



The Effect of Logistics Capabilities on Online Purchase Attitude and Purchase Intention in the Millennials of Tokopedia Users

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Abstract. This study aims to determine the effect of logistics capabilities on online purchase attitudes and purchase intentions in the millennial group aged 20 to 39 years of Tokopedia e-commerce users. This study reveals the effect of carriers' reputation in moderating the relationship between trust and purchase attitude. This study used 151 respondents and exercised the Structural Equation Modeling (SEM) method. The results show that shipment tracking, trust, people important to the consumer, and online reviews significantly affect purchase attitude, and purchase attitude has a positive and significant effect on purchase intention. Only the delivery speed variable does not significantly affect purchase attitude. A business requires the correct technological innovation, including an online business that requires the right logistics system. The study results provide input on how e-commerce services can be adequately developed. Explaining information on services and logistics capabilities during e-commerce transactions will increase customers' chances of completing online purchases.

Keywords: logistics capabilities · purchase attitude · purchase intentions · trust

1 Introduction

Running a business requires the correct technological innovation. Government support to industry players can help the logistics ecosystem be organized quickly, including the provision of appropriate resources, infrastructure, and technology. Currently, the government is starting to understand how important the logistics system is to support business development in Indonesia. Adequate technology gives an advantage to logistics services in e-commerce.

Sophisticated logistics infrastructure can provide better services for consumers and businesses. Consumers can track their purchases ordered through e-commerce via the application and find out the estimated time the goods will be received. The high use of the internet in Indonesia has led to an increase in e-commerce in Indonesia. The growth of the E-commerce industry cannot be separated from the consumer behavior in Indonesia who want speed delivery in shopping.

There are several e-commerce platforms in Indonesia, namely Tokopedia, Shopee, Bukalapak, Lazada, and Blibli. Of these several e-commerce sites, the highest number of visitors in 2019 was Tokopedia with 65.95 million visitors per month, followed by Shopee with 55.96 million, then Bukalapak with 42.87 million, Lazada with 27.99 million, and Blibli with 21.29 million [1]. Tokopedia is chosen as the object of this study as it has the most e-commerce visitors in Indonesia. All Tokopedia's shipments will be easily tracked (Shipment tracking); not only that, but the delivery speed can also be estimated to generate customer trust. Customers can also write their experiences in making online purchases at Tokopedia (Online reviews). So, consumers having a high trust will lead to a positive online purchase attitude and attract consumers to repeat the purchase (purchase intention).

This study replicates Riley & Klein [2], which investigated how shipment tracking, delivery speed, trust, carriers' reputation, people important to the consumers, and online review can affect attitudes toward online shopping on purchase intentions by administering 321 millennials in the United States. The results of Riley & Klein [2] reveal that shipment tracking, trust, carriers' reputation, people important to the consumers, and online reviews directly influence online purchase attitude. In comparison, the delivery speed variable obtains an insignificant result. It can be concluded that delivery speed has no effect on millennial attitudes in online shopping. Then online purchase attitude has a significant result on purchase intention.

According to Huang & Huang [3], logistics capabilities refer to a logistics service provider that aims to organize the transportation process by providing logistics services to increase competitive advantage and company performance that is effective and efficient in carrying out production. Logistics capabilities include several items: personnel contact quality, order release quantities, information quality, ordering procedures, accuracy, condition, order quality, discrepancy handling, and timeliness.

According to Chen & Lin [4], shipment tracking is the ability to track or monitor the status of shipments from the delivery location to the final delivery destination. When the shipment takes place, the logistics service provider is expected to update the shipment position periodically, post data over the internet, share via email, or give digitally-enabled notifications. The shipment tracking service aims to ease customers to track the shipment of goods they have ordered.

Delivery speed refers to the estimated time from the delivery of the goods to the arrival of the goods to the buyer's location [2]. It is one of the beneficial service outputs of the channel that consumers demand from upstream members [5]. For many logistics operators, delivery speed is equivalent to the number of days (i.e. 3 days, the next day) to deliver goods. While many online retailers offer express delivery capabilities, studies have shown that 85 percent of customers are willing to wait up to 5 days for delivery. The longer consumers are willing to wait, the more compensation they receive, such as lower prices, whereas quick delivery is associated with a higher price paid [5].

According to Wagner et al. [6], consumers generally view organizations with a positive reputation as fair and honest when dealing with customers. In Riley & Klein [2], carriers' reputation is expected to convey information about the capabilities of the services offered to potential customers. A positive reputation indicates that one can trust the company to act fairly when conducting business, while a negative reputation

can indicate that the logistics company may not act reasonably. Carriers' reputation is intended as an expedition in a marketplace that helps in carrying out its logistics which helps fulfill its logistics capabilities.

Moin et al. [7] defines trust as an individual's way of having confidence in others consistently from various aspects. Riley & Klein [2] discloses that trust can change over time and shows various levels when conditions change. For online retailers, maintaining communication with customers and forming good relationships is important because it can help increase trust.

Ajzen [8] defines people important to the consumer as important people for customers, such as friends, family, and even co-workers who become referrals and provide social pressure to do, or not to do, specific behavior. Subjective norms can influence individual attitudes and resulting behavior [2]. So, when a person important to a customer recommends a particular product or brand, then the more likely an individual will buy the product or the brand.

The online review refers to positive and negative comments about a product, brand, service offered, and the organization itself [9]. Customers can leave reviews on the targeted company's website according to their experience. Online reviews that customers have written will impact not only the company but also customer convenience and satisfaction.

Online purchase attitude is defined as the level of customers having a positive or negative attitude towards purchasing online products. Satisfaction or dissatisfaction in online purchases can be a determinant of online purchase attitude. Attitude is known as positive (or negative) feelings toward a person, object, or particular problem [10].

Thamizhvanan & Xavier [11] articulates online customer purchase intention as an understanding that will provide confidence for customers to make online purchases and purchase intention will depend on numerous factors because online transactions involve various information and actions taken in purchasing. For customers to have confidence when shopping online, retailers must focus on these factors to increase customer confidence in making purchases online.

Logistics operators have now provided tracking services via their web, aiming that consumers can use these services to determine delivery status and arrival time or update the movement of packages. Riley & Klein [2] states that logistics capabilities in tracking services can affect the customer experience in doing online shopping. With tracking, the customer is no longer worried about the goods because the customer can find out that the goods have been sent by just looking at the goods' delivery status. This tracking service can also affect the way consumers perceive goods delivery service providers, which also reflects retailers.

H1: Shipment tracking has an effect on attitude toward online shopping.

Customers always think that speed of delivery is a service with superior value for their preference to get the goods safely and quickly; thereby, retailers will often utilize what is available at the delivery service provider to meet customer needs. Delivery speed is a service that has superior value in online businesses. This can also affect customers when making online purchases. The millennial generation may have a low view if retailers do not have the speed of delivery in delivering goods. Riley & Klein [2]

reveals that customers will look for much information about services before making an online purchase. Information about services that have added value, one of which is the speed of delivery, will affect customers' view of online shopping.

H2: Delivery speed has an effect on attitude toward online shopping.

Every retailer will design their online platform to create trust and ensure that customers will get what they want by implementing integrity, benevolence, and competence in serving customers [12]. In addition, retailers must also build trust in customers so that customers can directly evaluate the quality and benefits of these goods, which can be seen on online platforms [13]. Riley & Klein [2] assumes that trust comes from integrity, benevolence, and competence.

H3a: Trust has an effect on attitude toward online shopping.

Customers can find out more information if they are not confident with the retailer or the e-commerce to ensure that the retailer has a good service. Several other studies have shown that customers often use reputation information to increase their opinion of retailers. Suppose the customers are worried and cannot trust the retailer. In that case, they are advised to look for replacement information at the logistics company until they finally have the confidence to make an online purchase. Numerous studies postulate that retailers will improve their reputation to influence consumer attitudes [2]. It is expected that the company's reputation can have an effect on strengthening and lowering the relationship between trust and customer attitude. If customer trust is low, customers will seek information about retailers and shipping companies, and vice versa.

H3b: Carriers' reputation has an effect when trust in online purchase attitude is low.

People considered important to individuals can easily influence customer attitudes and purchase intentions. Riley & Klein [2] postulates that important people such as parents, siblings and friends can influence individuals. This influence can give a positive response about online shopping, retailers. Generally, customers interested in buying a product will find out information about a retailer or a product being offered by looking for it on the seller's website and/or asking for advice from trusted people closest to them.

H4: People Important to the Consumer have an effect on attitude toward online shopping.

Online reviews written by customers vary from positive reviews such as positive feedback and negative reviews. These reviews are expressed in accordance with what is felt by the customer, which can then become information that can influence other customers' purchase decisions [2]. In addition, Riley & Klein [2] admits that customers are expected to evaluate several reviews first to get the correct review results about the products and services offered to encourage a purchase attitude. The attitude is influenced when customers see the ratings in several online reviews.

H5: Online reviews have an effect on attitudes toward online shopping.

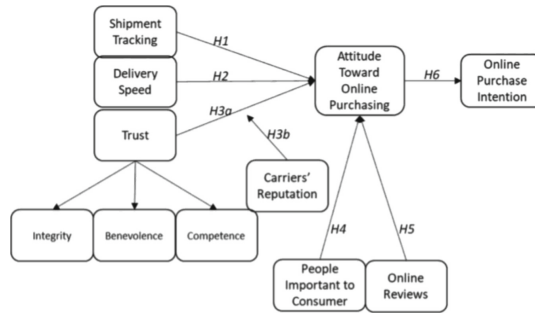


Fig. 1. Research Model

A positive customer view of online purchases and services that add value will allow customers to make online purchases. When the individual has a positive attitude towards action, he will accept and be willing to be involved in the action, and vice versa; if the individual has a negative attitude, then he is not willing to be involved [2]. When considering the purchase attitude of millennials, individuals with a positive attitude will tend to make purchases online.

H6: Attitude toward online shopping has an effect on purchase intention.

All hypotheses can be seen in Fig. 1.

2 Research Methods

This study used primary data sources obtained from respondents by distributing an online questionnaire using Google forms. Respondents were 151 millennials who have made online purchases at Tokopedia. This study’s target population was customers who have made online purchases at Tokopedia. The population characteristics were male and female customers, who have made online purchases at Tokopedia in the last 6 months, millennials born in 1981 to 2000 or aged 20 to 39, have a minimum education of high school or equivalent, and particularly those who have used the Tokopedia’s “assistance” feature.

This study exercised a non-probability sampling technique with a purposive sampling type, which collects data on the population members in accordance with the specified conditions. This research exercised SEM (Structural Equation Model) analysis to process the data.

3 Results and Discussion

Table 1 shows that related to the measurement model test, all parameter results met the criteria (CMIN/DF = 1.441, GFI = 0.873, CFI = 0.958, TLI = 0.946, and RMSEA = 0.054). The next stage was to test the validity and reliability of the constructs. The validity of the constructs can be reviewed through standardized loading and Average

Table 1. The Goodness of fit measurement model

No	Parameters	Criteria	Result	Remarks
1	CMIN/DF	$CMIN/DF \leq 2$	1.441	Good Fit
2	GFI	$GFI \geq 0.90$	0.873	Marginal Fit
3	CFI	$CFI \geq 0.90$	0.958	Good Fit
4	TLI	$TLI \geq 0.90$	0.946	Good Fit
5	RMSEA	$RMSEA \leq 0.08$	0.054	Good Fit

Variance Extracted (AVE), which must have a minimum value of 0.5. Reliability can be seen from Construct Reliability (CR) value above 0.6. All the results meet the criteria, and the structural model test can be conducted.

Table 2 shows that H1, which investigates the relationship between Shipment Tracking and Attitude Toward Online Purchasing, obtains a critical ratio value of 2.544, an estimated value of 0.15, and a probability value of 0.011. Thus, it can be concluded that the Shipment Tracking variable has a significant effect on the Attitude Toward Online Purchasing variable. These results are in line with [2] that reveal Shipment Tracking has a significant effect on Attitude Toward Online Purchasing.

Table 2 shows that H2, which investigates the relationship between Delivery Speed and Attitude Toward Online Purchasing, obtains a critical ratio value of 0.288, an estimated value of 0,023, and a probability value of 0,773. Thus, it can be concluded that the Delivery Speed variable has no significant effect on the Attitude Toward Online Purchasing variable. These results are in line with Riley & Klein research [2] that reveals Delivery Speed has no significant effect on the Attitude Toward Online Purchasing.

Table 2 shows that H3a, which investigates the relationship between Trust and Attitude Toward Online Purchasing, obtains a critical ratio value of 3.265, an estimated value of 0.373, and a probability value of 0.001. Thus, it can be concluded that the Trust variable has a significant effect on the Attitude Toward Online Purchasing variable. These results are in line with Riley & Klein [2] that reveals Trust has a significant effect on Attitude Toward Online Purchasing.

Table 2 shows that H3b, which investigates the mediating effect of Carriers' Reputation and Trust on Attitude Toward Online Purchasing, obtains a critical ratio value of -2.119 , an estimated value of -0.004 , and a probability value of 0.034. Thus, it can be concluded that the interaction between Carriers' Reputation and Trust on Attitude Toward Online Purchasing has a significant effect on moderating the relationship. These results are in line with Riley & Klein [2], which reveals that the interaction between Carriers' Reputation and Trust affects Attitude Toward Online Purchasing.

Table 2 shows that H4, which investigates the relationship between People Important to Customer and Attitude Toward Online Purchasing, obtains a critical ratio value of 2.218, an estimated value of 0.132, and a probability value of 0.027. Thus, it can be concluded that People Important to Customer has a significant effect on Attitude Toward Online Purchasing. These results are in line with Riley & Klein [2] that reveals People Important to Customer has a significant effect on Attitude Toward Online Purchasing.

Table 2. The Results of Hypothesis Testing

	Hypothesis	Estm.	S.E	C.R	Prob.
H1	Shipment Tracking → Attitude Toward Online Purchasing	0.153	0.060	2.544	0.011
H2	Delivery Speed → Attitude Toward Online Purchasing	0.023	0.080	0.288	0.773
H3a	Trust → Attitude Toward Online Purchasing	0.373	0.114	3.265	0.001
H3b	Carriers' Reputation Trust → Attitude Toward Online Purchasing	-0.004	0.002	-2,119	0.034
H4	People Important to Consumer → Attitude Toward Online Purchasing	0.132	0.060	2.218	0.027
H5	Online Review → Attitude Toward Online Purchasing	0.146	0.069	2.126	0.033
H6	Attitude Toward Online Purchasing → Online Purchase Intention	0.727	0.126	5.756	***

Table 2 shows that H5, which investigates the relationship between Online Reviews and Attitude Toward Online Purchasing, obtains a critical ratio value of 2.126, an estimated value of 0.146, and a probability value of 0.033. Thus, it can be concluded that Online Reviews have a significant effect on Attitude Toward Online Purchasing. These results are in line with Riley & Klein [2] that reveals Online Reviews have a significant effect on Attitude Toward Online Purchasing.

Table 2 shows that H6, which investigates the relationship between Attitude Toward Online Purchasing and Online Purchase Intention, obtains a critical ratio value of 5.756, an estimated value of 0.727, and a probability value of 0.000. Thus, it can be concluded that Attitude Toward Online Purchasing has a significant effect on Online Purchase Intention. These results are in line with Riley & Klein [2] that reveals Attitude Toward Online Purchasing has a significant effect on Online Purchase Intention.

4 Conclusion

The results show that shipment tracking, trust, people important to consumers, and online reviews have a significant positive effect on purchase attitude, and purchase attitude has a positive and significant effect on purchase intention. Only the delivery speed variable does not have a significant effect on purchase attitude. The reason may lie that consumer can wait for delivery because they are reassured by the shipment tracking and its logistic information.

Future study needs to investigate how shipment tracking and delivery speed are causally related when consumers demonstrate a positive purchase attitude.

A recommendation for Tokopedia is to pay attention to the carrier's delivery service to enable Tokopedia to provide excellent service in the shipping process.

This study has a limitation on the people important to the consumer variable as this variable has only one indicator. For SEM analysis requirements, AMOS should ideally have 2 to 3 indicators. With this, it is hoped that future research can use other software. Moreover, this study only used Tokopedia as the object; thus, it is recommended to use other objects for future research.

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