

THE ROLE OF PURCHASE DECISIONS IN MEDIATING THE EFFECT OF RESPONSIBILITY AND PERSONALIZATION IN CHATBOTS ON CUSTOMER SATISFACTION OF FASHION PRODUCTS AT TIKTOK SHOP IN PALU CITY

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Abstract

This study aims to analyze the role of purchasing decisions as a mediator of the influence of chatbot responsiveness and personalization on customer satisfaction on TikTok Shop in Palu City. Using quantitative methods with SEM-PLS (SmartPLS 4) and purposive sampling techniques, the study involved 100 respondents who had interacted with a chatbot when purchasing fashion products on TikTok Shop. The results show that responsiveness and personalization do not directly influence satisfaction, but both have a significant influence on purchasing decisions. Subsequent purchasing decisions are proven to have a strong influence on satisfaction and act as a full mediator. These findings reflect field conditions, where TikTok Shop users value chatbots more from their ability to assist the decision-making process such as clarity of information, relevant recommendations, and ease of transactions than from the emotional aspect of direct satisfaction. Practically, TikTok Shop needs to optimize the quality of chatbot responses, enrich personalization based on shopping history, and improve the accuracy of product information to encourage purchasing confidence, which ultimately increases customer satisfaction.

Keywords: *Responsiveness, Personalization, Purchase Decision, Customer Satisfaction*

INTRODUCTION

Customer satisfaction is a customer's evaluation of a product or service regarding the extent to which the product or service meets their expectations (Valarie A, Mary Jo, 2018). Customer satisfaction is a key indicator of the success of *e-commerce services* because it influences loyalty and continued purchases. In the context of *fashion* on TikTok Shop, which is the category with the highest online sales (Aftership, 2025), customer satisfaction is still heavily influenced by the quality of digital interactions during the transaction process. The system's inability to provide accurate information and appropriate responses often lowers customers' assessment of the shopping experience (Valarie A, Mary Jo, 2018). At this stage, the purchasing decision, which is the consumer's stage in determining product choices until the transaction occurs (Indrasari, 2019:70), plays an important role as a link between service experience and post-purchase satisfaction. Personalization and chatbot responsiveness are two key elements that shape this purchasing decision. Personalization reflects the chatbot's ability to tailor recommendations to user needs (Kotler, & Armstrong, (2023)), while responsiveness refers to the chatbot's speed and accuracy in providing responses (Devina & Sihotang, (2024)). In a *social commerce ecosystem* that relies on fast interactions such as TikTok Shop, these two aspects play a crucial role in creating a positive purchasing experience and driving customer satisfaction. However, previous studies have only examined the direct influence of personalization and responsiveness on customer satisfaction, without considering the role of purchasing decisions as a mediator (Mohammed, Aliyu, (2024)). Soetiyono et al., (2024). Furthermore, previous research has focused on general *e-commerce platforms* and has not yet described the characteristics of TikTok Shop in Indonesia. The local phenomenon in Palu City further reinforces this gap, where the increase in *fashion purchases* through TikTok Shop is still accompanied by complaints about chatbots being less responsive and less personal. Therefore, this study offers an examination of the influence of personalization and responsiveness on satisfaction through purchasing decisions as mediating variables, thus providing theoretical contributions and practical implications for improving the quality of chatbot services in the digital *fashion industry*.

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LITERATURE REVIEW

Black Box Model of Consumer Behavior

stimulus-response model proposed by (Armstrong and Kotler, 2023:161) focuses on the so-called consumer "black box," the internal mechanism that transforms external stimuli into behavior. Within this black box are buyer attributes, including cultural, social, personal, and psychological factors, as well as a series of decision-making stages ranging from need recognition to post-purchase evaluation. In this study, external stimuli are represented by the level of responsiveness and personalization of the chatbot, both of which are assumed to influence how consumers search for information, evaluate alternatives, and ultimately choose to purchase. Responsiveness accelerates the flow of information and suppresses consumer doubt, while personalization increases consumers' sense of attachment and trust in the seller. The result of this processing is a purchasing decision, which then impacts customer satisfaction. Within this framework, the influence of the chatbot is not solely direct but also mediated by the consumer's internal processes that determine whether the service experience is satisfactory.

Chatbot

Chatbot is an artificial intelligence (AI) based service system designed to automatically interact through text or voice to assist users in finding information and fulfilling service needs Mira Afrina, et al., (2025) . In the context of *e-commerce* , chatbot functions as a digital intermediary capable of providing product information, answering customer questions, providing recommendations, and facilitating the transaction process quickly and efficiently Nawawie et al., (2024) . Through these capabilities, chatbot plays an important role in shaping users' initial perceptions of service quality. On *platforms* such as TikTok Shop, chatbots are used to handle questions related to product availability, size, price, payment methods, and shipping status. The speed of response and the ability of chatbots to provide relevant recommendations make them one of the important factors influencing customer experience in *digital business services* . This is in line with research by Mulyanto & Budi, (2024) which shows that the level of responsiveness and personalization of chatbots has a direct impact on service perceptions and customer behavior, including purchasing interest and loyalty. As a service technology, chatbots have two key elements relevant to this study: responsiveness, which reflects the speed and accuracy with which the chatbot answers questions, and personalization, which describes the system's ability to provide recommendations or responses tailored to user needs. These two components play a role in shaping the purchasing decision process and ultimately influence customer satisfaction levels.

Responsiveness

Responsiveness is defined as the ability of a service provider to provide a quick, accurate response, and a willingness to help customers when needed Valarie A, Mary Jo, (2018) . In the context of chatbot-based digital services, responsiveness includes the speed of replies, accuracy of information, the system's readiness to provide solutions, and consistency in responding to various customer questions Valarie A, Mary Jo, (2018) . Responsiveness is an important dimension in service quality because it shapes customers' initial perceptions of the effectiveness of interactions. In the consumer behavior model, responsiveness functions as an external *stimulus* that influences the information search process and evaluation of alternatives before consumers make a purchasing decision (Kotler, & Armstrong, 2023) . When customers obtain information quickly and clearly, the level of doubt decreases and trust in the transaction process increases.

Previous research consistently shows that chatbot responsiveness can increase convenience and drive purchasing decisions. Soetiyono et al. (2024) found that responsiveness improves user experience in digital services. Research by Isalman et al. (2025) confirmed that rapid responses help reduce uncertainty and strengthen confidence before a transaction. Devina & Sihotang (2024) also showed that responsiveness determines the quality of the customer experience in *e-commerce* . In the context of TikTok Shop, responsiveness is highly relevant because *fashion product customers* require fast information regarding item availability, sizes, prices, and limited promotions. However, in some contexts, rapid responsiveness does not always result in satisfaction if the quality of information does not meet customer expectations. This aligns with the *Expectancy Disconfirmation theory*. Lee & Brodbeck (2025) stated that satisfaction occurs when service performance meets or exceeds expectations. Therefore, although responsiveness is important in initial interactions, its impact on satisfaction can vary.

Personalization

Chatbot personalization is understood as part of individual marketing or also known as *one to one marketing* , as the system's ability to customize services, messages, and recommendations based on customer preferences,

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behaviors, and specific needs Kotler, & Armstrong, (2023) , In chatbots, personalization includes the accuracy of recommendations, the convenience of interaction, and the relevance of content provided to users Lukman, & Gerson, (2025) . In digital *platforms* , personalization strengthens the perception of closeness and relevance of services. In consumer behavior, personalization influences the information search and alternative evaluation stages. When recommendations are perceived as appropriate, the decision-making process becomes faster and more convincing because the level of match between the information received increases. Previous research shows that AI-based personalization plays an important role in influencing purchasing decisions. Mohammed, & Aliyu, (2024) showed that personalization in the *fashion industry* increases interest and purchasing decisions. Reyzakky, et al., (2024) also found that personalization in Tokopedia chatbots triggers positive attitudes and purchasing behavior. However, other studies such as Kim (2025) and Saragih (2025) emphasize that personalization can lose its effectiveness if it triggers *privacy concerns* or if the recommendations are irrelevant, thus decreasing the perceived value of the service. Thus, personalization is an important variable that drives purchasing decisions, but its influence on customer satisfaction is not always consistent and is highly dependent on the quality of the recommendation relevance and the perception of data security during digital interactions.

Purchase decision

Purchasing decisions are defined as a psychological and behavioral process when consumers determine the product, brand, timing, and quantity to be purchased by Kotler, & Armstrong, (2023) ; Indrasari, (2019) . This process includes the stages of needs evaluation, information search, alternative analysis, and commitment to purchase. On the TikTok Shop *platform* , purchasing decisions are heavily influenced by the quality of chatbot interactions, from response speed to recommendation relevance. In the *Black Box model* , purchasing decisions are *the output* of *external stimuli* such as responsiveness and personalization that are processed in the consumer's internal mechanisms. When information is provided quickly, relevantly, and trustworthy, customer confidence in purchasing decisions increases. Previous research shows that purchasing decisions have a strong relationship with customer satisfaction. Hartanto et al ., (2022) , Cindia & Rochman, (2016) , and Handayani et al., (2020) revealed that the right purchasing decision results in satisfaction because consumers feel what they choose meets expectations. This shows that purchasing decisions are not only the end result of interactions, but also an important element that bridges service quality and satisfaction. In this study, purchase decisions act as a mediating variable, explaining how responsiveness and personalization can enhance customer satisfaction. This means that chatbots don't directly create satisfaction, but rather improve the quality of purchase decisions before generating satisfaction.

Customer satisfaction

Customer satisfaction is the final evaluation of a product or service based on the extent to which the service meets or exceeds customer expectations (Valarie A, Mary Jo, 2018) . Satisfaction is influenced by perceived service quality, clarity of information, and actual experience during the purchasing process (Indrasari, 2019:92) . On digital *platforms* such as TikTok Shop, satisfaction is influenced by information accuracy, ease of transaction, and the quality of chatbot interactions. In consumer behavior, satisfaction occurs at the post-purchase stage and is an important indicator in assessing the success of a service, as it influences repurchase intentions and word-of-mouth recommendations. Previous research has shown mixed results regarding the influence of responsiveness and personalization on satisfaction. Mahalli et al., 2023 stated that chatbot responsiveness can increase satisfaction. However, research by Kim, 2025 and Saragih, 2025 showed that personalization does not always increase satisfaction, especially if the relevance of recommendations is low or there are privacy concerns. In this study, customer satisfaction is more influenced by purchasing decisions than by direct responsiveness or personalization. This means that satisfaction only arises after customers feel confident in their purchasing decisions. This confirms that purchasing decisions act as an important mediator that channels the influence of chatbot service quality towards customer satisfaction.

Relationship between variables

Responsiveness and personalization in chatbots are *external stimuli* in the *Black Box model* that influence the consumer evaluation process before forming a purchasing decision (Kotler, & Armstrong, 2023) . High responsiveness, in the form of speed and accuracy of chatbot responses, can reduce uncertainty and increase trust, thus encouraging purchasing decisions (Soetiyono et al., 2024) ; Isalman et al. , (2025) . In addition, personalization that suits customer preferences increases the relevance of information and emotional engagement, thereby strengthening confidence in choosing a product (Mohammed, (2024) ; Reyzakky et al., (2024) . Purchasing

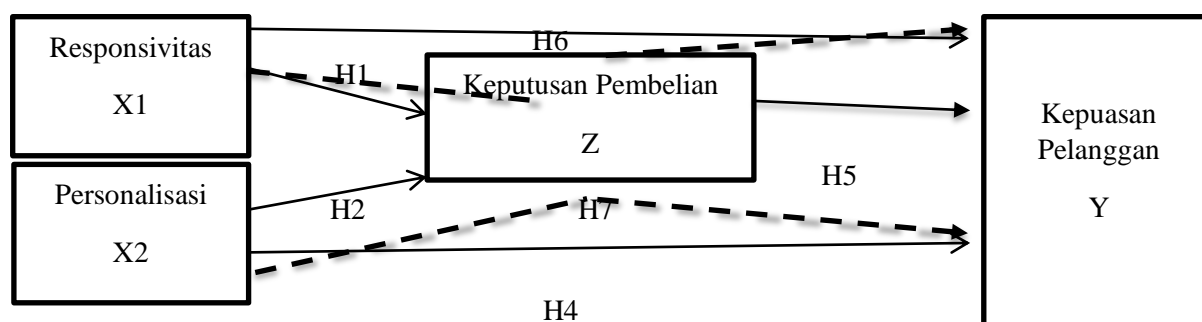
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decisions made based on fast, accurate, and relevant information tend to result in satisfaction because the decision is considered in accordance with consumer expectations Hartanto et al., (2022) ; Handayani et al., (2020) . Therefore, purchasing decisions function as a mediator that channels the influence of responsiveness and personalization on customer satisfaction. Theoretically, responsiveness and personalization can also directly influence satisfaction. However, the impact is highly dependent on the quality of interaction and the level of fulfillment of customer expectations Valarie A, Mary Jo, (2018) . Thus, this study positions purchasing decisions as a mediating variable that explains how the quality of chatbot interactions on TikTok Shop can lead to customer satisfaction with *fashion products* .

1. H1: Chatbot responsiveness has a positive effect on purchasing decisions.
2. H2: Chatbot personalization has a positive effect on purchasing decisions.
3. H3: Chatbot responsiveness has a positive effect on customer satisfaction.
4. H4: Chatbot personalization has a positive effect on customer satisfaction.
5. H5: Purchasing decisions have a positive effect on customer satisfaction.
6. H6: Purchase decisions mediate the effect of chatbot responsiveness on customer satisfaction.
7. H7 : Purchase decision mediates the effect of chatbot personalization on customer satisfaction .

H3



METHODS

This research uses quantitative methods to examine a specific population or sample. Data collection uses research instruments, and data analysis is quantitative or statistical in nature, with the aim of testing the established hypothesis . In this research, quantitative methods are used. to test the effect of Responsiveness and Personalization on chatbots on increasing customer satisfaction which impacts purchasing decisions on *fashion products* in Tiktok shop Palu City Sugiyono (2023:16) . Seven hypotheses in this study were tested to identify the direct effect of Responsiveness and personalization on customer satisfaction, as well as the indirect effect through the mediating role of purchasing decisions. The data of this study were collected using a five-point Likert scale questionnaire based on theoretical indicators Sugiyono (2023:146) . Data analysis was carried out using SEM-PLS with SmartPLS 4, which is suitable for models involving latent variables and mediation paths Ghazali, (2023:210) . The population in this study were TikTok Shop users in Palu City who had used chatbots in purchasing fashion products. The measurement of the number of samples used refers to Hair et al., (2021) which states that the number of samples can be determined by multiplying the number of indicators by 5 or the number of latent constructs by 10. Hair et al., (2021) mentions a constant of 10, however, in this study the calculation of the number of samples uses a constant of 25 so that the obtained value is more representative. With the number of latent variables as many as 4, the minimum sample requirement is $4 \times 25 = 100$ respondents. Therefore, this study determines the number of samples as many as 100 respondents, using a purposive sampling technique, based on the criteria of TikTok shop users who are domiciled in Palu City, aged > 17 years and have interacted with chatbots in purchasing *fashion products* .

RESULTS AND DISCUSSION

Respondent Overview

The research questionnaire was distributed online via *Google Form* to TikTok shop users residing in Palu City who had interacted with the chatbot when purchasing *fashion products* . Data collection was conducted over 16 days, from October 23, 2025, to November 7, 2025. Table 1 presents an overview of the respondents.

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Table 1. Description of Respondent Characteristics

Characteristics	Category	Number of Respondents
Gender	Man	32
	Woman	68
	Total	100
Age	17-25 Years	93
	26-35 Years	7
	Total	100
Residence	Palu City	100
How often do you use TikTok Shop?	Rarely (1-2 times)	14
	Sometimes (3-4 times)	24
	Quite Often (5-6 times)	37
	Often (7-8 times)	17
	Very Often (>10 times)	8
	Total	100
How often do you interact with Chatbot when purchasing <i>fashion products</i> on TikTok Shop?	Rarely (1-2 times)	22
	Sometimes (3-4 times)	40
	Quite Often (5-6 times)	23
	Often (7-8 times)	17
	Very Often (>10 times)	2
	Total	100
Last interaction with chatbot on TikTok Shop	Ask about product availability	60
	Track orders	
	Asking for prices/promos	34
	Asking about payment/shipping methods	16
	Ask about the product return mechanism	9
	Ask how to order a product	
		21
		1

Source : Primary Data (2025)

Based on the data in Table 1, the majority of respondents were female (68%) and aged 17–25 (93%). All respondents resided in Palu City (100%). TikTok Shop was used quite frequently (37%), while interactions with the chatbot for *fashion purchases* were generally occasional (40%). The most common form of interaction with the chatbot was questions about product availability (60%), followed by order tracking (34%), and questions about return procedures (21%).

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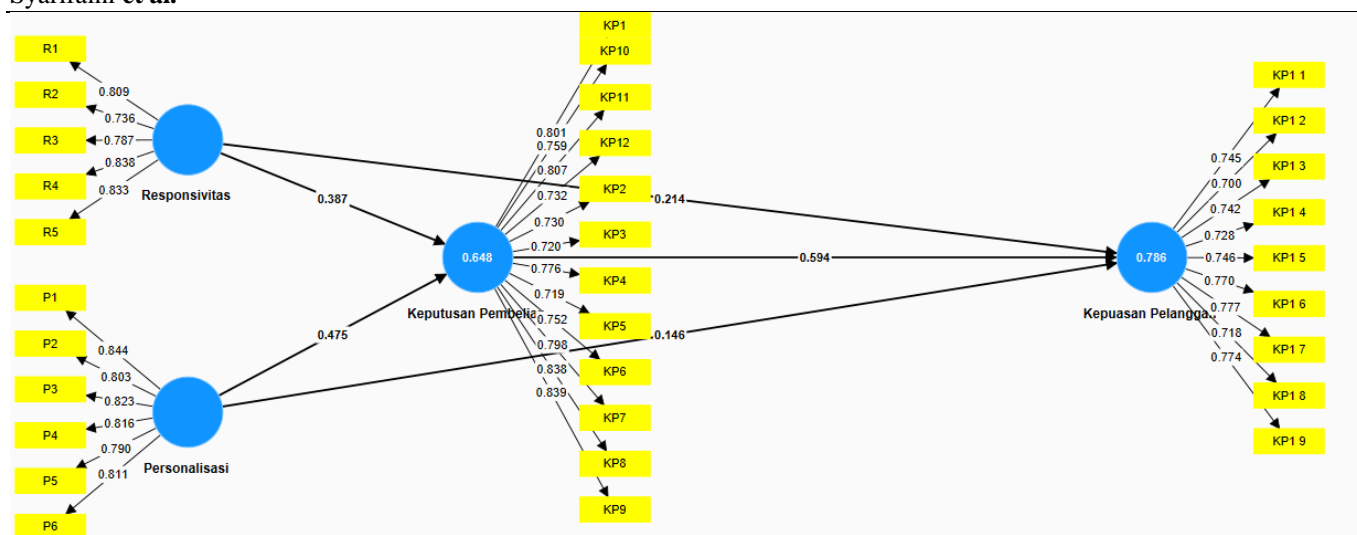


Figure 2. External Model
Source : Primary Data (2025)

External model testing is conducted to assess the extent to which each questionnaire item truly represents or describes the variables to be studied as well as the stability and consistency of respondents in answering questions in the questionnaire. Sugiyono (2023:178) . In the figure, the external load values of the Responsiveness (X1), Personalization (X2), Purchase Decision (M), and Customer Satisfaction (Y) variables can be observed.

External Model Analysis Convergent Validity Test

Table 2. Results of Convergent Validity Test-Outer Loading & AVE Value

Variables	Indicator	Outer loadings	Information	AVE value	Information
Customer satisfaction	Kp 1 1	0.745	Legal	0.555	Legal
	Kp 1 2	0.700	Legal		
	Kp 1 3	0.742	Legal		
	Kp 1 4	0.728	Legal		
	Kp 1 5	0.746	Legal		
	Kp 1 6	0.770	Legal		
	Kp 1 7	0.777	Legal		
	Kp 1 8	0.718	Legal		
	Kp1 9	0.774	Legal		
Purchase decision	Kp 1	0.801	Legal	0.599	Sah
	Kp 2	0.730	Sah		
	Kp 3	0.720	Sah		
	Kp 4	0.776	Sah		
	Kp 5	0.719	Sah		
	Kp 6	0.752	Sah		
	Kp 7	0.798	Sah		
	Kp 8	0.838	Sah		
	Kp 9	0.839	Sah		
	Kp 10	0.759	Sah		
	Kp 11	0.807	Sah		

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	Kp12	0,732	Sah		
	R 1	0,809	Sah		
	R 2	0,736	Sah		
Responsivitas	R 3	0,787	Sah	0.642	Sah
	R 4	0,838	Sah		
	R 5	0,833	Sah		
	P 1	0,844	Sah		
	P 2	0,803	Sah		
Personalisasi	P 3	0,823	Sah	0.664	Sah
	P 4	0,816	Sah		
	P 5	0,790	Sah		
	P 6	0,811	sah		

Sumber:SEM-PLS (2025)

The Customer Satisfaction variable is measured by nine valid items, with *outer loading values* ranging from 0.700 to 0.777. The AVE value of 0.555 (>0.50) confirms the fulfillment of convergent validity. Therefore, all indicators can be considered consistent in describing the Customer Satisfaction construct. The Purchase Decision variable consists of twelve valid items, with *outer loading values* ranging from 0.719 to 0.839. The AVE value of 0.599 (>0.50) indicates the fulfillment of convergent validity. Furthermore, the Responsiveness variable, measured through five statements with the total number of items declared valid, has an *outer loading value ranging from 0.736 to 0.838*. The *Average Variance Extracted* (AVE) value of 0.642, which exceeds the minimum limit of 0.50, indicates that the construct meets the criteria for convergent validity ; all indicators are considered consistent in representing the Responsiveness construct. Finally, the Personalization variable measured using six valid items with *outer loading values* between 0.790 and 0.844. An AVE value of 0.664 (>0.50) indicates that convergent validity has been met.

Discriminant Validity Test

Table 2.Vladdidity-Fornell-Criterion Discriminant

Variables	Customer satisfaction	Buying decision	Personalization	Responsiveness
Customer satisfaction	0.745			
Buying decision	0.863	0.744		
Personalization	0.757	0.762	0.815	
Responsiveness	0.761	0.739	0.742	0.801

Source : SEM-PLS (2025)

The results of the discriminant validity test using the Fornell-Larcker criteria indicate that each construct in the model has good self-discrimination capabilities. The square root AVE values of each variable, namely Customer Satisfaction (0.745), Purchase Decision (0.744), Personalization (0.815), and Responsiveness (0.801), are all higher than the correlation values between the other constructs. This confirms that each latent variable has adequate discriminant validity, so that the constructs used in this study can be declared valid and conceptually different from one another.

Table 3. Discriminant Validity-Heterotrait-Monotrait Ratio (HTMT)

	Customer satisfaction	Buying decision	Responsiveness	Personalization
Customer satisfaction				
Buying decision	0.936			
Responsiveness	0.831	0.820		
Personalization	0.861	0.819	0.837	

Source: SEM-PLS (2025)

The results of the discriminant validity test using the HTMT ratio indicate that there is one pair of constructs that exceeds the threshold of 0.90, namely between Customer Satisfaction and Purchase Decision (0.936). This finding

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indicates a possible overlap between the two constructs. Meanwhile, the HTMT values for the other pairs, namely Customer Satisfaction–Responsiveness (0.831), Purchase Decision–Responsiveness (0.820), Customer Satisfaction–Personalization (0.861), Purchase Decision–Personalization (0.819), and Responsiveness–Personalization (0.837), are still below the threshold of 0.90. Thus, the discriminant validity in this model can be said to be partially fulfilled.

Reliability Test

Table 5. Reliability Test

Variables	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)
Customer Satisfaction	0.899	0.901	0.918
Buying decision	0.939	0.940	0.947
Responsiveness	0.860	0.864	0.900
Personalization	0.899	0.902	0.922

Source: SEM-PLS (2025)

The results of the reliability test indicate that all variables in this study have high internal consistency. The Cronbach's Alpha and Composite Reliability (CR) values each exceeded the recommended minimum limit of 0.70. Specifically, the Consumer Satisfaction variable has a value (Cronbach's Alpha is 0.899 and Composite Reliability (CR) is 0.918) . Purchasing Decision have (Cronbach's Alpha 0.939 And Composite Reliability (CR) 0.947) . Responsiveness has (Cronbach's Alpha 0.860 and Composite Reliability (CR) 0.900) , while Personalization has (Cronbach's Alpha 0.899 and Composite Reliability (CR) 0.922) . These values confirm that all constructs meet good reliability criteria, so that the research instrument can be declared consistent and suitable for use in the next stage of analysis.

Deep Model Analysis

Table 6. R-Square

Variables	R-Square	R-Square Adjusted
Buying decision	0.648	0.641
Customer satisfaction	0.786	0.779

Source: SEM-PLS (2025)

The R-Square test results show that the Purchase Decision variable has a Q-Square value of 0.648 or 64.8%, which means that customer experience is able to explain 64.8% of the variation in the Purchase Decision variable, and this relationship is in the Strong category. Customer Satisfaction shows an R-Square value of 0.786 or 78.6%, which means that repurchase intention is able to explain 78.6% of the variation in the Customer Satisfaction variable, and this relationship is in the Strong category.

Table 7. F-Square .

Square F	
Purchase decision → Customer Satisfaction	0.580
Personalization → Customer Satisfaction	0.035
Personalization → Purchase decision	0.288
Responsiveness → Customer Satisfaction	0.080
Responsiveness → Purchase decision	0.192

Source: SEM-PLS (2025)

The F-Square analysis describes the magnitude of the effect of each relationship between variables in the research model. Based on the analysis results, the relationship between Purchasing Decision and Customer Satisfaction has a large effect size with an F-Square value of 0.580. This finding indicates that Purchasing Decision plays a significant role in increasing the level of Customer Satisfaction. Conversely, the relationship between Personalization and Customer Satisfaction has a small effect size, namely 0.035, which indicates that the influence of Personalization on increasing Customer Satisfaction is relatively low. On the other hand, Personalization has a moderate influence on Purchasing Decision with an F-Square value of 0.288, which indicates that Personalization contributes significantly to influencing consumer decisions to make purchases. Meanwhile, the relationship between Responsiveness and Customer Satisfaction shows a small effect size with an F-Square value of 0.080, which means that the influence of Responsiveness on Customer Satisfaction is still limited. However, the relationship between Responsiveness and Purchasing Decision shows a moderate effect with a value of 0.192, indicating that Responsiveness' ability to respond

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to customers has a significant influence on purchasing decisions. Overall, the results of this study confirm that Purchasing Decision is the variable with the most dominant influence on Customer Satisfaction, while Personalization and Responsiveness provide varying contributions from small to moderate levels of influence on the two dependent variables.

Hypothesis Testing

Table 9. Direct Effect Hypothesis Test

Hypothesis	Original sample (o)	Sample Mean (M)	Standard Deviation (STDEV)	T statistic (t0/STD EVI)	P Values	Information
Responsiveness->purchase decision	0.387	0.388	0.145	2,671	0.008	Accepted
Personalization-> purchase decision	0.475	0.471	0.107	4,426	0,000	Accepted
Responsiveness-> customer satisfaction	0.214	0.224	0.118	1,804	0.071	Rejected
Personalization->Customer satisfaction	0.146	0.160	0.082	1,778	0.075	Rejected
Purchase decision-> customer satisfaction.	0.594	0.571	0.0119	4,973	0,000	Accepted

Source: SEM-PLS (2025)

The results of the direct effect hypothesis test show that the Responsiveness variable has a significant influence on Purchasing Decisions with an original sample value of 0.387, a T value of 2.671, and a P Value of 0.008 (<0.05), so the hypothesis is accepted. This finding indicates that the higher the level of Responsiveness, the greater its influence on consumer decisions in making purchases. In addition, the Personalization variable is also proven to have a significant influence on Purchasing Decisions with an original sample value of 0.475, a T value of 4.426, and a P Value of 0.000 (<0.05), which means that the better the level of Personalization provided, the higher the consumer's tendency to make purchases. Conversely, the influence of Responsiveness on Customer Satisfaction has an original sample value of 0.214, a T value of 1.804, and a P Value of 0.071 (>0.05), so this hypothesis is rejected. These results indicate that Responsiveness has not been able to provide a significant impact on increasing Customer Satisfaction. A similar thing also occurs in the Personalization variable on Customer Satisfaction, with an original sample value of 0.146, a T value of 1.778, and a P Value of 0.075 (>0.05), which indicates that the effect is not yet significant. However, Purchasing Decisions show a significant influence on Customer Satisfaction with an original sample value of 0.594, a T value of 4.973, and a P Value of 0.000 (<0.05), so this hypothesis is accepted. Overall, the results of this analysis indicate that Purchasing Decisions have the most dominant influence on Customer Satisfaction, while Personalization and Responsiveness have a more limited influence.

Table 10. Indirect Effect Hypothesis Test

Hypothesis	Original sample (o)	Sample Mean (M)	Standard Deviation (STDEV)	T statistic (t0/STDE VI)	P Values	Information
Responsiveness->Purchase Decision->Customer Satisfaction	0.282	0.272	0.094	3,014	0.006	Accepted
Personalization-> Purchase Decision-> Customer Satisfaction	0.230	0.216	0.084	2,736	0.003	Accepted

Source: SEM-PLS (2025)

The results of the indirect effect test analysis indicate that Responsiveness has a significant effect on Customer Satisfaction through Purchasing Decisions as a mediating variable. The original sample value of 0.282, T statistic

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3.014, and P Value 0.006 (<0.05) indicate that increasing Responsiveness can encourage purchasing decisions which ultimately contribute to increasing Customer Satisfaction. In other words, the higher the level of Responsiveness, the greater its influence on Customer Satisfaction through the purchasing decision-making process. In addition, Personalization is also proven to have a significant indirect effect on Customer Satisfaction with the original sample value of 0.230, T statistic 2.736, and P Value 0.003 (<0.05). These results indicate that Personalization can increase Customer Satisfaction indirectly through the role of Purchasing Decisions. Overall, these findings confirm that Purchasing Decisions are intermediary variables that strengthen the relationship between Responsiveness and Personalization with Customer Satisfaction.

Discussion

The Influence of Chatbot Responsiveness on Purchasing Decisions

The results of the study show that chatbot responsiveness has a significant influence on purchasing decisions, so that aspects of willingness to help customers, speed of service, timeliness of service, attention to problems and responsiveness of chatbot communication become important stimuli in the consumer decision-making process. Within the *Black Box model framework*, responsiveness functions as an *external stimulus* that strengthens the information search process, reduces doubts, and helps consumers evaluate alternatives before making a purchasing choice. Kotler, & Armstrong, (2023). This mechanism explains how a quick response from a chatbot increases consumer confidence, as the information received is perceived as more reliable and makes it easier for them to assess the suitability of a product to their needs. This finding is consistent with research. Soetiyono et al., (2024), Isalman, et al., (2025), and Devina & Sihotang, (2024) which also shows that responsiveness can boost consumer confidence in purchasing decisions. This alignment of findings reinforces the understanding that on *e-commerce platforms* like TikTok Shop, responsiveness is a crucial factor in accelerating the decision-making process amidst limited physical interaction and the high demand for instant information. TikTok Shop needs to ensure that its chatbot can provide fast, accurate, and consistent responses to maintain customer trust throughout the pre-purchase process. Optimizing the chatbot system, updating product data in *real time*, and improving AI's ability to understand the context of questions are important steps to strengthen the influence of responsiveness on purchasing decisions.

The Influence of Chatbot Personalization on Purchasing Decisions

This study also demonstrates that personalization significantly influences purchasing decisions, such that the accuracy of recommendations, the convenience of digital interactions, and the relevance of promotions can increase customer engagement and trust. Within the framework of consumer behavior, personalization serves to strengthen the relevance of the information customers receive and accelerate the alternative evaluation process, as consumers perceive that the recommendations provided are aligned with their needs and preferences. Kotler, & Armstrong, (2023). This mechanism explains how personalization helps reduce consumers' cognitive load, allowing them to make purchasing decisions more quickly and confidently. This finding is consistent with research Mohammed, & Aliyu, (2024) and Reyzakky et al., (2024) confirmed that AI-based personalization can increase consumer confidence and purchase intentions by presenting tailored and more meaningful information to users. This finding corroborates the evidence that personalization is a strategic component in driving purchasing decisions, particularly on digital *platforms* that offer a wide selection of products and complex information. Companies need to optimize chatbots' ability to personalize recommendations by leveraging data from consumer behavior, search history, and product preferences. Improving the quality of personalization algorithms will help create more relevant interactions and increase the likelihood of consumers making purchasing decisions. Furthermore, service providers need to ensure that personalization remains ethical and does not raise privacy concerns to maintain positive customer reception.

The Influence of Chatbot Responsiveness on Customer Satisfaction

The results of the study showed that chatbot responsiveness did not directly impact customer satisfaction in TikTok Shop. Although response speed and service accuracy are important components of service quality (Valarie A, Mary Jo, (2018)) These findings indicate that responsiveness plays a greater role in the pre-purchase stage, namely helping customers obtain information and reduce doubts before deciding to buy (Kotler, & Armstrong, 2023). According to Expectancy Disconfirmation theory, satisfaction is not only determined by the speed of response, but also by the suitability of the final experience to customer expectations. Therefore, responsiveness alone is not enough to create satisfaction if the quality of the answer or transaction results do not meet expectations. This study also shows that responsiveness influences purchasing decisions more than satisfaction, because a quick response helps customers feel confident in making decisions. Satisfaction only arises after customers evaluate the results of the decision and

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the overall transaction experience (Valarie A, Mary Jo, (2018) ; Indrasari, (2019) . Thus, the purchasing decision becomes a mediator that connects the influence of responsiveness to satisfaction.

The Influence of Chatbot Personalization on Customer Satisfaction

The results of the study show that personalization does not significantly influence customer satisfaction, indicating that personalized product recommendations and interactions have not been able to meet consumer expectations in the post-purchase phase. Mechanistically, personalization works primarily in the pre-purchase phase, namely increasing the relevance of information and helping consumers filter product alternatives. However, in the final evaluation stage, customers assess satisfaction based on the quality of the overall transaction experience, not simply the suitability of previously provided recommendations. This condition is in line with research by Kim, (2025). And Saragih (2025) , who showed that personalization can lose its effectiveness if recommendations are not relevant enough, feel generic, or raise concerns regarding the use of personal data. Thus, personalization in the context of this study is more effective in forming purchasing decisions, but not strong enough to create a post-purchase experience that results in satisfaction. Companies need to improve the quality of personalization by presenting more precise recommendations, based on actual user behavior, and being transparent in data management so that customers feel safe and valued. These efforts can help personalization contribute not only to purchasing decisions but also to future customer satisfaction.

The Influence of Purchasing Decisions on Customer Satisfaction

The research results show that purchasing decisions significantly influence customer satisfaction, with product choice, brand and dealer choice, and timing and purchase amount being the most dominant factors in shaping post-purchase evaluations. Mechanistically, purchasing decisions reflect a customer's level of confidence after going through the information search process, considering alternatives, and assessing the relevance of the information obtained. When consumers feel confident in their decisions due to previously receiving fast, clear, and appropriate information, the resulting transaction experience tends to be evaluated positively. This finding is consistent with research. Hartanto et al., (2022) , Cindia & Rochman, (2016) and Handayani et al ., (2020) explained that a correct purchasing decision results in positive disconfirmation, a condition where the customer experience meets or even exceeds expectations, resulting in satisfaction. This suggests that satisfaction depends not only on the quality of the chatbot service, but also on how the information provided contributes to the consumer's decision-making process. Companies need to ensure that the process that drives consumers toward purchasing decisions, including information quality, clarity of answers, and ease of access, runs optimally. By strengthening the factors that shape purchasing confidence, companies can increase the likelihood of achieving customer satisfaction after a transaction occurs.

The Role of Purchasing Decisions in Mediating the Effect of Chatbot Responsiveness on Customer Satisfaction

The results of the study indicate that purchasing decisions act as a significant mediator that channels the influence of chatbot responsiveness on customer satisfaction. Responsiveness demonstrated through the speed and accuracy of responses helps customers feel guided and more confident during the product search process, thereby increasing their confidence in purchasing fashion products at TikTok Shop in Palu City. This mechanism is in line with the findings of (Yanesya & Tjokrosaputro, 2024) , which confirm that the quality of chatbot responses can build trust and encourage user confidence in making transaction decisions. When customers decide to purchase, the decision reflects how effectively the chatbot's responsiveness provides relevant information and reduces doubts, so that purchasing decisions become an important basis for evaluating satisfaction. This finding is also supported by Soetiyono et al ., (2024) and (Alexia, 2024) , which show that chatbot responsiveness influences purchasing decisions and customer satisfaction. Thus, purchasing decisions are the main pathway that channels the influence of chatbot responsiveness towards customer satisfaction in the context of *fashion shopping* at TikTok Shop in Palu City.

The Role of Purchasing Decisions in Mediating the Effect of Chatbot Personalization on Customer Satisfaction

The results of the study indicate that purchasing decisions significantly mediate the influence of chatbot personalization on customer satisfaction. The personalization displayed by the chatbot, including product recommendations based on shopping history, preferences, and user habits, can build user trust and confidence that the chatbot understands their needs, thus encouraging the decision to purchase *fashion products* at TikTok Shop in Palu City. This trust is a psychological factor that explains why personalization does not always directly increase

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satisfaction, but works indirectly through consumer confidence in making purchasing decisions. This finding is in line with research by Sakina & Ali, (2021) , who found that personalization in *e-commerce platforms* has a positive effect on trust and purchase intention, confirming that personalization tends to trigger a sense of relevance and confidence before consumers make a purchasing decision. This finding is also supported by research by Syarifudin et al., (2024) , which shows that the quality of personalized chatbot services *increases* user trust and ultimately influences purchase intention. Thus, purchasing decisions play a crucial role in channeling the influence of personalization towards customer satisfaction, as the purchasing decision is the final evaluation that determines whether the personalized experience provided by the chatbot actually results in satisfaction.

Conclusion

This study concludes that chatbot responsiveness and personalization play a significant role in shaping customers' purchasing decisions for *fashion products* at TikTok Shop in Palu City through response speed, information accuracy, and recommendation relevance. However, these two variables do not directly increase customer satisfaction, as satisfaction only emerges when customers feel they have made the right purchase decision, indicating that the purchase decision acts as a full mediator and is the most dominant factor in building positive evaluations after the transaction. Thus, chatbots function more as decision support tools than direct creators of satisfaction, so strengthening information quality, recommendation relevance, and the system's ability to build trust are strategic steps to improve the shopping experience. These findings enrich *the Black Box Model* and *Expectancy Disconfirmation Theory* and open up opportunities for research development by including moderating variables such as digital literacy, shopping experience, or trust in AI. Practically, increasing the accuracy of product-related information, personalization that maintains privacy ethics, the quality of more solution-oriented answers, additional interactive features, good after-sales service, and *human handover options* need to be optimized. For future research, a mixed-method or qualitative approach is recommended to delve deeper into the psychological aspects that influence the relationship between chatbots, decisions, and customer satisfaction.

REFERENCES

- AfterShip. (nd). *TikTok Shop statistics in 2025* . AfterShip. <https://www.aftership.com/ecommerce/statistics/tiktok-shop> AfterShip
- Alexia, KR (2024). *The Effect of Artificial Intelligence (AI)-Based Chatbot Implementation on Customer Satisfaction in the Online Retail Industry* Kenny . 3 (1), 1–15.
- Armstrong, K. (2023). *Buying decision* .
- Business, WS, Wijayanto, G., Rivai, Y., Alvionita, A., Wildah, SW, Riau, U., & Info, A. (2023). *Evaluation of the Effect of Chatbot in Improving Customer Interaction and Satisfaction in Online Marketing in Indonesia* . 1 (04), 304–311.
- Cindia, I., & Rochman, F. (2016). *Decision and Fashion Interest in Purchasing Imitation Handbags (A Study of Female Students in Malang City)* . 366 .
- Devina, R., & Sihotang, T. (2024). *The Influence of Chatbot Usability and Responsiveness on Customer Satisfaction: Analysis of Digital Business Students at Medan State University in the Context of E-Commerce Use* . 3 (6), 2080–2091.
- Hair et al. (2021). *Fundamentals of Marketing Research* (New Edition, p. 420). McGraw-Hill Education, 2 Penn Plaza, New York, NY 10121.
- Handayani, J., Derriawan, D., & Hendratni, TW (2020). *The influence of product design on purchasing decisions and its impact on consumer satisfaction in Shopping Goods* . 10 (1), 91–103. <https://doi.org/10.14414/jbb.v10i1.2261>
- Hartanto, N., Mani, L., Jati, M., Josephine, R., & Hidayat, Z. (2022). *Factors Affecting Online Purchase Decision, Customer Satisfaction, and Brand Loyalty: An Empirical Study from Indonesia's Biggest E-Commerce* . 11 , 33–45.
- Indrasari, M. (2019). *Marketing & Customer Satisfaction* . Unitomo Press.
- Isalman, Ahmad Mubaraq, Conny, APN (2025). *The urgency of e-service quality to strengthen trust in purchasing decisions* . 17 (1), 112–125.
- Kim, H. (2025). *Triggering the Personalization Boomerang Effect: The Moderating Role of Situational Privacy Concern* .

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- Kotler, Armstrong, & B. (2023). Principles of Marketing. In *The Economic Journal* (Vol. 38, Issue 151). <https://doi.org/10.2307/2224326>
- Lee, N., & Brodbeck, FC (2025). *Expectation disconfirmation and consumer satisfaction: A meta-analysis of Expectation-disconfirmation and satisfaction* . 0123456789. <https://doi.org/10.1007/s11747-024-01078-x>
- Lukman Hakim Sangapan, Gerson Manurung, AHM (2025). *Analysis of Service Personalization Strategy in Increasing Customer Loyalty* . 1 (1), 11–25.
- Ghozali. (nd). *Smart PLS 4* .
- Mahalli, F., Shiddieq, D.F., & Nurhayati, D. (2023). *The Role of Responsiveness and Usability of Shopee's Artificial Intelligent Chatbot on Customer Satisfaction* . September .
- Mira Afrina, Naretha Kawadha Pasemah Gumay, Ardina Ariani, DMF (2025). *The Effect of Chatbot Usage on Customer Satisfaction: A Quantitative Study of Shopee, Tokopedia, and Lazada Using SmartPLS* . 14 (2019), 114–122.
- Mohammed, Aliyu, R.I. (2024). *The Effect of AI-Based Personalization on Purchasing Decisions and Customer Satisfaction in the Nigerian Fashion Industry* . 04 , 92–107. <https://doi.org/10.5281/zenode.13847988>
- Mulyanto, D., & Budi, AP (2024). *Chatbot Interaction And Customer Loyalty: Analyzing The Role Of Personalization And Responsiveness* . 164–174.
- Nawawie, GH, Satriana, I., & Sucipto, AJ (2024). *Chatbots and Customer Satisfaction in E-Commerce: An Exploratory Study* . 4 (4), 176–185.
- Reyzakky Alfiano Rizkillah, Fadhil Puja Winata, YP (2024). *Analysis of the Use of the “Ask” Chatbot Feature on the Tokopedia Application* . 119–128.
- Sakina, M., & Ali, S. (2021). Determining Factors of Purchase Intention in Personalized Website Context for Indonesian Consumers. *Journal of Economics, Business, & Accountancy Ventures* , 24 (1), 139–155. <https://doi.org/10.14414/jebav.v24i1.2287>
- Saragih, AE (2025). *AI-Driven Personalization in E-Commerce : Impact on Customer Engagement and the Role of Privacy Concerns* . 9 (2), 564–574. <https://doi.org/10.29408/jpek.v9i2.30466>
- Soetiyono, A., Kurnia, Y., & Kurnia, R. (2024). The Effect of Chatbot and Virtual Assistant Usage on Increasing Customer Satisfaction and Its Impact on Purchasing Decision Making. *ECo-Buss* , 6 (3), 1367–1381. <https://doi.org/10.32877/eb.v6i3.1169>
- Sugiyono (2023). (nd). *Qualitative Quantitative Research Methods* . Alfabet Publisher Bandung.
- Syarifudin, M., Yulianto, E., & Nugroho, A. (2024). Journal of Digital Marketing and Halal Industry Modeling AI-Chatbot Service Quality and Purchase Intention: Mediating Mechanisms and the Moderating Role of Intrusiveness. *Journal of Digital Marketing and Halal Industry* , 6 (2), 211–240.
- Valarie A, Mary Jo, D. (2018). *Services Marketing* . Seventh Edition.
- Yanesya, Z., & Tjokrosaputro, M. (2024). The Influence of Chatbot Usage and Response on. *Journal of Economics* , 29 (03), 446–468.