., Silva, S. C., & Alparone, F. R. (2020). Millennials' attitude toward chatbots: an experimental study in a social relationship perspective. *International Journal of Retail & Distribution Management*, 48(11), 1213-1233.
- Dewalska-Opitek, A., Bilińska, K., & Cierpiat-Wolan, M. (2022). The application of the soft modeling method to evaluate changes in customer behavior towards e-commerce in the time of the global COVID-19 pandemic. *Risks*, 10(3), 62.
- Dhiman, N., & Jamwal, M. (2023). Tourists' post-adoption continuance intentions of chatbots: integrating task–technology fit model and expectation–confirmation theory. *foresight*, 25(2), 209-224.
- Filieri, R.; Alguezau, S.; McLeay, F. Why do travelers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth. *Tour. Manag.* 2015, 51, 174–185.
- Gefen, D.; Karahanna, E.; Straub, D.W. Inexperience and experience with online stores: The importance of TAM and trust. *IEEE Trans. Eng. Manag.* 2003, 50, 307–321
- Ghozali, I. Latan, H. (2012). *Partial Least Square : Konsep, Teknik dan Aplikasi SmartPLS 2.0 M3*. Semarang: Badan Penerbit Universitas Diponegoro
- Giao, H., Vuong, B., & Quan, T. (2020). The influence of website quality on consumer's

- e-loyalty through the mediating role of e-trust and e-satisfaction: An evidence from online shopping in Vietnam. *Uncertain Supply Chain Management*, 8(2), 351-370.
- Gupta, S., Kushwaha, P. S., Badhera, U., Chatterjee, P., & Gonzalez, E. D. S. (2023). Identification of Benefits, Challenges, and Pathways in E-commerce Industries: An integrated two-phase decision-making model. *Sustainable Operations and Computers*.
- Haider, J., & Sundin, O. (2022). Information literacy challenges in digital culture: conflicting engagements of trust and doubt. *Information, communication & society*, 25(8), 1176-1191.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to Use and How to Report The Results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hsiao, K. L., & Chen, C. C. (2022). What drives continuance intention to use a food-ordering chatbot? An examination of trust and satisfaction. *Library Hi Tech*, 40(4), 929-946.
- Huang, D. H., & Chueh, H. E. (2021). Chatbot usage intention analysis: Veterinary consultation. *Journal of Innovation & Knowledge*, 6(3), 135-144.
- Ikumoro, A. O., & Jawad, M. S. (2019). Intention to use intelligent conversational agents in e-commerce among Malaysian SMEs: an integrated conceptual framework based on tri-theories including unified theory of acceptance, use of technology (UTAUT), and TOE. *International Journal of Academic Research in Business and Social Sciences*, 9(11), 205-235.
- Kasilingam, D. L. (2020). Understanding the attitude and intention to use smartphone chatbots for shopping. *Technology in Society*, 62, 101280.
- Khan, A., & Azam, M. K. (2016). Factors influencing halal products purchase intention in India: preliminary investigation. *IUP Journal of Marketing Management*, 15(1), 20.
- Kim, J., Kim, M., Im, S., & Choi, D. (2021). Competitiveness of E Commerce firms through ESG logistics. *Sustainability*, 13(20), 11548.
- Kong, Y., Wang, Y., Hajli, S., & Featherman, M. (2020). In sharing economy we trust: Examining the effect of social and technical enablers on millennials' trust in sharing commerce. *Computers in human behavior*, 108, 105993.
- Lee, C. T., Pan, L. Y., & Hsieh, S. H. (2022). Artificial intelligent chatbots as brand promoters: a two-stage structural equation modeling-artificial neural network approach. *Internet Research*, 32(4), 1329-1356.
- Liu, D., Shi, M., Kang, Y., Egamberdiev, N., & Bakhareva, A. (2022). Factors affecting online purchase intention of consumers: a comparative approach between China and Uzbekistan. *European Journal of International Management*, 17(1), 114-148.
- Liu, Y., Han, T., Ma, S., Zhang, J., Yang, Y., Tian, J., ... & Ge, B. (2023). Summary of ChatGPT-Related Research and Perspective Towards the Future of Large Language Models. *Meta-Radiology*, 100017.
- Masri, N.W.; You, J.-J.; Ruangkanjanases, A.; Chen, S.-C.; Pan, C.-I. Assessing the effects of information system quality and relationship quality on continuance intention in e-tourism. *Int. J. Environ. Res. Public Health* 2020, 17, 174.
- Memon, Y. J., Azhar, S. M., Haque, R., & Bhutto, N. A. (2020). Religiosity as a moderator between theory of planned behavior and halal purchase intention. *Journal of Islamic Marketing*, 11(6), 1821-1836.
- Meyer-Waarden, L., Pavone, G., Poocharontou, T., Prayatsup, P., Ratinaud, M., Tison, A., & Torné, S. (2020). How service quality influences customer acceptance and usage of chatbots?. *SMR-Journal of Service Management Research*, 4(1), 35-51.
- Misischia, C. V., Poecze, F., & Strauss, C. (2022). Chatbots in customer service: Their relevance and impact on service quality. *Procedia Computer Science*, 201, 421-



428.

- Murtarelli, G., Collina, C., & Romenti, S. (2023). "Hi! How can I help you today?": investigating the quality of chatbots–millennials relationship within the fashion industry. *The TQM Journal*, 35(3), 719-733.
- Nanda, A., Xu, Y., & Zhang, F. (2021). How would the COVID-19 pandemic reshape retail real estate and high streets through acceleration of E-commerce and digitalization?. *Journal of Urban Management*, 10(2), 110-124.
- Naqvi, M. H. A., Hongyu, Z., Naqvi, M. H., & Kun, L. (2023). Impact of service agents on customer satisfaction and loyalty: mediating role of Chatbots. *Journal of Modelling in Management*.
- Ngai, E. W., Lee, M. C., Luo, M., Chan, P. S., & Liang, T. (2021). An intelligent knowledge-based chatbot for customer service. *Electronic Commerce Research and Applications*, 50, 101098.
- Nguyen, D. M., Chiu, Y. T. H., & Le, H. D. (2021). Determinants of continuance intention towards banks' chatbot services in Vietnam: A necessity for sustainable development. *Sustainability*, 13(14), 7625.
- Nguyen, D. T., Pham, V. T., Tran, D. M., & Pham, D. B. T. (2020). Impact of service quality, customer satisfaction and switching costs on customer loyalty. *The Journal of Asian Finance, Economics and Business*, 7(8), 395-405.
- Niu, B., & Mvondo, G. F. N. (2024). I Am ChatGPT, the ultimate AI Chatbot! Investigating the determinants of users' loyalty and ethical usage concerns of ChatGPT. *Journal of Retailing and Consumer Services*, 76, 103562.
- Nugroho, A. B., Ravenska, N., & Zulvia, P. (2021, July). Lifestyle Patterns During the Covid-19 Pandemic. In 2nd International Conference on Administration Science 2020 (ICAS 2020) (pp. 78-82). Atlantis Press.
- Nuryanti, Y., Hutagalung, D., Nadeak, M., Abadiyah, S., & Novitasari, D. (2021). Understanding the links between system quality, information quality, service quality, and user satisfaction in the context of online learning. *International Journal of Social and Management Studies*, 2(4), 54-64.
- Ping, N. L. (2019). Constructs for artificial intelligence customer service in E-commerce. In 2019 6th International Conference on Research and Innovation in Information Systems (ICRIIS) (pp. 1-6). IEEE.
- Pollák, F., Konečný, M., & Ščelovs, D. (2021). Innovations in the management of E-commerce: analysis of customer interactions during the COVID-19 pandemic. *Sustainability*, 13(14), 7986.
- Ponte, E.B.; Carvajal-Trujillo, E.; Escobar-Rodríguez, T. Influence of trust and perceived value on the intention to purchase travel online: Integrating the effects of assurance on trust antecedents. *Tour. Manag.* 2015, 47, 286–302.
- Rai, A., Tang, X., Yin, Z., & Du, S. (2022). Gaining customer loyalty with tracking information quality in B2B logistics. *Journal of Management Information Systems*, 39(2), 307-335.
- Rajaobelina, L., Prom Tep, S., Arcand, M., & Ricard, L. (2021). Creepiness: Its antecedents and impact on loyalty when interacting with a chatbot. *Psychology & Marketing*, 38(12), 2339-2356.
- Ruan, Y., & Mezei, J. (2022). When do AI chatbots lead to higher customer satisfaction than human frontline employees in online shopping assistance? Considering product attribute type. *Journal of Retailing and Consumer Services*, 68, 103059.
- Sanny, L., Susastra, A., Roberts, C., & Yusramdaleni, R. (2020). The analysis of customer satisfaction factors which influence chatbot acceptance in Indonesia. *Management Science Letters*, 10(6), 1225-1232.
- Selamat, M. A., & Windasari, N. A. (2021). Chatbot for SMEs: Integrating customer and business owner perspectives. *Technology in Society*, 66, 101685.
- Sensuse, D. I., Dhevanty, V., Rahmanasari, E., Permatasari, D., Putra, B. E., Lusa, J.



- S., ... & Prima, P. (2019, October). Chatbot evaluation as knowledge application: a case study of PT ABC. In 2019 11th International Conference on Information Technology and Electrical Engineering (ICITEE) (pp. 1-6). IEEE.
- Shafi, P. M., Jawalkar, G. S., Kadam, M. A., Ambawale, R. R., & Bankar, S. V. (2020). AI—Assisted Chatbot for E-Commerce to Address Selection of Products from Multiple Products. *Internet of Things, Smart Computing and Technology: A Roadmap Ahead*, 57-80.
- Shin, D. (2021). The effects of explainability and causability on perception, trust, and acceptance: Implications for explainable AI. *International Journal of Human-Computer Studies*, 146, 102551.
- Sidaoui, K., Jaakkola, M., & Burton, J. (2020). AI feel you: customer experience assessment via chatbot interviews. *Journal of Service Management*, 31(4), 745-766
- Singh, A., Ramasubramanian, K., Shivam, S., Singh, A., Ramasubramanian, K., & Shivam, S. (2019). Building a Chatbot Solution. *Building an Enterprise Chatbot: Work with Protected Enterprise Data Using Open Source Frameworks*, 55-69.
- Sitthipon, T., Siripipatthanakul, S., Phayaphrom, B., Siripipattanakul, S., & Limna, P. (2022). Determinants of customers' intention to use healthcare chatbots and apps in Bangkok, Thailand. *International Journal of Behavioral Analytics*, 2(2), 1-15.
- Teo, T.S.; Srivastava, S.C.; Jiang, L. Trust and electronic government success: An empirical study. *J. Manag. Inf. Syst.* 2008, 25, 99–132
- Tisland, I., Sodefjed, M. L., Vassilakopoulou, P., & Pappas, I. O. (2022). The Role of Quality, Trust, and Empowerment in Explaining Satisfaction and Use of Chatbots in e-government. In *Conference on e-Business, e-Services and e-Society* (pp. 279-291). Cham: Springer International Publishing.
- Trivedi, J. (2019). Examining the customer experience of using banking chatbots and its impact on brand love: The moderating role of perceived risk. *Journal of internet Commerce*, 18(1), 91-111.
- Tseng, L. Y., Chang, J. H., & Zhu, Y. L. (2021). What drives the travel switching behavior of Chinese Generation Z consumers. *Journal of Tourism Futures*.
- Xu, Y., Du, J., Khan, M. A. S., Jin, S., Altaf, M., Anwar, F., & Sharif, I. (2022). Effects of subjective norms and environmental mechanism on green purchase behavior: An extended model of theory of planned behavior. *Frontiers in Environmental Science*, 10, 779629.
- Yang, X. (2021). Determinants of consumers' continuance intention to use social recommender systems: A self-regulation perspective. *Technology in Society*, 64, 101464.
- Yen, C., & Chiang, M. C. (2021). Trust me, if you can: a study on the factors that influence consumers' purchase intention triggered by chatbots based on brain image evidence and self-reported assessments. *Behaviour & Information Technology*, 40(11), 1177-1194.
- Yu, J., Zhao, J., Zhou, C., & Ren, Y. (2022). Strategic business mode choices for e-commerce platforms under brand competition. *Journal of Theoretical and Applied Electronic Commerce Research*, 17(4), 1769-1790.
- Zhang, Z., Zhang, N., & Wang, J. (2022). The influencing factors on impulse buying behavior of consumers under the mode of hunger marketing in live commerce. *Sustainability*, 14(4), 2122.
- Zhou, M., Huang, J., Wu, K., Huang, X., Kong, N., & Campy, K. S. (2021). Characterizing Chinese consumers' intention to use live e-commerce shopping. *Technology in Society*, 67, 101767.