

## Influence System Online Tracking And Delivery Timeliness Regarding the Decision to Use in An Expedition Services

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## ABSTRACT

The background of this study is based on the increasing number of e-commerce users, which has led to high demand for fast, accurate, and real-time trackable delivery services. However, there are still customer complaints regarding the accuracy of tracking information and delivery delays, which affect customer decisions. The purpose of this study is to determine the influence of the Online Tracking System and Delivery Timeliness on Service Usage Decisions at the J&T Express Branch in Cilincing, North Jakarta. This study used a quantitative method with a descriptive approach. The population consists of J&T Express customers at the Cilincing Branch in North Jakarta. The sample in this study consisted of 100 respondents using purposive sampling. Data analysis used multiple linear regression models, T-tests, F-tests, and coefficient of determination ( $R^2$ ) tests. The results of this study indicated that both partially and simultaneously, the variables of the Online Tracking System and Delivery Time significantly influence Service Usage Decisions. This is proven by the F-test results, which have a significance value of  $0.000 < 0.05$ . The T-test results for the Online Tracking System variable are 0.000, and for the Delivery Timeliness variable are 0.005, where the value is less than 0.05. Based on the t-test results, it can be concluded that all variables, namely the Online Tracking System and Delivery Timeliness, influence the Decision to Use Services. The coefficient of determination ( $R^2$ ) for the decision to use services at J&T Express is influenced by the Online Tracking System and Delivery Timeliness variables by 0.778 or (77.8), while the remaining 22.2% is influenced by other variables outside the scope of this study.

## 1. INTRODUCTION

J&T Express is a delivery service company in Indonesia, providing goods and document delivery services. J&T Express utilizes a sophisticated information technology system to deliver goods and company documents, from sorting to receiving the goods. J&T Express offers numerous tips for achieving customer satisfaction, including providing excellent customer service, fast and friendly service, and having branches in various regions to facilitate customer package delivery.

J&T Express is known as a shipping company that prioritizes speed and accuracy in shipping goods, supported by a real-time tracking system that makes it easy for consumers to monitor their shipments. Since its inception in Indonesia in 2015, J&T Express has experienced quite rapid growth. This growth is reflected in the number of customers that continues to increase year after year. However, in recent years, although customer data shows quantitative increases, this does not always reflect the level of customer satisfaction or optimal customer decisions in using the service. At the Cilincing Branch in North Jakarta, the number of customers has increased significantly.

Based on internal data, the number of J&T Express customers in January 2025 was 22,948, increasing to 30,547 in February 2025, and again to 34,160 in March 2025. Cumulatively, the total number of customers during the first three months of 2025 reached 87,655.

**Table 1.** of J&T Express Customers at the Cilincing Branch, North Jakarta

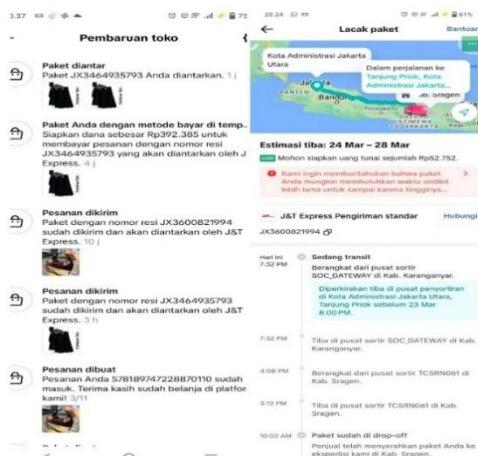
Month	Number of Customers	Delivery Success	Delivery Late	Return
January	22,948	22,390	408	150
February	30,547	29,504	785	258
March	34,160	32,590	1,170	400
<b>TOTAL</b>	<b>87,655</b>			

Source : J&amp;T Express Cilincing Branch, North Jakarta

However, this increase in customer numbers has not necessarily been accompanied by an increase in service quality. As delivery volumes have increased, various customer complaints have emerged regarding late deliveries, unclear package location information, discrepancies in the items received, and discrepancies between the system's delivery status and actual conditions on the ground. This situation has led to customer dissatisfaction, which risks eroding trust and loyalty in J&T Express' delivery service, particularly in the Cilincing Branch [1].

This phenomenon demonstrates that an increase in customer numbers does not necessarily reflect an increase in service quality. In fact, if not supported by a robust operational system, an increased workload can actually lead to a decline in service quality. This is in line with the opinion of [2], who stated that development to achieve the desired service quality requires a strong system and performance to achieve customer satisfaction. Quality service will result in a positive customer experience and drive increased revenue and company reputation.

Furthermore, several common issues often arise in tracking systems and delivery timeliness, which can influence customer decisions in using services. The first is the Online Tracking System. Tracking systems have a significant influence on service usage decisions in the context of modern delivery services. In today's digital era, customers not only want fast delivery but also transparency and visibility into order status. An accurate tracking system gives customers the ability to monitor package movements in real time, which directly contributes to increased customer loyalty and satisfaction.

**Fig 1.** Shipment tracking system

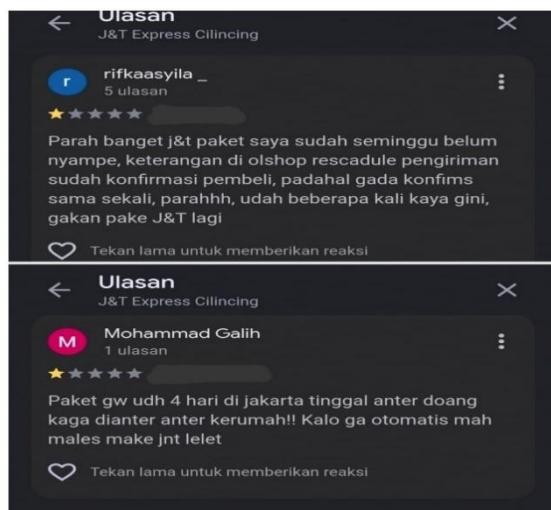
Based on Figure 1.1 above, the problem that occurred was a discrepancy between the notification and the reality on the ground. In the first image, the notification states "Package delivered," as if the package has arrived at the customer's hands. However, the second image (real-time tracking) shows that the courier is still en route and has not yet arrived at the recipient's address. This discrepancy can cause confusion for customers who think the package has been received when in fact it has not.

The real-time mapping in the second image proves that the "Package delivered" status displayed in the previous notification was inaccurate and published too soon. Tracking accuracy was

compromised by the lack of synchronization of update times between systems (between notification and live tracking) and the misleading status delivery. The "Package delivered" notification should be displayed after the package is actually received by the customer, not while it is still in the delivery process, as "On delivery" should not mean "Already delivered." Furthermore, another issue that arises concerns delivery timeliness.

Delivery timeliness is crucial, as it is a key factor in increasing customer satisfaction. This is particularly relevant in the Cilincing area of North Jakarta, where high population density and logistics activity demand an accurate and efficient delivery system. Delivery timeliness is a key factor for customers in determining which logistics service to use as an alternative delivery service. Delivery timeliness is the time period from when a customer orders a product until it arrives. All incoming packages must be delivered on schedule. Estimated arrival times are typically used by customers to determine whether a service is good or not. J&T Express' delivery timeliness is typically around 3 to 4 days for deliveries from and within Indonesia, including the Cilincing area [3].

These inaccuracies and time discrepancies are likely due to the lack of real-time tracking status updates, which leaves recipients unaware of the precise whereabouts of their goods. Furthermore, each individual has different criteria for fulfilling their needs. The decision to use a product or service is crucial. From this decision, a company can identify individual differences in how a product or service is used, what products or services are used, why consumers use them, and when consumers use them.



**Fig 2.** Review of service usage decisions

Source : <https://g.co/kgs/YRUwTUw>

Based on Figure 1.2 above is phenomenon complaint customer to service expedition be one of indicator important in evaluate quality service A company logistics . Based on reviews left by users J&T Express services in the area Cilincing , found a number of recurring and sufficient problems crucial , especially related accuracy system online tracking and accuracy time delivery

One of review mention that there is mismatch between information listed on the system tracking with reality on the ground , where the delivery status Already show " confirmation buyers ", even though goods Not yet accepted . This is show that system tracking No only No accurate , but also potentially give information fake , which gives rise to confusion and disappointment , and this can lead to loss trust to service expedition .

Other complaints also indicate that package that has been located in Jakarta for 4 days No quick delivered to address destination , even though the delivery status Already approach stage end . Delay delivery without clarity This show low accuracy time delivery , which should be become priority in service modern logistics .

From both review said , can seen that inaccuracy system tracking online and delays delivery give impact negative direct to satisfaction and decisions use service service expedition. Even a number of

consumer state No want to Again use J&T Express in the future consequence experience recurring bad situation . This show that reliability system tracking and commitment to accuracy time delivery No only become feature additional , but become factor crucial factors that influence decision consumer in use service [4].

Based on analysis to mapping and pending data , can concluded that decision use services are highly dependent on two aspects the main thing that becomes focus study this , namely system tracking and accuracy time Shipping . When these two aspects don't work well, it can be difficult to reach a decision about using a service. Delays not only cost customers time and trust, but also indicate the need for reform in the shipping company's distribution system and tracking technology.

J&T Express is one of the leading logistics service providers in Indonesia, known for its wide network coverage and real-time tracking system. The company has experienced rapid growth since 2015. However, increasing customer numbers are not always accompanied by improvements in service quality. At the Cilincing Branch, North Jakarta, despite the rising number of customers, complaints related to inaccurate tracking status and delivery delays are still frequently found.

Previous studies highlight the importance of tracking accuracy and timeliness. [5] tracking systems and delivery punctuality significantly affect customer satisfaction in J&T Express Bekasi. [6] confirmed that delivery timeliness and system facilities are strong determinants of service quality in J&T Express. Meanwhile, [2] emphasized that online tracking reliability has a direct effect on customer trust.

These studies suggest that both online tracking and delivery timeliness are critical factors for customer decisions. However, research focusing specifically on the **decision to use services** at J&T Express Cilincing Branch, where shipping volume is high, has not been widely conducted. This creates a **research gap** that the current study aims to fill, by analyzing how these two factors influence customer decisions in the North Jakarta context

Based on the problem formulation above, it can be concluded that the objectives of the research conducted are as follows:

1. To determine the extent of influence of the online tracking system on the decision to use J&T Express shipping services.
2. To determine the extent of influence of on-time delivery on the decision to use J&T Express shipping services.
3. To determine the extent of influence of the online tracking system and on-time delivery simultaneously on the decision to use J&T Express shipping services, Cilincing Branch, North Jakarta.

### Online tracking system

According to [7] System tracking is something system provided by a business - focused companies logistics For make it easier customer know information the goods while Still in the delivery process with method write number receipt .

Quality service service in the environment electronic is one of the crucial thing For determine success even failure from something activity trading electronics . In an era where the digital world is becoming center need like all of these service delivery goods generally Already own system live tracking integrated with its database . This is play a role as means for sender and recipient package For monitor presence status package they online [5].

One of service electronics presented company through the website to support service the main thing is that is system online tracking (web trace and tracking) which is usually presented by a company engaged in in business logistics or service delivery and perpetrator online business , where system this online tracking (web trace and tracking) give facility to consumer For know information regarding the status of the goods or products that are still in the delivery process . Consumers can in a way direct do check delivery status goods or the product through facility system online tracking (web trace and tracking) with method enter number receipt [8].

The dimensions of the tracking system according to Saha and Zhao (2005:18) in the journal [9] are as follows:

- 1) Efficiency: is ability customer or users For get a website

- 2) Reliability : is ability something component technical in cycle website operations that can give information in a way accurate .
- 3) Responsiveness: is ability respond problem users related with invention the desired information and provide fast service . Fulfillment : is to
- 4) ability For accuracy service with method give product in promised time .
- 5) Privacy : is ability For No know information personally or personal who is not can disseminated to users other .

### Timely delivery

According to Nistrom (2005) said Accuracy time is something utilization information by the taker decision before information the is lost its capabilities . Accuracy time is ability from suppliers to send package with appropriate time with small shipping lots . There will be evaluation between suppliers and company , capacity production and capabilities delivery they in a way appropriate time [10].

Dimension of Punctuality delivery according to Christopher Martin in journal (Hafizha et al., 2019)

- 1) Transportation used , Vehicle used by the sender For send goods ordered by customers For until to recipient
- 2) Estimate goods until to recipient , Estimated estimated time goods will until to recipient with bad luck will happen
- 3) Distance traveled , Total length the route taken from si sender until until to recipient .

### Decision to use services

According to Kotler and Amstrong (2012) "*Customer buyer behavior refers to the buying behavior of final consumer individuals and households that buy goods and services for personal consumption*" which means that purchasing decision behavior refers to the final purchasing behavior of consumers, both individuals and households who buy goods and services for personal consumption.

According to Kotler and Keller, the service usage decision process is divided into 5 (five) stages [11], namely:

- 1) The need recognition stage, namely the stage where consumers become aware of the problem or what is needed.
- 2) Information search stage, namely the stage where consumers seek further information about what they want to get.
- 3) Alternative evaluation stage, namely the stage where consumers use information to evaluate and assess several products obtained.
- 4) Stage decision purchase , the stage where the consumer buy products that have been chosen .
- 5) Post-purchase behavior stage, the stage where consumers feel satisfied or dissatisfied with the product they purchased.

Decision Dimensions of Use service according to Kotler & Armstrong in journal (Halim et al., 2023) that is :

- 1) Recognition of Needs, Purchase process with recognize problem or need buyer from something difference between actual state and desired state , needs That can be moved by stimulation from in self buyer or from outside
- 2) Information Search, Consumers look for more information about what they want to get.
- 3) Alternative Evaluation, Consumers use information to evaluate and assess several products obtained.
- 4) Purchase Decision, Consumer have method alone in manage the information he received with limit necessary alternatives chosen or evaluated For determine which product will purchased
- 5) Post Purchase Behavior , If the item is purchased No give expected satisfaction , then buyer will change his attitude to brand the become attitude negative , even Possible will rejected from the list of options . Instead If consumer get satisfaction , then desire For buy / use it will the more strong and will recommend it to others.

## Last mile delivery

### a. Last mile delivery theory

According to [12] *Last mile delivery* refers to the activities required for delivery physique to objective end selected by the recipient . Delivery *last mile* can also be seen as a front end, where *last mile* meet with recipient . Last mile delivery and last mile transportation are very much interconnected. related . *Last mile logisticssss* can be depicted as a process of planning , implementation and control transportation and storage efficient and effective goods , from point penetration order to customer end [13]. *Last mile logistics* refers to a set of activity final in A cycle delivery , which involves a series activities and processes carried out for the delivery process from final transit point to point decline end from chain delivery .

### b. Last mile delivery process

This process plays a crucial role in ensuring customer satisfaction because it affects the speed, accuracy, and precision of delivery. Based on the image shown, the *last-mile delivery process* can be described in the following five stages:



**Fig 3.** mile delivery process

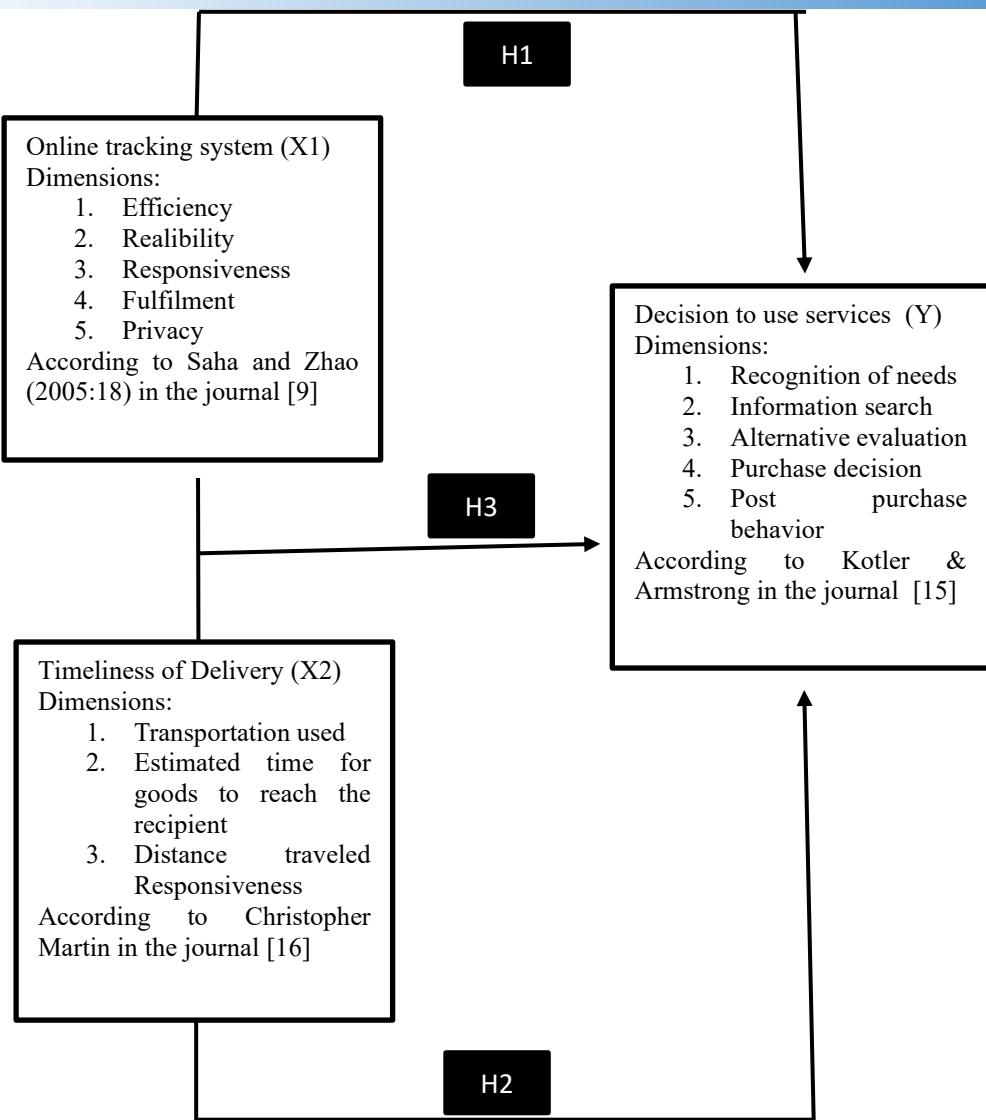
Source : <https://redstagfulfillment.com/last-mile-delivery/>

1. Requests or orders are entered into a centralized system
2. The first step in the *last-mile delivery process* is when customer requests or orders are recorded and managed through a centralized system. This system is typically logistics software or an order management system (*OMS*), which allows companies to monitor and manage the flow of goods in real time. This stage is the most effective method for ensuring that each item can be accurately tracked from its origin to the customer's hands.
3. Goods arrive at the Warehouse or Distribution Hub
4. Once an order is entered into the system, goods are shipped from the factory or supplier to a distribution center, known as a warehouse or *transportation hub* . *This location serves as a transition point between large - scale transportation* (for example, from a manufacturer to a city) and final delivery to individual consumers. This important Because mark start of the shipping process *last mile* , namely delivery direct to customer .
5. Assignment task delivery
6. At this stage, the system will assign deliveries to couriers based on optimized routes. The use of algorithm-based technology allows companies to determine the most efficient delivery routes, saving time and costs . This play a role important in create solution cost -effective logistics cost and efficient .
7. Scanning goods before sent

8. Before loading to in vehicle shipping , every goods will scanned (*scanned* ) for ensure accuracy shipping . This process also updates the status of the goods in system tracking . Stage This important For avoid error delivery and ensure that every goods sent in accordance with the right goal .
9. Proof of delivery accepted by customers
10. The final stage is when the goods are received by the end customer. The courier will usually require a digital signature or photographic evidence to confirm delivery. This process is also recorded in the system as proof of *delivery*. This step creates transparency and accountability in the delivery process and serves as a basis for resolving customer complaints should any issues arise.

c. *Last mile delivery* destination

In research this , system online tracking and accuracy time delivery is representation from quality service *last mile delivery* . Second variables the become indicator important in measure effectiveness delivery stage the end and its impact to decision use service expedition by consumers . Therefore that , concept *last mile delivery* become base important in in explain connection between variables in study this , especially in effort create service fast , accurate and convenient delivery for customer [14].

**Fig 4.** Theoretical Framework

## Hypothesis

Hypothesis can be interpreted as an answer to a temporary question for a study until it is proven through the data collected. Whereas according to (Sugiyono, 2017) Hypothesis is an answer to a temporary question from the formulation of the question, because it is temporary and necessary, not quite enough to answer with the collected empirical data.

According to [15], service usage decisions are influenced by information and customer experience. In the context of shipping, online tracking systems are part of the information that shapes customer trust [2]. With accurate tracking, customers feel confident and are more likely to reuse shipping services. Therefore, the first hypothesis can be formulated that online tracking systems have a positive effect on service usage decisions.

According to [16] explain that timeliness is a key dimension of service quality. Research by [5] and [6] demonstrates that timely delivery significantly determines customer satisfaction and loyalty. This indicates that timely delivery also influences service usage decisions.

Thus, the hypothesis in this case is as follows:

1. Hypothesis 1 (H1)

- H 0 : There is no influence between variables system online tracking of decision use service J&T Express Expedition , Cilincing Branch, North Jakarta
- Ha : There is influence between system online tracking of decision use service J&T Express Expedition , Cilincing Branch, North Jakarta

2. Hypothesis 2 (H2)

- H 0: There is no influence positive between accuracy time delivery to decision use service J&T Express Expedition , Cilincing Branch, North Jakarta
- Ha : There is influence between accuracy time delivery to decision use service expedition iJ&T Express Cilincing Branch, North Jakarta

3. Hypothesis 3 (H3)

- H0 : There is none influence between system online tracking and accuracy time delivery to decision use service J&T Express Expedition , Cilincing Branch, North Jakarta
- Ha : There is influence between system online tracking and accuracy time delivery to decision use service J&T Express Expedition , Cilincing Branch, North Jakarta .

## 2. RESEARCH METHODS

Approach research used in study This is study quantitative . According to Sugiyono (2018:15 ) that method quantitative called thus because of the data collected shaped numbers and analyzed use technique statistics . Therefore that , method study can interpreted as something approach scientific methods used For obtain accurate and valid data , by objective find , prove , and develop knowledge , which is ultimately can utilized For understand , solve and anticipate problem in field business .

Data collection techniques in research This done through two types of data based on source acquisition , namely primary data and secondary data . Primary data is the main data obtained in a way direct from source the original , like through interview and distribution questionnaire to respondents . Secondary data is type of data obtained in a way No direct from the source , meaning this data No given in a way direct to data collector . In research this technique data collection used is method questionnaire . For measure responses and opinions respondents to statement in questionnaire , using the Likert Scale. This scale is one of the the most common instruments used , where respondents requested For show level agreement or disagreement they to a number of statement related object under study . The Likert scale is used in study This consists of of five levels assessment against statement submitted .

In writing thesis method data analysis used in study This use descriptive quantitative. After the data is collected , the processing process carried out so that the information obtained become more easy For interpreted and analyzed in accordance with method analysis used in Discussion . There are two main requirements that a questionnaire must meet: validity and reliability. An instrument is considered valid if it can measure the intended aspects and accurately represent the variables being studied.

This study used a quantitative descriptive method. The study population was 87,665 J&T Express Cilincing customers who had used J&T Express Cilincing logistics services. Sampling was conducted using purposive sampling with 100 respondents who had used J&T services at least twice in the last three months. Data collection used a questionnaire with a Likert scale (1–5).

## 3. RESULTS AND DISCUSSION

### 3.1. Results

#### a. Validity Test

According to Sugiyono (2016:177) validity show degrees accuracy between the actual data occurs in the object with data collected by researchers For look for validation an item. We correlate the item score with the total of the items. Validity testing is carried out by correlating each indicator score with the total construct score. Therefore, the basis taking his decision is as following :

- a) If  $(r \text{ count} \geq r \text{ table})$  the significant value  $< \alpha$  (0.05) then it is declared valid
- b) If  $(r \text{ count} \leq r \text{ table})$  the significant value  $> \alpha$  (0.05) then it is declared invalid

c) The validity test in this study uses an r-table value with a significance value of 0.05, data size (n) = 100, and df = n-2, resulting in an r-table of 0.196 and the results of the validity test in this study:

**Table 2.** Results of X1 Validity Test

No	Question Item (X1)	r- count	r- table	information
1	X1.1	0.899	0.196	Valid
2	X1.2	0.909	0.196	Valid
3	X1.3	0.899	0.196	Valid
4	X1.4	0.896	0.196	Valid
5	X1.5	0.859	0.196	Valid
6	X1.6	0.877	0.196	Valid
7	X1.7	0.895	0.196	Valid
8	X1.8	0.887	0.196	Valid
9	X1.9	0.819	0.196	Valid
10	X1.10	0.839	0.196	Valid

Source : SPSS 26 for Windows, processed by the author

**Table 3.** Results of X2 Validity Test

No	Question Item (X2)	r- count	r- table	Information
1	X2.1	0.962	0.196	Valid
2	X2.2	0.955	0.196	Valid
3	X2.3	0.867	0.196	Valid
4	X2.4	0.950	0.196	Valid
5	X2.5	0.949	0.196	Valid
6	X2.6	0.931	0.196	Valid

Source : SPSS 26 for Windows processed by the author

Based on the Validity Test on the questionnaire table above R Count more big from the R Table , namely (0.196) , then For validity test variables System Online Tracking (X1) and Delivery Timeliness ( X2 ) with use SPSS version 26 method , then can concluded that questionnaire declared valid.

**Table 4.** Results of the Y Validity Test

No	Question Item (Y)	r- count	r- table	Information
1	Y.1	0.848	0.196	Valid
2	Y.2	0.841	0.196	Valid
3	Y.3	0.849	0.196	Valid
4	Y.4	0.857	0.196	Valid
5	Y.5	0.875	0.196	Valid
6	Y.6	0.860	0.196	Valid
7	Y.7	0.878	0.196	Valid
8	Y.8	0.836	0.196	Valid
9	Y.9	0.840	0.196	Valid
10	Y.10	0.834	0.196	Valid

Source : SPSS 26 for Windows processed by the author

Based on the Validity Test on the questionnaire Table IV.8 R Count more big from the R Table , namely (0.196) So for validity test Service Use Decision variable (Y) with use SPSS version 26 method , then can concluded that questionnaire declared valid.

### b. Reliability Test

Reliability test is tool For measure questionnaire which is indicator variables or structure . A instrument it is said reliable if response somebody to statements the consistent or stable from time to time . Reliability test kind of This only can done to valid problem or effective . The statistical techniques used For test it is Cronbach's alpha coefficient . A questionnaire It is said to be reliable if Cronbach's Alpha > 0.60.

**Table 5.** Reliability Test Results System Online Tracking (X1)

Reliability Statistics	
Cronbach's Alpha	N of Items
.967	10

Source : SPSS 26 for Windows processed by the author

Based on Table IV.9, the *Cronbach's alpha* value is 0.967 for the Online Tracking System variable > 0.6. Thus, it can be concluded that the statements in the Online Tracking System variable are trustworthy and meet the data quality requirements of reliable status.

**Table 6.** Reliability Test Results Delivery Timeliness ( X2 )

Reliability Statistics	
Cronbach's Alpha	N of Items
.971	6

Source : SPSS 26 for Windows processed by the author

Based on Table IV.10 values *Cronbach's alpha* is 0.971 on the variable On- Time Delivery > 0.6. With thus can concluded that statement in variables Timely Delivery can trusted and fulfilling condition quality of data that has status reliable .

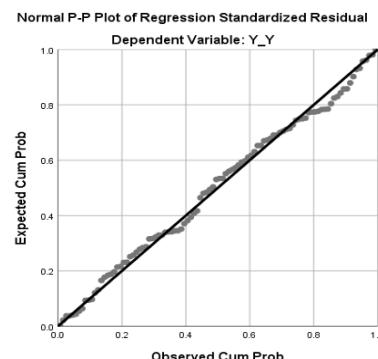
**Table 7.** Reliability Test Results for Decisions to Use Services (Y)

Reliability Statistics	
Cronbach's Alpha	N of Items
.956	10

Source : SPSS 26 for Windows processed by the author

Based on Table IV.11, the *Cronbach's alpha* value is 0.694 for the variable Decision to Use Services > 0.6. With thus can concluded that statement in Service Use Decision variables can trusted and fulfilling condition power in status reliable .

### c. Normality Test



**Fig 5.** Normality Test Result

Based on Figure VII.1 above, it shows that all the data are normally distributed, as they are spread around the diagonal line and form a straight line around it. Therefore, it can be concluded that the data meets the requirements for normality or follows the line of normality.

#### d. Multiple Correlation Test

**Table 8.** Calculation results coefficient correlation multiple

**Model Summary**

Model	R	Adjusted		Standard Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
		R Square	R Square			F Change	df1	df2	
1	.882 <sup>a</sup>	.778	.774	4.76071	.778	170,342	2	97	.000

a. Predictors: (Constant), Timeliness of Delivery , System Online Tracking

Source : SPSS 26 for Windows processed by the author

Based on the Sig F Change value is 0.000 (<0.05) then Can concluded that variables System Online Tracking (X1) and Delivery Timeliness ( X2 ) have significant relationship on the Decision to Use Services (Y) in general simultaneously . The R value ( Coefficient Correlation ) is 0.882 then Can concluded level connection between System Online Tracking (X1) and Timeliness of Delivery (X2) on the Decision to Use Services (Y) in general simultaneous own Very Strong Relationship (0.80 – 1.00).

#### e. Coefficient of Determination

**Table 9.** Coefficient of Determination

**Model Summary**

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.882 <sup>a</sup>	.778	.774	4.76071

a. Predictors: (Constant), Timeliness of Delivery , System Online Tracking

Source : SPSS 26 for Windows processed by the author

Based on Table VIII.8 above, it can be concluded that the Online Tracking System and On-Time Delivery variables collectively influence the decision to use services by 77.8%. Meanwhile, 22.2% of the decision to use services is influenced by factors outside this study.

#### f. Multiple Linear Regression

Study This use analysis multiple linear regression with marketing as following :

$$Y = a + b_1X_1 + b_2X_2 + e$$

Information :

- Y = Decision on use service
- a = Constant
- b<sub>1</sub>b<sub>2</sub> = Coefficient Regression
- X<sub>1</sub> = System online tracking
- X<sub>2</sub> = Accuracy time delivery
- e = Error Residue (error)

Coefficient value regression with means as base analysis . The coefficient b will worth positive (+) if show one- way relationship between variables independent with variables dependent , meaning increase variables independent will result in increase variables dependent , and vice versa .

**Table 10.** Results of Multiple Linear Regression Test

Model	Coefficients <sup>a</sup>					
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	1,181	2,137			.553	.582
System Online Tracking	.660	.075		.663	8,789	.000
Timely Delivery	.458	.131		.263	3,491	.001

a. Dependent Variable: Decision to Use Services

Source : SPSS 26 for Windows processed by the author .

$$\begin{aligned} Y &= a + b_1.x_1 + b_2.x_2 \\ &= 1.181 + 0.660.x_1 + 0.458.x_2 \end{aligned}$$

Based on *output coefficient* this , will proven hypothesis in a way simultaneous , beta effect produced , as well formation equality regression . Equation linear regression in study This can formed from results *coefficient* on kolol *Standardized Coefficient* is as following :

1. Constant Value show mark of 1.181 means If mark independent variable ( free ) zero so mark dependent variable ( bound ) of 1.181
2. Variable value System online tracking (X1) against decision use services worth 0.660 positive so that If decision use service experience increase One value , then system online tracking will increase of 0.660
3. Variable value accuracy time delivery (X2) against decision use services worth 0.458 positive so that If decision use service experience increase One value , then accuracy time delivery will increase of 0.458.

#### g. Partial Significance Test (t-Test)

Partial test or t test is used For knowing that there is an independent variable or No his influence in a way partial to dependent variable . In the study This , t-test was performed with use IBM SPSS 26 for Windows application . Criteria used in the t-test is as following :

1. Significant value  $t < 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted. This means that the independent variable (X) partially influences the dependent variable (Y).
2. Significant value  $t > 0.05$ , then  $H_0$  is accepted and  $H_a$  is rejected. This means that the independent variable (X) does not have a partial effect on the dependent variable (Y).

Table 11. t-Test Results

Model	Coefficients <sup>a</sup>					
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	-2,904	2,912			-.997	.321
X_1	.568	.036		.850	15,758	.000
X_2	.293	.069		.230	4,264	.000

a. Dependent Variable: Y \_ Y

Source : SPSS 26 for Windows processed by the author

Based on Table IV.51, it can be seen with t- table value which is standard For take decisions on hypotheses and sought with determine df that is mark  $df = nk$ . n is amount respondents and k is all variables in study This namely (  $df = 100-2 = 98$ ), from calculation the obtained t- table value at the level significance of 0.05 , namely of 1,984.

From table IV.51 above, it can be concluded that:

1. **Hypothesis Testing I:** it is known that the t-table value = 1.984, the Online Tracking System variable has a significant and positive effect on the service usage decision variable. This can

be seen from the significance of 0.000 which is smaller than 0.05, then the t-count value of 15.758, both of which are positive. Therefore, the hypothesis "The Online Tracking System variable has a positive and significant effect on the service usage decision partially."

2. **Hypothesis Testing II.** The variable of on-time delivery has an influence on the decision to use services. This can be seen from the significance value of 0.000 which is smaller than 0.05, then the t-value of 4.264 is greater than 1.984 as the t-table, it can be interpreted that the second hypothesis is accepted in other words, the hypothesis "the variable of on-time delivery has a positive and significant effect on the decision to use services partially."

#### **h. Simultaneous Test (F Test)**

The F test aims to determine whether independent variables simultaneously influence the dependent variable. The F test is conducted to determine the influence of all independent variables simultaneously on the related variable. Determining the F table value can be determined with a significance level of  $5\% = 0.05$  and it is known that  $F$  table =  $F(k; nk) = F(2:97) = 3.09$ , then the  $F$  table value is 3.09. The following F test results can be seen in the table below.

**Table 12. F-Test Results**

**ANOVA <sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2631.084	2	1315,542	126,438	.000 <sup>b</sup>
Residual	1009.251	97	10,405		
Total	3640.335	99			

a. Dependent Variable:  $Y$   $Y$

b. Predictors: (Constant),  $X_2$ ,  $X_1$

Source : SPSS 26 for Windows processed by the author

F test is performed For know whether all over variables independent in a way simultaneous influential to variables dependent . Based on the ANOVA results, the calculated F value was 126.438 with a significance value of 0.000 ( $p < 0.05$ ). These results indicate that the regression model involving variables  $X_1$  and  $X_2$  together has a significant effect on variable  $Y$ . Thus, the regression model can be declared feasible and significant simultaneously.

### **3.2.Discussion**

#### **1. Influence System Online Tracking of Service Usage Decisions**

Based on the recapitulation results, the Online Tracking System variable averaged 3.86, and was rated as Good. These results indicate that the Online Tracking System is effective and should be maintained and improved.

Based on the t-test, it was found that the Online Tracking System partially influenced the decision to use services significantly and positively. This can be seen from the results of the t-test stating that the p-value is smaller than the significance value ( $0.000 < 0.05$ ). In addition, in the Online Tracking System variable, the t-count value is  $15.758 >$  t-table value of 1.984, so the online tracking system variable is stated to have a positive effect. So it can be concluded that there is an influence of the Online Tracking System on the Decision to Use Services significantly and positively partially. In addition, the correlation coefficient ( $R$ ) value of 0.866 , This value indicates that the influence of the Online Tracking System on the decision to use services is very strong and the coefficient of determination ( $R^2$ ) value on the Online Tracking System variable is 0.751. This proves that the decision to use services is influenced by the Online Tracking System by 75.1%.

#### **2. The Influence of Timeliness of Delivery on the Decision to Use Services**

Based on the recapitulation results, the On-Time Delivery variable averaged 4.1, and was therefore rated as Good. These results indicate that the implementation of On-Time Delivery is good and should be maintained and improved.

Based on the t-test, it was found that Timeliness of Delivery partially significantly and positively influences the Decision to Use Services. This can be seen from the results of the t-test

stating that the p-value is smaller than the significance value ( $0.000 < 0.05$ ). In addition, in the Timeliness of Delivery variable, the t-count value of  $4.264 > 1.984$ , so the Timeliness of Delivery variable is stated to have a positive effect. Therefore, it can be concluded that there is a significant and positive influence of Timeliness of Delivery on the Decision to Use Services partially.

In addition, the correlation coefficient (R) value is 0.776 . This value indicates that the influence of Timeliness of Delivery on the Decision to Use Services is strong and the coefficient of determination (R2) value on the Timeliness of Delivery variable is 0.602. This proves that the Decision to Use Services is influenced by Timeliness of Delivery by 60.2%.

### 3. The Influence of Online Tracking Systems and Delivery Timeliness on the Decision to Use Services

Based on the results of the hypothesis test, it shows that the Online Tracking System and Timeliness of Delivery simultaneously influence the Decision to Use Services. The simultaneous test (F test) produced an F-count value of 126.438, which means that the independent variable has a significant relationship with the dependent variable. With a significance value of 0.000. Therefore, the hypothesis that there is an influence of the Online Tracking System and Timeliness of Delivery on the Decision to Use Services simultaneously.

## 4. CONCLUSION

1. Based on results study It can be concluded that the influence of the online tracking system on the decision to use services is based on the correlation coefficient (R) value of 0.866 , meaning that the two variables have a relationship. The strength of the relationship between the variables is very strong, and tested with the coefficient of determination (R2) test produces a value of 75.1% while the remaining 24.9% (from 100% - 75.1%) is influenced by other variables not examined in this study. Meanwhile, the results of the t test which has a t value shows a result of  $15.758 > 1.984$ , this means that  $H_0$  is rejected and  $H_1$  is accepted or there is an influence between the online tracking system and the decision to use services. Online Tracking of Service Usage Decisions .
2. Based on results study This can concluded that Influence Timely Delivery on Service Use Decisions based on mark coefficient correlation (R) of 0.776 means second variables own that existence relationship . As for the strength connection between variables that is strong and tested with coefficient test determination (R2) produces value of 60.2%. While the remaining 39.8% (from 100% - 60.2%) is influenced by other variables not examined in this study. Meanwhile, the t-test results with a t-value show results of  $4.264 > 1.984$ , this means that  $H_0$  is rejected and  $H_2$  is accepted or there is an influence between Timeliness of Delivery on the Decision to Use Services.
3. The influence of the online tracking system and the on-time delivery simultaneously, the multiple correlation coefficient (R) value of 0.882 indicates that the influence of the online tracking system and on-time delivery on the decision to use the service, meaning that the three variables have a relationship. The strength of the relationship between the variables is strong and tested with the coefficient of determination (R2) produces a value of 77.8%, while the remaining 22.2% is influenced by other variables not examined in this study. Meanwhile, the f test shows the results of  $126.438 > 3.09$ . This  $H_0$  is rejected and  $H_3$  is accepted or there is an influence between the online tracking system and on-time delivery on the decision to use the service simultaneously.

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