

# WORD OF MOUTH ADVERTISEMENT USING SELF-SERVICE TECHNOLOGY IN CREATING SATISFACTION AND LOYALTY

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## ABSTRACT

*The study aims to explain the impact of the advertisement of Word of Mouth and Self-Service Technology on customer satisfaction and loyalty in era pandemic Covid-19. Furthermore, this research is also to find out whether Word of Mouth is one of the important things in convincing the public to use online transactions when buying a product or service. The data is collected using a questionnaire that has been evaluated for validity and reliability, mainly the Average Variance Extracted and composite reliability. The purposive sampling strategy was employed to obtain data in this study. The number of samples is 200 respondents who have the characteristics of having received information from Word of Mouth related to online transactions using self-service technology. With the help of Partial Least Square (PLS) software, the statistical analysis method utilizes descriptive evaluation and path analysis. The finding of this research shows that word of mouth has a positive and significant effect on implementing Self-Service Technology and increasing customer satisfaction. Thus, positive word of mouth will affect increasing customer confidence in implementing Self-Service Technology so that it will affect increasing customer satisfaction. However, the study also found that word of mouth did not directly affect customer loyalty. Meanwhile, customer satisfaction influences customer loyalty.*

**Keywords:** Word of Mouth, Self-Service Technology, Customer Satisfaction, Customer Loyalty.

**JEL Classification Code:** M31, M21, L14

## INTRODUCTION

The development of information and communication technology is very rapid, marked by the emergence of the internet. The internet is driving people's economy, with the rise of online commerce. Every individual in society faces modifications inside the transport, social, monetary, and cultural modifications. The era of technology information and communication pushes so that it influences people's lives. In trade, this technology can from change traditional transactions into online transactions. This transaction is supported by an application system to simplify and speed

up the transaction process. Using self-service technology makes it easy for the public, especially to process transactions online with a more efficient time. In technology-based services, it is necessary to prioritize user-friendly and high security, so that service users do not feel worried about the risks of their transactions. However, some consumers are still hesitant to make online transactions, especially regarding the risks. People still believe in information from Word of Mouth about online transactions.

Several researchers have studied the role of word of mouth in transactions, such as Bayunitri et al. (2017) maintaining phrase of mouth is one of the few approaches to draw and preserve patron loyalty. Wien & Olsen (2012) conceptualizes the relational benefit as an antecedent of the quality of service. The results show that the variables of social advantage and self-assurance relational blessings have an enormous effect on client loyalty and word-of-mouth marketing cannot influence customer loyalty. Therefore, the relational benefits perceived by consumers can have a beneficial impact on service providers. However, with increasingly more transactions being made with inside the absence of worker contact, critical attention is whether relational advantages continue to apply inside the online context. In the absence of human contact, the relational element of a change over the Internet can have an effect on definitely negatively to keep to pressure on patron loyalty and satisfaction. Although the perceived advantages of Internet-primarily based totally self-provider are increasing, there are potential disadvantages to changing personal contact with technology-based interactions (Hamzah et al., 2020). According to Hsu et al. (2017) clients who have a great courting with the organization can be greater dependable and greater inclined to offer hints to others. Interpersonal relationships which are set up like this are some distance greater essential to clients than giving occasional prices or other special services (Park & Park, 2018).

In the transaction, there is a relationship between the consumer and the seller which is referred to as a social benefit. Social benefits describe the emotional aspects of the personal relationship between the customer and the seller, and the development of friendship between the customer and the seller. Meanwhile, special treatment benefits are felt by consumers both economically and with special services. The provision of special offers and treatment given by the company to consumers is to distinguish between special consumers and ordinary consumers. The improvement of this application remains primarily based totally on relational blessings primarily based totally on face-to-face encounters, whether clients understand relational blessings in technology-primarily based totally provider issue interactions remains unknown. Wong et al. (2014) advanced a wonderful dating among the 3 styles of relational blessings and client loyalty. Regardless of the provider, self-belief blessings are the maximum essential part of the blessings of face-to-face encounters on loyalty, specifically via satisfaction (Reza Jalilvand et al., 2012). Given that protection and privateness problems in online transactions are a major challenge for consumers' perceptions, self-belief blessings in online transactions have a wonderful impact on one's staying on this dating (Kumar et al., 2010).

Special treatment benefits allow clients to engage with carrier vendors and feature a fantastic impact on someone staying in this relationship. Since internet-primarily based on totally self-service era through definition excludes interplay with different parties, there's no possibility to increase social-relational blessings (Kwok et al., 2017). Hyun & Han (2012) argued that there are four dimensions of electronic-based totally service fine, such as customer service, security technology and information quality, technology convenience, and ease of use technology, that have a direct influence on customer satisfaction and consumer loyalty. That is supported by

using the outcomes of studies (Rizki et al., 2021) which stated that the use of self-service has an immediate impact on consumer pleasure, but affects retention and switching charges, which can be loyalty factors. Handa & Gupta (2020) stated that users of self-service technology are more satisfied with the services provided by their companies than users of non-self-service. Consumer satisfaction needs to be considered in a business because someone will repurchase a product or service if they are satisfied after consuming or using the product. Consumer satisfaction relates to a person's comparison between the perceived performance of a product and/or service about his or her expectations (Lai & Hitchcock, 2020). According to the expectation disconfirmation theory, customers are satisfied when actual performance meets or exceeds their expectations. Otherwise, when expectations are higher than actual performance, it leads to negative disconfirmation or causes customers to feel dissatisfied (Bueno & Gallego, 2021). Customer satisfaction has always been a source of concern for businesses since high satisfaction is linked to positive word of mouth from consumers, the intention to return, and loyalty, all of which are important factors in long-term economic success (Lim et al., 2021). Today, customer loyalty is an important factor for running a business in a highly competitive market, credit cooperatives, and business institutions which are no exception (Talib & Rusly, 2020).

However, there has been no research linking word of mouth and self-service technology so that the study is novel entails testing the impact of word of mouth and self-service technology on customer satisfaction and loyalty. Further, there is a research hole associated with the effect of word of mouth on customer loyalty. The consequences of the take a look at Rosa et al. (2018); Ahlunnazak & Abror (2019), and Soelasih & Sumani (2021) confirmed that word of mouth had a widespread wonderful impact on customer satisfaction. However, Ballestar et al. (2018) and (Hamzah et al., 2020) stated that word of mouth did not affect directly customer loyalty. This research will look at how advertisement of word of mouth and self-service technology create the customers satisfaction and loyalty in current pandemic Covid-19. Furthermore, this research describes the use of self-service technology for online transactions in Indonesia, which has grown significantly. Many discoveries are projected to be valuable for the development of marketing literature and factual marketing activities as a result of the explanation and results of this research because in Indonesia there are several people still hesitate to use the self-service technology for their online transaction.

## LITERATURE REVIEW AND HYPOTHESES

In Indonesia currently, online transactions are rampant, word of mouth (WOW) information still has a very significant role in influencing consumers to have more confidence in conducting online transactions using self-service technology. The analysis of the literature was carried out according to the approach proposed by Le-Hoang (2020); Sasono et al. (2021); Ganguli et al. (2011), and Hong & Slevitch (2018). These are the references of these papers that provide theoretical justification of the literature review process. Le-Hoang (2020) argues that customer satisfaction is associated with favorable word-of-mouth recommendations and a willingness to return. Then, Sasono et al. (2021) believes that technology-based self-service technology has provided benefits for consumers and companies, namely: speed and ease of obtaining services which are advantages for consumers, while the reduction in service costs due to eliminating human interaction is an advantage for the company. Over the past five years, WOM has been the object of several studies in marketing. There are several concepts related to

this personal recommendation (or interpersonal communication (Kim & Park, 2013), informal communication (Chen et al., 2021), personal and interpersonal influence (Van Vaerenbergh et al., 2014). Ganguli et al. (2011) argued that consumer satisfaction can result in the consumer buying back the product he bought and will also provide positive word of mouth information to his family and friends. There is an indirect impact of Word of Mouth on customer loyalty through subjective norms in a study involving family consumers (Zaid & Patwayati, 2021).

## Word of Mouth

Word of mouth is an informal change of facts both positive and negative between people. Consistent with Ing et al. (2020) that word of mouth is a bit of advice that comes from different consumers who're sincere compared to the employer's efforts to introduce its merchandise through promotional activities and can influence humans' decisions to apply offerings or to avoid offerings. Customers' good word of mouth, intent to return, as well as loyalty, is all critical factors in the long-term success of businesses in today's customer-focused sector, so business providers are constantly looking for new ways to maintain and increase consumer happiness (Chaparro-Peláez et al., 2015). While a purchaser gets a product or service, word-of-mouth communication is defined as verbal recommendations given to other customers within the shape of support or grievance (Giantari et al., 2021). Means of communication stimulate the customer's intention to buy from the word of mouth. Mardhiyah et al. (2013) who performed an intensive study of the impact of WOM on visitors' loyalty and determined it to be pretty huge.

*H<sub>1</sub>: Word of Mouth (WOM) has influenced Customer Satisfaction (CS)*

*H<sub>2</sub>: Word of Mouth (WOM) has influenced Customer Loyalty (CL)*

## Self Service Technology

Soelasih & Sumani (2021) defined self-service technology (SST) as a connecting technology that allows consumers to process serving services independently and free from direct services by service provider employees. Based on this definition, the aspects of usability, ease of use, availability, and convenience play an important role in satisfying customers with self-service technology. The company uses self-service technology to provide benefits for both the company and consumers. For companies, with self-service technology, companies can concentrate more on handling other company tasks that require extra attention, because many simple company tasks have been replaced by self-service technology. For consumers, self-service technology, consumers will certainly be greatly helped because all simple transactions can be done easier without them having to go to the office and leave the activities they are doing at that time. Another advantage of using self-service technology is that it allows significant cost reductions while increasing service efficiency and effectiveness. (Bolton et al., 2013) estimates that the cost of processing electronic transactions is one-sixth that of manual processing.

*H<sub>3</sub>: Self-Service Technology (SST) has influenced Customer Satisfaction (CS)*

*H<sub>4</sub>: Self-Service Technology (SST) has influenced Customer Loyalty (CL)*

## Customer Satisfaction

If the customer benefits from the transaction, it matches or exceeds what is expected, then customer satisfaction will arise. Edvardsson et al. (2016) who revealed that satisfaction is related to making comparisons between the perceived performance of products and services about their expectations. Customer happiness has a big influence on marketing results. By using the right assessment tools, customer satisfaction can be accessed through the provision of goods and services that quickly meet customer expectations. Methods to measure customer satisfaction, there are two methods: (1) Single item, to access customer satisfaction. So it can be understood that the impact of overall satisfaction occurs after the customer uses the product through a single satisfaction item. (2) Multiple items, to measure individual satisfaction through the product using a general scale and then adding up all satisfaction (Du et al., 2010).

Customer forms their expectations from their previous buying experiences, the advice of friends and social group, and the potential information of marketers and rivals. Buyers are likely to be disappointed if marketers set unrealistic expectations. Buyers, on the other hand, will be uninterested if manufacturers set outlooks too low. Some of today's successful manufacturers continue to raise expectations and deliver performance that meets those expectations (Lyu et al., 2019b).

**H<sub>6</sub>:** *Customer Satisfaction (CS) has influenced Customer Loyalty (CL)*

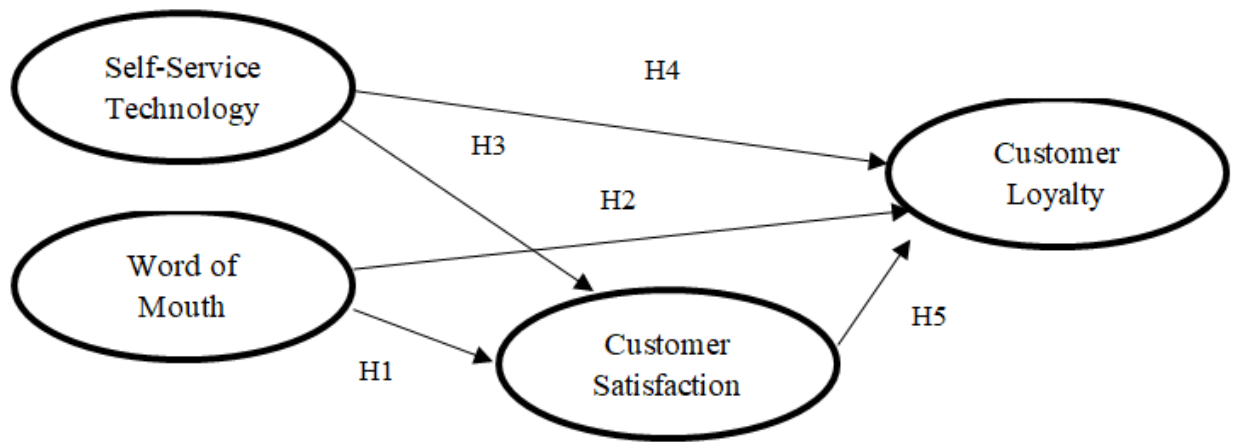
## Customer Loyalty

Consumer loyalty is one of the most important aspects for the company, to retain its customers, so as not to switch to other companies. Loyalty is a consumer's commitment to re-transaction on products or services from the company (Cook et al., 2015). The level of customer loyalty can be seen from their intention to recommend to others (Taillon & Huhmann, 2019).

In a business context, loyalty has become a customer's dedication to working with producers, making repeated purchases of goods and services, and recommending services and products to friends and associates. Consumer loyalty is the result that companies get from creating benefits for consumers so that they will maintain or increase their purchases from producers. To ensure consumer loyalty, producers must be able to anticipate consumer needs because consumers' interest in maintaining loyal relationships will depend on the producer's ability to anticipate consumers' future needs and offer them first before others (Hong & Slevitch, 2018).

Several indicators can be used to measure consumer loyalty, including: (1) repeat purchases, (2) always like the brand, (3) continuing to choose the brand, (4) believing that the brand is the best. In addition, consumer loyalty can also be measured through price tolerance. A consumer with greater loyalty will have a high level of price tolerance. and customer satisfaction is an important concept to consider when developing a customer loyalty program (Lyu et al., 2019a).

The hypothetical model that explains the relationship between word of mouth (WOM) and self-service technology (SST), as well as customer satisfaction (CS) and consumer loyalty (LC), may be described inside the form of Figure 1.



**FIGURE 1**  
**RESEARCH MODEL**

### RESEARCH METHODOLOGY

The populations in this observation are all purchasers who are inclined and feature made online transactions. This has a look at using a purposive sampling method with the standards of getting used to self-service technology and having gained information from word of mouth. The number of samples used was 200 respondents who use online transactions with self-service technology in Malang and Surabaya, Indonesia. The reason for choosing the two cities is because they are big cities in East Java and many people have several businesses and often implementing self-service technology for their transactions. The method of collecting data is using a questionnaire whose instruments have been tested for validity and reliability. The 5-factor Linkert scale is used inside the questionnaire wherein 1 shows strongly disagree and 5 suggests strongly agree. The assertion inside the questionnaire is used to explain the impact of word of mouth and self-service technology on consumer satisfaction and purchaser loyalty.

This research uses four variables, namely word of mouth (WOM) and self-service technology (SST), as well as customer satisfaction (CS) and consumer loyalty (LC). The variable of word of mouth (WOM) is measured using two indicators such as recommend to others and tell good things. Self-service technology (SST) variable consists of 5 indicators such as ease of use, usability, cost savings, security and self-control. Satisfaction is explained with 5 indicators such as happy to be satisfied, often use, in accordance with expectations, more performance, and does not disappoint. Loyalty is measured by 4 indicators such as psychological commitment, transfer burden, word of mouth advertisement, and cooperation.

The facts analyst used descriptive evaluation and path analysis utilized PLS software. The data from the questionnaire was tested by calculating the validity and reliability. The validity test was carried out to ensure that each indicator in the research instrument was able to measure the variables specified in this study. While the reliability test is intended to determine the extent to which the measurement results remain consistent if the measurement is carried out twice or more against the same statement, so that it can be known whether the measuring instrument can be trusted. Then, the analysis was carried out using the Average Variance Extracted (AVE),

Composite Reliability, Cronbach's Alpha, Communalities, Structural Model Testing, and hypothesis test.

## RESULTS AND DISCUSSION

### Description of Respondent

A total of 200 respondents participated in this study, with 123 men (61.5 percent) and 77 women (38.5 percent) making up the sample. The majority of the respondents had completed their most recent education at the bachelor's level, with 78 respondents (39%), followed by respondents with a master's level education (48%), respondents with a diploma level education (33%), respondents with a doctoral-level education (17%), high school/vocational education level (16%), and below high school level (16%). Moreover, the majority of the respondents (79 out of 39.5 percent) worked as private employees. Entrepreneurs represent 49 of the responses or 24.5 percent. The state-owned enterprise's personnel accounted for 36 of the responses (18%). 29 respondents (14.5 percent) said they worked as civil servants, while 7 respondents (3.5 percent) as another kind of job.

### Validity and Reliability Test

In this study, the validity of the components was assessed using discriminant validity values, which needed a good model if the AVE of each variable was higher than 0.5. Table 1 demonstrates that each variable has an AVE value higher than 0.5, indicating that the constructs Word of Mouth (X1), Self-Service Technology (X2), Customer Satisfaction (Y1), and Customer Loyalty (Y2) are great models. As a result, the envisioned model's variables all match the criteria for discriminant validity. Composite reliability is used in this look's reliability analysis, which examines the reliability coefficients between the indicator blocks of the variables which shape it. In the same way, build reliability is employed (equal to Cronbach alpha to degree construct reliability or latent variables). If the composite reliability and Cronbach's alpha are both more than 0.7, the variables are considered reliable.

Table 1 shows that the composite reliability for the word of mouth variable (X1) is 0.928, Self-service technology (X2) is 0.957, customer satisfaction (Y1) is 0.948, and customer loyalty (Y2) is 0.965, where the composite reliability value of all variables in the models are all higher than 0.70, so because the validity of an indicator can be acknowledged by using its loading value, the size model with view signs has a very good validation, for exploratory studies, 0.5 to 0.6 is taken into consideration sufficient. As a consequence, it could be said that the indicators of word of mouth (X1), Self-service technology (X2), consumer satisfaction (Y1), and consumer loyalty (Y2), surely improve each other's latent variables or can degree the latent variable.

Construct reliability is good if the value is greater than 0.70 based on Cronbach's alpha. Table 1 shows that the Cronbach alpha for the word of mouth (X1) is 0.844, Self-service technology (X2) is 0.944, consumer pride (Y1) is 0.931, and consumer loyalty (Y2) is 0.952. All constructs within the model are more than 0.70, for this reason, it could be said that the variables of WOM (X1), SST (X2), customer satisfaction (Y1), and customer loyalty (Y2), certainly have high construct reliability with a completely sturdy level of reliability. So that the model on this takes a look at has met composite reliability and assemble reliability.

In addition, the amount of variance (can be in percentage) of an initial variable can explain the results of the analysis that has been interpreted as Communalities. Table 1 shows the output of Communalities from PLS. The value of Communalities from word of mouth (X1) is 0.865, which suggests that the word of mouth variable can explain roughly 86.5 percent of the variance (diversity) in the outcomes of the investigation (X1). The value of communalities Self-service technology (X2) is 0.816, which means that the variable Self-service technology can explain roughly 81.6 percent of the variation (diversity) in the findings of the analysis (X2). The value of communalities customer satisfaction (Y1) is 0.784, which suggests that the customer satisfaction variable can explain roughly 78.4 percent of the variance (diversity) in the outcomes of the analysis (Y1). With the proviso that the greater the communalities of a variable, the closer the relationship and the greater the influence on the results of the analysis carried out.

<b>Tabel 1</b> <b>THE AVERAGE VARIANCE EXTRACTED (AVE), COMPOSITE RELIABILITY, CRONBACH'S ALPHA, AND COMMUNALITIES</b>				
<b>Variables</b>	<b>The average variance extracted (AVE)</b>	<b>Composite Reliability</b>	<b>Cronbach's Alpha</b>	<b>Communalities</b>
X1 (WOM)	0.865	0.928	0.844	0.865
X2 (SST)	0.816	0.957	0.944	0.816
Y1 (CS)	0.784	0.948	0.931	0.784
Y2 (CL)	0.874	0.965	0.952	0.874

### Structural Model Testing (Inner Model)

For the based construct, R-square (R2) is utilized to evaluate the model. With an R-square limit of larger than 0.10 or greater than 10%, the R-square value indicates the predictive strength of the entire version. The resulting coefficient of determination (R-square) for the consumer satisfaction variable (Y1) is 0.617, which suggests that word of mouth (X1) and self-service technology (X2) both contribute 61.7 percent to customer satisfaction (Y1). Meanwhile, the R-square value of the customer loyalty variable (Y2) is 0.720, indicating that word of mouth (X1), self-service technology (X2), and 72.0 % customer satisfaction influence customer loyalty (Y2). The value of Q2 may reveal the goodness of fit in PLS. Because of the coefficient of will power (R-square) within the regression analysis, the value of Q2 has the same means. The better R2, the more accurate the version can be said to be. A Q-square number greater than 0 (zero) indicates that the model is predictively relevant, whereas a Q-square value less than 0 (zero) indicates that the version is not. From equation 1, it can be obtained the value of Q2 as follows.

$$\begin{aligned}
 Q2 &= 1 - (1 - R21) (1 - R22) (1 - R23) \dots (1 - R2n) \\
 &= 1 - (1 - 0.617) (1 - 0.720) \\
 &= 1 - 0.10743 \\
 &= 0.8926 \\
 &= 89.26\%
 \end{aligned}$$

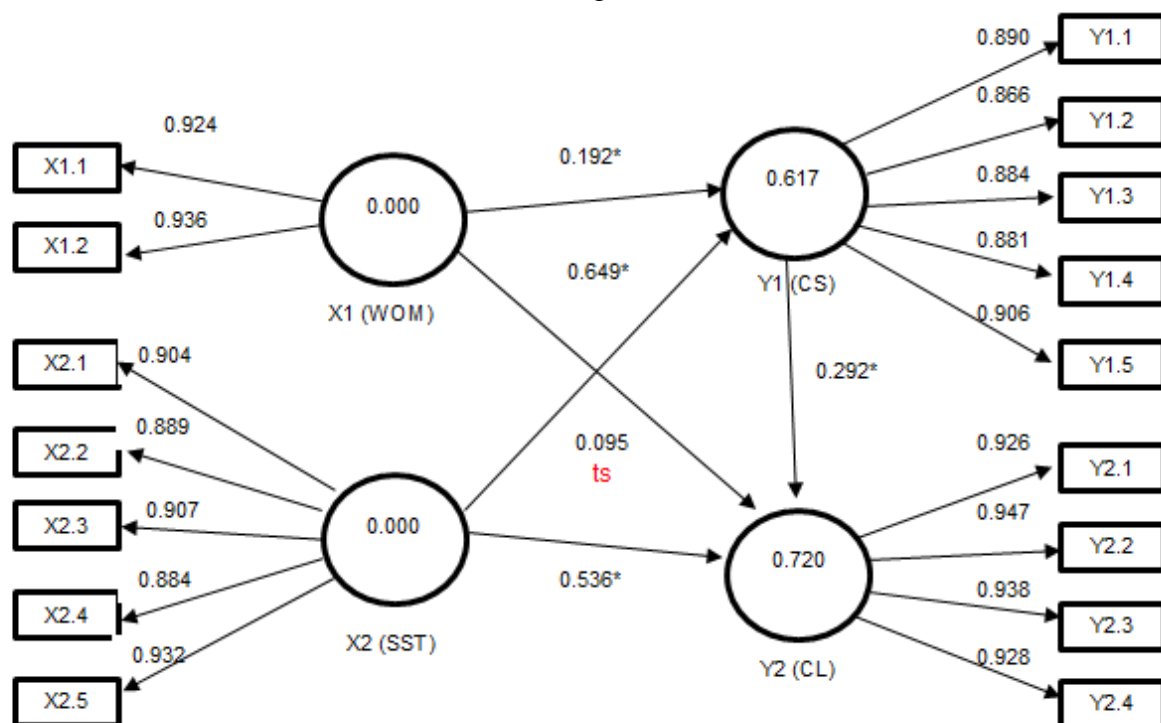
The R-square value created in the overall model equation in this research model is 89.26%, which is a high number, indicating that the structural model has high predictive relevance. The superior model can be used to make predictions.



## Hypothesis Test

Hypothesis testing executed the usage of the bootstrap re-sampling technique advanced by using Geisser and Stone. The test statistical used is the t-test. The re-sampling method's software permits the use of distribution-loose information, does not require a big sample, and does not require the assumption of a normal distribution. If the value of  $|t \text{ count}|$  is received  $> t \text{ table}$  ( $\alpha$  5 percent = 1.96), the test is considered significant, and vice versa. If the outcomes of the hypothesis trying out on the outer model are enormous, this shows that the indicator may be used as an instrument to degree latent variables. In the meantime, if the test effects on the inner version are great, it can be interpreted that there may be a great effect of latent variables on different latent variables.

Hypothesis testing and the relationship between variables may be seen from the effects of the direction coefficient on the model, as seen in Figure 2.



Note: \* = significant effect; ts = no significant effect

**FIGURE 2**  
**PATH DIAGRAM FOR T-TEST**

Figure 2 shows the t-statistical values of each indicator on each latent variable so that it can be seen which indicators have a significant effect on latent variables, as well as the significance between latent variables. Table 2 shows the path coefficients in the inner model and t-test results.

**Table 2**  
**PATH COEFFICIENT AND T-TEST RESULTS**

Hypotheses	Variables	Path Coefficient	t Statistics	Decision
H <sub>1</sub>	X1 (WOM) ->Y1(CS)	0.192	2.983***	Significant
H <sub>2</sub>	X1 (WOM) ->Y2 (CL)	0.095	1.907	No Significant
H <sub>3</sub>	X2 (SST) ->Y1 (CS)	0.649	12.251***	Significant
H <sub>4</sub>	X2 (SST) ->Y2 (CL)	0.536	8.584***	Significant
H <sub>5</sub>	Y1 (CS) ->Y2 (CL)	0.292	4.486***	Significant

Note: \*\*\* t-value>1.960. Significant at the 5% level.

The inner model's estimation results for the direct effect of word of mouth (X1) on customer satisfaction (Y1) reveal a t-test value of 2.983, which is greater than 1.960 for a two-way test with an error rate of 5%, rejecting the statistical hypothesis that there is no direct effect of word of mouth (X1) on customer satisfaction (Y1). This indicates that word of mouth (X1) has a direct and positive influence of 0.192 on customer satisfaction (Y1). The positive influence between word of mouth (X1) on customer satisfaction (Y1) can be interpreted that the better word of mouth (X1), then it will increase customer satisfaction (Y1). And vice versa, the less good word of mouth (X1), then it will reduce customer satisfaction (Y1). This finding is supported by previous studies such Ahlunnazak & Abror (2019); Park & Park (2018); Soelasih & Sumani (2021), and Rosa et al. (2018).

The estimation effects of the inner model for the direct effect of word of mouth (X1) on customer loyalty (Y2) display a t-test a look at cost of 0.907, in which the value is smaller than 1.960 for a two-way test with an error rate of =5%, so the statistical hypothesis which states that there's no direct influence among word of mouth (X1) on customer loyalty (Y2) is accepted. This indicates that there's no significant direct effect between word of mouth (X1) on customer loyalty (Y2) due to the fact that the significance of the effect among phrase of mouth (X1) on consumer loyalty (Y2) is small, particularly 0,095. So it could be stated that the extent of consumer loyalty (Y2) isn't always inspired by way of desirable or awful word of mouth (X1). The results of this research were in line with Ballestar et al. (2018) and Hamzah et al. (2020) who found that word of mouth (WOM) has no effect directly on consumer loyalty (CL).

The inner model for the direct impact of self-service technology (X2) on customer satisfaction (Y1) shows a t-test look at a value of 12,251, where the value is greater than 1.960 for a two-manner take a look at with an error rate of =5% so that the statistical hypothesis states there's no direct effect among Self-service technology (X2) on customer satisfaction (Y1) is rejected. This implies that there is a significant positive impact between self-service technology (X2) on customer satisfaction (Y1) of 0.649. The high-quality impact of self-service technology (X2) on customer satisfaction (Y1) may be interpreted that the higher self-service technology (X2), will grow customer satisfaction (Y1). And vice versa, the less properly self-carrier technology (X2), then it's going to lessen customer satisfaction (Y1). This result is identical to the one done by Buell et al. (2010).

The direct effect of self-service technology (X2) on customer loyalty (Y2) indicates a t-test value of 8,584, in which the value is greater than 1.960 for a two-way test with an error rate of =5%, so the statistical hypothesis which states there may be no effect direct relationship among Self-service technology (X2) and customer loyalty (Y2) is rejected. This shows that there is a right away and effective influence among self-service technology (X2) on customer loyalty (Y2) of 0.536. The effective effect of self-service technology (X2) on customer loyalty (Y2) may be interpreted that the better self-service technology (X2), will growth of customer loyalty (Y2). Vice versa, the less suitable Self-service technology (X2), then it will lessen customer loyalty

(Y2). This finding is alike to the studies by Girsang et al. (2021) and Proença & Rodrigues (2011).

The connection among customer satisfaction (Y1) and customer loyalty (Y2) indicates a t-test value of 4.486, where the value is more than 1.960 for a -manner take a look at with an error rate of=5% so that the statistical hypothesis which states that customer satisfaction (Y1) has not to influence customer loyalty (Y2) is rejected. It is proven that there may be an immediate and superb impact among customer satisfaction (Y1) on customer loyalty (Y2) of 0.292. The positive influence among customer satisfaction (Y1) on customer loyalty (Y2) can be interpreted that the higher customer satisfaction (Y1), will increase customer loyalty (Y2). The lower the customer satisfaction (Y1) causes the lower the customer loyalty (Y2). These results are also following some previous studies by Djajanto et al. (2019); Ladhari et al. (2008); Park & Park (2018); Sasono et al. (2021); and Zaid & Patwayati (2021) who found that customer satisfaction has a positive impact on customer loyalty.

After knowing the direct impact between variables, then the oblique effect of several exogenous variables on endogenous variables is calculated through a variable. The oblique effect (PTL) may be recognized through the multiplication of the course coefficient values for each variable. Table 3 suggests the hypothesis test out for the indirect impact is executed with the SOBEL test.

<b>Table 3</b> <b>SOBEL TEST ON HYPOTHESIS TESTING FOR THE INDIRECT EFFECT</b>								
<b>Calculate SOBEL for the indirect effect</b>	<b>a</b>	<b>b</b>	<b>ab</b>	<b>sa</b>	<b>sb</b>	<b>sab</b>	<b>t-test</b>	<b>Decision</b>
X1 (WOM) ->Y1(CS) ->Y2 (CL)	0.192	0.292	0.056	0.064	0.065	0.023	2.442***	Significant
X2 (SST) ->Y1(CS) ->Y2 (CL)	0.649	0.292	0.189	0.053	0.065	0.045	4.2***	Significant

Note: \*\*\*t-value>1.960. Significant at the 5% level.

a=path coefficient from variable 1 to variable 2

b=path coefficient from variable 2 to variable 3

ab=(path a) \* (path b)

Sa=standard error of path a

Sb=standard error of path b

Then to test the significance of the indirect influence (PTL), it's miles necessary to evaluate the t value of the ab coefficient with the following equation 2.

$$t = \frac{ab}{Sab} \quad (2)$$

Table 3 shows the indirect effect test a look at above, it can be visible that the direction coefficient value for the indirect impact between word of mouth (X1) via customer satisfaction (Y1) on customer loyalty (Y2) is 0.056 showing a t-test value of 2.442 which is above  $\pm 1.960$  (5%), so reject  $H_0$  and it could be concluded that the indirect effect between phrase word of mouth (X1) through customer satisfaction (Y1) on customer loyalty (Y2) is sizeable. The higher word of mouth (X1), will affect the growth in customer satisfaction (Y1) so that the growth in customer satisfaction (Y1) will influence the increase in customer loyalty (Y2) and vice versa. In

the meantime, the route coefficient value for the oblique impact among Self-service technology (X2) through customer satisfaction (Y1) on customer loyalty (Y2) is 0.189, showing a t-test look at a value of 4.20 which is above  $\pm 1.960$  (5%), so it could be said that the oblique effect of self-service technology (X2) through customer satisfaction (Y1) on customer loyalty (Y2) is substantial. The better Self-service technology (X2), will affect the increase in customer satisfaction (Y1) then the growth in customer satisfaction (Y1) will affect the growth in customer loyalty (Y2), and vice versa.

## CONCLUSION

The study illustrates that customer satisfaction is an important thing that needs to be considered by the company because it will affect customer loyalty which is shown by the transactions made again by the customer. In addition, customer satisfaction and trust after using self-service technology will encourage customers to convey positive information through word of mouth to family or other people who will directly benefit the company. The findings in this study are the positive and significant influence of word of mouth and self-service technology on customer satisfaction. Then, self-service technology and customer satisfaction on customer loyalty. However, word of mouth in this study was found to not affect directly customer loyalty. To maintain customer trust regarding the use of online transactions, providers of self-service technology need to maintain the security and confidentiality of customer data. The findings of this study are expected to provide some additional knowledge in certain marketing areas, especially related to marketing using online system transactions. The limitation of this research is that the sampling area is still limited to using only two cities in Indonesia so that future researchers should be able to develop research in other areas or countries and increase the number of samples as well as by adding new variables or indicators.

## Practical Implication

According to the findings of this research, in order for consumers to feel secure about the level of security when using self-service technology to conduct online transactions, the company or business must increase the level of security in online transactions, guarantee consumer risks, maintain data confidentiality, and ensure that it is not stolen by third parties. Given that customer confidence in using self-service technology is heavily influenced by word of mouth, companies or businesses in Indonesia must continue to educate the public about increasingly advanced technology developments and the magnitude of the benefits of using self-service technology to achieve a level of consumer satisfaction. In addition, to increase customer happiness, good and positive word of mouth will also improve consumer loyalty to the company, which is already able to do so.

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