

# THE EFFECT OF SERVICE QUALITY, PRICE, AND EASE OF ACCESS ON THE INTENTION TO USE GOODS DELIVERY SERVICES THROUGH CUSTOMER SATISFACTION AS AN INTERVENING VARIABLE CASE STUDY: CONSUMERS OF TERNATE POST OFFICE

<sup>1</sup>Andika Perwira Yudha,<sup>2</sup>Melia Eka Lestiani

<sup>1,2</sup>Management Logistic, Faculty Logistic and Business, Universitas Logistik dan Bisnis Internasional  
Bandung, Indonesia

Author's email:

<sup>1</sup>Andhika18920@gmail.com; <sup>2</sup>meliaeka@ulbi.ac.id

\*Corresponding author: Andhika18920@gmail.com

**Abstract.** *The rapid growth of e-commerce has led to an increase in the logistics and delivery service sector. The post office, as one of the service providers with an extensive network, is required to continuously offer high-quality services. This also applies to the Ternate Branch Post Office, which plays an important role in meeting goods delivery needs in archipelagic regions. This study employed a quantitative approach using Structural Equation Modeling–Partial Least Squares (SEM-PLS) analysis. Data were collected through 100 questionnaires distributed to consumers of goods delivery services at the Ternate Branch Post Office. The results indicate that service quality, service price, and ease of access have a significant effect on customer satisfaction. Customer satisfaction is proven to mediate the effect of service quality, service price, and ease of access on the intention to use goods delivery services. This study concludes that increasing the intention to use goods delivery services at the Ternate Branch Post Office is strongly influenced by customer satisfaction, which is shaped through improvements in service quality, competitive pricing, and ease of service access.*

**Keywords:** *Customer Satisfaction; Ease of Access; SEM-PLS; Service Price; Service Quality; Usage Intention.*

## 1. INTRODUCTION

The development of the goods delivery service sector in Indonesia has experienced significant growth along with increasing trade activities and the rapid expansion of e-commerce. E-commerce has become a primary intermediary for online purchasing transactions by offering convenience, practicality, and time efficiency for consumers, thereby increasing the demand for goods delivery services (Kuswandani, 2015). This condition has triggered the emergence of various national and international courier service companies, such as JNE, TIKI, Pos Indonesia, J&T, FedEx, and DHL, resulting in increasingly intense competition within the delivery service industry (Purwanti, 2008).

As one of the oldest delivery service providers and a state-owned enterprise (SOE), Pos Indonesia has an extensive service network and long-standing experience. However, increasing competition from private courier companies that offer fast and technology-based services requires Pos Indonesia to continuously improve service quality, operational efficiency, and customer satisfaction in order to remain relevant and trusted by the public (Tjiptono, 2019). This condition also applies to the Ternate Branch Post Office, which has a strategic role in serving goods delivery needs in island regions but faces challenges due to growing consumer preferences for courier services that are more accessible and responsive.

The intention to use goods delivery services is influenced by various factors, including service quality, price, and ease of access. In addition, customer satisfaction plays an important role as a consumer evaluation of the congruence between expectations and the actual performance of the service received, which ultimately shapes the intention to reuse the service. Customer satisfaction is assumed to function as a mediating variable that links service quality, price, and ease of access with the intention to use goods delivery services. Therefore, this study aims to

analyze the effect of service quality, price, and ease of access on the intention to use goods delivery services through customer satisfaction among consumers of the Ternate Branch Post Office.

## **2. LITERATURE REVIEW**

### *2.1 The Effect of Service Quality on the Intention to Use Goods Delivery Services at the Ternate Branch Post Office*

Service quality is closely related to the comparison between customer expectations and the actual services received by customers or consumers. The higher the level of service quality provided, the greater the tendency of consumers to make decisions to choose a particular service. Therefore, service quality has a positive influence on service selection decisions. Companies that are able to provide good service quality will facilitate consumers in obtaining and understanding information about certain products or brands, as well as encourage consumers to give positive responses to various available product alternatives. Research conducted by Chen et al. (2018) concluded that service quality has a positive effect on purchasing decisions. This statement is consistent with the research of (Zitkien et al, 2017), which states that service quality has a positive influence on purchasing decisions. Rizkalla and Suzanawaty (2012) also stated that there is a positive effect of service quality on decisions in selecting goods or services.

### *2.2 The Effect of Shipping Price on the Intention to Use Goods Delivery Services at the Ternate Branch Post Office*

Price is the amount of value that must be paid by consumers to obtain a product or service. According to Kotler and Armstrong, price is the only element of the marketing mix that generates revenue, while other elements incur costs (Kotler & Armstrong, 2018). Therefore, price becomes an important consideration for consumers in the decision-making process. In delivery services, prices are often compared with the benefits received, such as delivery speed and goods security. Consumers tend to choose services with prices that are perceived as reasonable and proportional to the service quality obtained. Competitive pricing can increase customer satisfaction and encourage usage intention (Zeithaml, 1988). Previous studies indicate that price has a positive effect on customer satisfaction and usage intention, especially when consumers perceive that the price paid is commensurate with the value received (Tjiptono & Chandra, 2017).

### *2.3 The Effect of Ease of Access on the Intention to Use Goods Delivery Services at the Ternate Branch Post Office*

Ease of access refers to the level of convenience for consumers in reaching service locations and understanding as well as undergoing the service process. According to Davis, the ease of use of a system or service will influence user attitudes and intentions in adopting the service (Davis, 1989). In the context of delivery services, ease of access includes strategic office locations, simple delivery processes, short waiting times, and clear service procedures. Good ease of access will reduce the effort and time spent by consumers, thereby increasing satisfaction and the intention to use the service (Kotler & Keller, 2016).

### *2.4 Usage Intention to Use Goods Delivery Services*

Usage intention is the behavioral tendency of consumers to use a product or service within a certain period. According to Schiffman and Kanuk, intention represents a form of consumer readiness to act that is influenced by attitudes and perceptions toward a product or service (Schiffman & Kanuk, 2010). In delivery services, usage intention is reflected in consumers' desire to reuse the service, make it their primary choice, and recommend it to others. Usage intention is influenced by prior customer experiences, satisfaction levels, and perceptions of service

quality and value received (Kotler & Armstrong, 2018).

### 2.5 Relationships Among Variables in the Study

Service quality, price, and ease of access have a close relationship with customer satisfaction. Good service quality, reasonable pricing, and ease of access will increase customer satisfaction, which subsequently encourages the formation of usage intention. In this context, customer satisfaction acts as a mediating variable that bridges the influence of service-related factors on the intention to use delivery services (Parasuraman et al., 1988; Oliver, 1997).

## 3. RESEARCH METHODS

The population in this study consists of all consumers who use goods delivery services at the Ternate Branch Post Office. Considering the relatively large population size, this study employed a sample to represent the population. The sampling technique used was purposive sampling, which is a sampling method based on certain considerations or criteria relevant to the research objectives (Indriantoro & Supomo, 2002). The respondent criteria in this study include: (1) consumers who use goods delivery services at the Ternate Branch Post Office; (2) consumers who have used post office services at least twice in the past month; (3) willingness to complete the research questionnaire; (4) male or female respondents aged 17–60 years; and (5) respondents from both business actors and the general public. The sample size used in this study was 100 respondents, with data collection conducted from January 3, 2026, to January 10, 2026.

Figure 3.1 Research Model

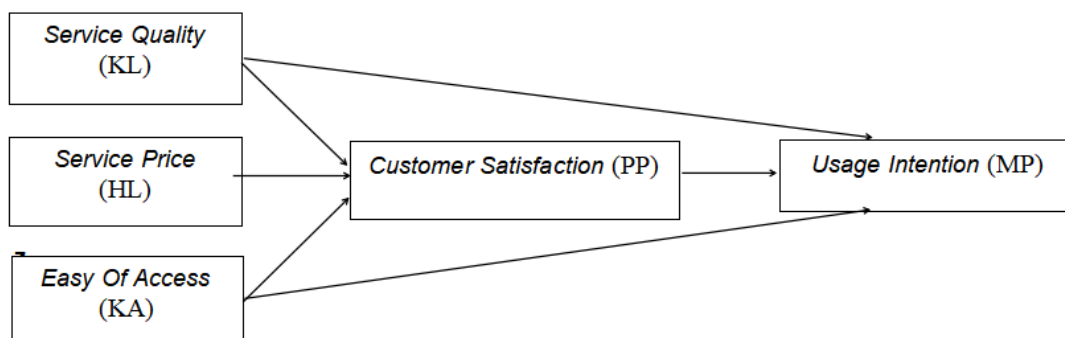


Figure 3.1 presents the research model of this study. The operational definitions of variables are aligned with the model to ensure consistent measurement of each construct for SEM-PLS analysis. The operational definition of variables is provided to clarify the meaning of each variable used in this study and to ensure consistency in measurement. Each variable is defined based on relevant theoretical concepts and is operationalized through measurable indicators, as presented in the following table.

Tabel 3.1 Operational Definition of Variables

No	Variable	Operational Definition	Indicators	Likert
1	Service Quality (KL)	Customers' perceptions of the level of excellence of goods delivery services at the Ternate Branch Post Office in meeting customer expectations	1) Service speed 2) Delivery accuracy 3) Goods security 4) Staff attitude and friendliness	1–7

2	<i>Service Price</i> (HL)	Customers' perceptions of the fairness of delivery costs compared to the benefits and service quality received	1) Price affordability 2) Clarity of pricing information 3) Price competitiveness	1-7
3	<i>Easy Of Access</i> (KA)	Customers' perceptions of the ease of reaching service locations and undergoing the goods delivery process	1) Accessibility of location 2) Ease of delivery procedures 3) Simplicity of service process 4) Ease of obtaining information	1-7
4	<i>Customer Satifaction</i> (PP)	The level of pleasure or satisfaction experienced after comparing expectations with the actual service performance received	1) Satisfaction with service 2) Service conformity with expectations 3) Satisfaction with the delivery process 4) Satisfaction with the decision to use the service	1-7
5	<i>Usage Intention</i> (MP)	Customers' tendency to reuse and recommend goods delivery services at the Ternate Branch Post Office	1) Intention to reuse the service 2) Preference for choosing the Post Office 3) Intention to recommend the service 4) Willingness to make the Post Office the primary choice	1-7

#### 4. RESULTS AND DISCUSSION

##### 4.1 Descriptive Statistics and Data Normality Test

Descriptive statistical analysis and data normality testing were conducted on 100 respondents to examine the distribution characteristics of the data. The normality test is a preliminary stage before conducting further analysis. The results of the analysis are presented in the following table:

**Table 4.1** Descriptive Statistics and Data Normality Test

<i>Var</i>	<i>Mean</i>	<i>Median</i>	<i>Standard deviation</i>	<i>Excess kurtosis</i>	<i>Skewness</i>
KL1	5.600	6.000	1.233	-0.489	-0.527
KL2	5.620	6.000	1.129	-0.422	-0.557
KL3	5.530	6.000	1.162	-0.882	-0.327
KL 4	5.640	6.000	1.082	-0.742	-0.440
KL 5	5.380	6.000	1.129	-0.658	-0.331
HL 1	5.610	6.000	1.085	-0.612	-0.407
HL 2	5.570	6.000	1.089	-0.693	-0.300
HL 3	5.620	6.000	1.018	-0.761	-0.332
KA 1	5.580	6.000	1.115	-0.428	-0.468
KA2	5.500	6.000	1.082	-0.540	-0.337
KA 3	5.420	5.000	1.124	-0.079	-0.333
KA 4	5.470	6.000	1.204	-0.987	-0.243
PP 1	6.110	6.000	0.646	0.272	-0.335
PP 2	5.810	6.000	0.821	-0.747	-0.072

PP 3	5.460	5.000	0.842	-0.551	0.077
PP 4	5.270	5.000	0.733	-0.011	0.297
MP1	6.010	6.000	0.755	-0.454	-0.300
MP2	5.420	5.000	0.802	-0.397	0.147
MP3	5.860	6.000	0.825	-0.122	-0.491
MP4	5.570	6.000	0.765	-0.380	0.100

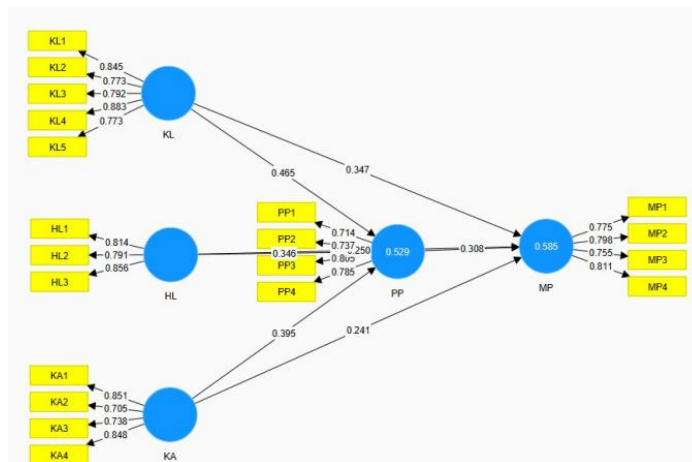
Source: Data Processed Using SEM-PLS,2026

Based on Table 4.1, it can be observed that the skewness and kurtosis values do not exceed  $\pm 2.000$ . Therefore, it can be concluded that the data used in this study are approximately normally distributed. Consequently, the analysis can proceed to SEM-PLS modeling.

#### 4.2 SEM-PLS Modeling

All constructs functioning as latent variables along with their item codes as indicators or manifest variables in this study were analyzed using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) method. The latent variables examined include Service Quality, Service Price, and Ease of Access. Each construct was modeled reflectively with respect to its indicators. The SEM-PLS analysis began with the development of a PLS path model to obtain loading factor values for each relationship between variables. After the initial model was established, testing was conducted using the PLS algorithm to generate path coefficients and loading factor values.

Figure 4.1 SEM-PLS Model



Source: Data Processed Using SEM-PLS, 2026

The figure above presents the results of the SEM-PLS analysis. The measurement model illustrates the relationships between latent constructs, namely service quality, service price, ease of access, and their reflective indicators. Based on the analysis results, most indicators have loading factor values  $\geq 0.60$  and are therefore considered valid. Thus, all latent constructs in this study have met the criteria for convergent validity and can be used in the inner model analysis. The inner model analysis can be observed through the path coefficient values shown in the figure. When the path coefficient value approaches +1, it indicates a stronger relationship between variables. The results show that the path coefficient from service quality to customer satisfaction is the strongest among all relationships, while the weakest path coefficient is observed from ease of access to the intention to use goods delivery services. Further analysis involves examining convergent validity and reliability values (Composite Reliability; CR and Average Variance Extracted; AVE) for each variable.

**Table 4.2** Convergent Validity and Reliability  
(Composite Reliability; CR and Average Variance Extracted; AVE)

Variable	Composite reliability	Composite reliability (rho_c)	AVE
HL	0.776	0.861	0.673
KA	0.852	0.867	0.622
KL	0.889	0.907	0.663
MP	0.795	0.865	0.616
PP	0.767	0.846	0.579

Source:Data Processed Using SEM-PLS, 2026

Based on Table 4.2, the AVE values exceed 0.50, indicating that the measurement model satisfies convergent validity. Furthermore, all CR values exceed 0.60, indicating acceptable reliability. The next analysis examines discriminant validity measured using the Heterotrait-Monotrait Ratio (HTMT) and the Fornell–Larcker Criterion.

**Tabel 4.3** Heterotrait-Monotrait Ratio (HTMT)

	HL	KA	KL	MP
HL				
KA	0.135			
KL	0.226	0.169		
MP	0.576	0.406	0.607	
PP	0.566	0.449	0.589	0.871

Source:Data Processed Using SEM-PLS, 2026

According to Henseler et al. (2015), a construct demonstrates good discriminant validity when the HTMT value is less than 0.90. For studies using highly similar constructs, a stricter threshold of HTMT < 0.85 may be applied. Based on the HTMT results, all HTMT values between constructs are below 0.90. Therefore, it can be concluded that all constructs in the research model meet the criteria for discriminant validity, indicating that each variable represents a distinct concept without overlap.

**Tabel 4.4** Fornell and Larcker Criterion

	HL	KA	KL	MP	PP
HL	<b>0.821</b>				
KA	0.058	<b>0.788</b>			
KL	0.155	-0.077	<b>0.814</b>		
MP	0.454	0.345	0.517	<b>0.785</b>	
PP	0.441	0.379	0.488	0.679	<b>0.761</b>

Source:Data Processed Using SEM-PLS, 2026

Based on the table above, the discriminant validity values are greater than the correlations between latent variables, indicating that the measurement model is valid. After confirming validity and reliability, the coefficient of determination ( $R^2$ ) was examined. The  $R^2$  value for the MP variable is 0.585, indicating that 58.5% of the variance in usage intention can be explained by HL, KA, KL, and PP, while the remaining variance is explained by other variables outside the model. This value falls within the moderate to strong category. Meanwhile, the  $R^2$  value for PP is 0.529, indicating that 52.9% of the variance in customer satisfaction can be explained by HL, KA, and KL, which falls within the moderate category. Based on the evaluation of the

measurement model, bootstrapping analysis was conducted to test the research hypotheses.

Hypothesis testing was performed by examining whether the latent variables have a direct effect on the intention to use goods delivery services at the Ternate Branch Post Office. Service quality has a P-value of  $0.000 < 0.05$ , indicating a positive and significant effect on usage intention (MP). Service price also has a P-value below 0.05, namely 0.003, indicating that service price has a positive and significant effect on usage intention. Ease of access has a positive and significant effect, as evidenced by a P-value of 0.002. Customer satisfaction also has a positive and significant effect on usage intention.

In addition to direct effects, indirect effects were also examined. The indirect effect coefficient of service quality on usage intention through customer satisfaction is 0.143, with a T-statistic of 3.294 and a P-value of 0.001. These results indicate that customer satisfaction significantly mediates the relationship between service quality and usage intention, and this is the strongest indirect effect among the variables. The indirect effect of service price on usage intention through customer satisfaction has a coefficient of 0.107, with a T-statistic of 2.836 and a P-value of 0.005, indicating a positive and significant indirect effect. Similarly, the indirect effect of ease of access on usage intention through customer satisfaction has a coefficient of 0.122, with a T-statistic of 2.829 and a P-value of 0.005, meeting the significance criteria. Thus, ease of access has a positive and significant effect on usage intention through customer satisfaction.

The effect size ( $f^2$ ) results indicate that the effect of service quality on usage intention has an  $f^2$  value of 0.194, which falls within the moderate category. The effect of service quality on customer satisfaction has an  $f^2$  value of 0.444, which falls within the large category and represents the most dominant effect. The effect of customer satisfaction on usage intention has an  $f^2$  value of 0.108, which falls within the small category. The effect of service price on usage intention has an  $f^2$  value of 0.117, which falls within the small-to-moderate category, while the effect of service price on customer satisfaction has an  $f^2$  value of 0.247, which falls within the moderate category. The effect of ease of access on usage intention has an  $f^2$  value of 0.104, which falls within the small category, whereas the effect of ease of access on customer satisfaction has an  $f^2$  value of 0.327, which falls within the moderate to near-large category. Overall, usage intention is influenced by several variables with relatively small to moderate contributions.

Based on the predictive relevance ( $Q^2$ ) test using the blindfolding procedure, the  $Q^2$  value for the endogenous variable MP is 0.331, and for PP is 0.279. Both  $Q^2$  values are greater than zero ( $Q^2 > 0$ ), indicating that the research model has good predictive relevance. The  $Q^2$  value for MP falls within the moderate-to-near-large category, suggesting that the model has strong predictive capability for usage intention. Meanwhile, the  $Q^2$  value for PP falls within the moderate category, indicating adequate predictive capability for customer satisfaction. Thus, overall, the SEM-PLS model used in this study demonstrates good predictive relevance and is suitable for predicting endogenous variables.

## **CONCLUSION**

This study analyzes the effect of service quality, service price, and ease of access on the intention to use goods delivery services, with customer satisfaction as an intervening variable, among consumers of the Ternate Branch Post Office using the SEM-PLS method. The results of the analysis indicate that service quality, service price, and ease of access have a positive and significant effect on customer satisfaction. Furthermore, customer satisfaction is proven to have a positive and significant effect on the intention to use goods delivery services. In addition to direct effects, customer satisfaction is able to mediate the effects of service quality, service price, and ease of access on usage intention, with service quality demonstrating the strongest mediating effect. These findings indicate that increasing the intention to use goods delivery

services at the Ternate Branch Post Office is highly determined by the level of customer satisfaction, which is formed through high service quality, competitive pricing, and ease of access.

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