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An Empirical Study on the Factors Affecting Customer Satisfaction and Customer Loyalty in Online Transportation Apps

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Abstract. Maxim is one of the latest technology advancements in the transportation industry that has been operating in Indonesia since 2018. According to the data and first survey of 72 reviews from maxim users. The result showed satisfied and dissatisfied customers in giving reviews and ratings, several customers who provided reviews were discussed about the quality of service, social media marketing, and prices. In the dissatisfied review, most customers complained about maxim application. Such as, user interface looks slightly confusing, the maps are inaccurate, and driver did not understand the way to reach the destination. Moreover, it could be one of the causes customers will leave Maxim. Therefore, this study will determine what factors influence customers to gain satisfaction and loyalty level in maxim applications. The analysis of this research uses SEM-PLS algorithm to measure the impact of the quality of service, price, and social media marketing on customer loyalty whereby customer satisfaction acts as a mediating variable. This research concludes that 3 of the seven hypotheses are accepted. Theoretically, service quality is a construct that affects customer loyalty significantly. Then, social media marketing has an impactful effect for customer satisfaction. Practically, based on study results, maxim can build an impactful strategy in conducting digital marketing, such as creating innovative content to attract customers then posting frequently through social media. For further research, it would be great to add another social media marketing indicator considered relevant to customer satisfaction and loyalty in online transportation apps.

Keywords: Online Transportation, Maxim, Customer Satisfaction, Customer Loyalty, SEM-PLS.

1. Introduction

In recent years, online transportation with rapid adoption and growth has become a daily need. This application functions to identify the pick-up location, then take it to the destination with the shortest path, then calculates the total cost of the trip depending on time and distance traveled. Maxim is one of the latest technology advancements in the transportation industry that has been operating in Indonesia since 2018. Starting from June 2018 to early 2020, Maxim managed users to increase up to 31 times. The increase occurred in June 2019, when users were still below 100,000, however in July 2019, users increased to 100,000 users. It doesn't take long, within a month, namely in August 2019. Maxim users reached more than 150,000 in the following months. Maxim users have increased up to 31 times (Maxim Coorporation, 2020).

Maxim is increasing popularity in Indonesia and announced that it had completed more than 16 million orders and the largest number of orders was obtained from maxim bikes. With order acquisition of 70% of the total order, followed by the number of orders from Maxim car with a percentage of 24.5% and in third place, there is maxim delivery which contributes to the number of orders as much as 2% (Warta Ekonomi, 2020). Moreover, Maxim has also expanded operations in several regions in Indonesia. Now the citizen of Bekasi, Depok, Tangerang, and Bogor can use Maxim's services. After successfully opening branches in these four cities, Maxim is committed to continuing to provide online transportation services.

Nevertheless, Maxim has gained awesome achievements in increasing the number of users. There are some opinions regarding the fare offered. Several users are considered too cheaper by the distance traveled, and another one encourages Maxim not to raise the rate on the applications. According to the survey of 72 reviews of the maxim service's users on two different platforms, namely the play store and the app store, it shows the results of the identification is affected customer satisfaction. This identification is carried out from satisfied and dissatisfied customers in giving bad reviews and ratings.

Several customers who provided reviews discussed the quality of service, facilities, and prices. On the other hand, the dissatisfied review, the most customers complained about the quality of service both from the maxim application and maxim bike services. Such as user interface looks slightly confusing, the maps are inaccurate, the waiting time to get a driver is long, and driver not able to understand the way to the destination. Therefore, it is necessary to identify the factors that will be influenced towards customer satisfaction in maxim apps. This is especially for the maxim bike service, which is the most frequently ordered by maxim customers.

From the problems, the research aims to discover what factors influence customers to gain satisfaction and loyalty level in maxim applications. Furthermore, this research provides a several suggestions that can be implemented by Maxim based on the results. Some of the previous studies are focused on online transportation, however there are different kinds of online transportation apps. This research focuses on Maxim apps, especially on Maxim bike service.

2. Literature review

2.1. Online Transportation

Presently, numerous sectors are significantly reliant on technology, whether directly or indirectly, it will include the transportation services sector. A prevalent initiative in public transportation service pertains to integrating Information Technology (IT) to renovate conventional modes of public transportation. This undertaking refers to an online transport service. Online transportation is a transformation from conventional transportation, which is part of the technological development in the field of transportation applications (Mahmud, Soesilowati, Setyowat, & Thriwaty, 2019).

Nowadays, individuals can conveniently select the range of transportation modes available using the smartphone. By using online transportation apps, people can get an estimate of the total costs associated with their upcoming travel plans. Additionally, people feel safer because the application has features that capture the data on the driver and vehicle. (Aziah & Adawia, 2018). Online transportation

in Indonesia began to appear around 2014 to 2015, such as GOJEK, Uber, Grab, and Maxim.

Additionally, online transportation also has benefits for the people of Indonesia. The benefits obtained from online transportation are practical and easy to use, only by using smartphones, the internet, and online transportation applications. We can already order transportation services. The next benefit is transparent, with this online application-based transportation service also allows customers to know for sure every detailed online transportation service information such as driver name, the number of vehicles, driver position to be used, travel to time (Wuisan, Pati, & Wilar, 2020).

2.2. Service Quality

The measurement of the quality of service within a service-based enterprise is commonly called the disparity between the envisaged quality of service and the factual quality of service received (Desiyanti, Sudja, & Martini., 2018). Another conclusion with the concept of service quality stated by (Mahsyar & Surapati, 2020), company who can provide good service to customers. Furthermore, the quality of service might be able to achieve by satisfying the requirements and wishes of customers while precisely delivering beyond or fulfilling their expectations. According to (Ramya, Kowsalya, & Dharanipriya, 2019), service quality consists of five dimensions that must be met, there are reliability, responsiveness, assurance, empathy, and tangibility. As per the findings of the research analysis (Hudda, Fitriyani, & Nurcahyo, 2017) and (Mahsyar & Surapati, 2020) service quality exerts a significant impact on the level of customer satisfaction.

2.3. Price

Price can be defined as the amount of money charged or exchanged for the benefits of using a product or services (Kotler, Wong, Saunders, & Armstrong, 2005). Based on (Sharma & Ch. S, 2015), price is an important element in consumer purchases, and therefore, has a major influence on consumers' judgments about services. However, for most products and services, the potential for price reduction makes business profits decreased (Keiningham, Gupta, Aksoy, & Buoye, 2014). Better the pricing and the higher the product quality, will increase customer satisfaction (Kencana, 2018).

According to Kotler 2012 in (Dimyati & Subagio, 2016) defines Price is a quantifiable dimension that comprises multiple indicators, such as fair price, discounted price, affordable price, competitor price, and price suitability. Then, there are additional indicators based on Kottler and Gary (2008) in (Butarbutar, Efendi, Sudirman, & Lie, 2019) payment method. Then research by (Hutagaol & Erdiansyah, 2019), mentioned four indicators, namely, affordability, price compatibility with product or service quality, price competitiveness, price and benefit conformity.

2.4. Social Media Marketing (SMM)

According to (Sano, 2015), SMM is a framework for e-marketing that can build and maintain good relationships with customers through social media. SMM is an activity to market products or services through social media platforms such as Blogs, Facebook, Twitter, Instagram, and YouTube. This activity is also called a strategy to reach and engage potential customers and to encourage interactions between companies and customers, even between customers (Suharto, Junaedi, Muhdar, Firmansyah, & Sarana, 2022).

Research of (Bismoaziiz, Suhud, & Saparuddin, 2021) reveal indicators in social media marketing are feelings of pleasure, sharing opinions, providing the latest information, and the suitability of information services. Next (Zahara, Rombe, Ngatimun, & Suharsono, 2021) states marketing activities through social media support with relevant information according to the specific needs of prospective customers. It can also help customers to find the information they need easily.

Based on research of Arghashi et al. (2021) in (Suharto, Junaedi, Muhdar, Firmansyah, & Sarana, 2022) The application of social media marketing (SMM) has a considerable impact on enhancing customer satisfaction, customers will feel satisfied after they consume a product or service. However, customer satisfaction does not directly affect customers when they see advertisements on social media.

2.5. Customer Satisfaction

Customer satisfaction is a reaction or response after purchasing a product or service, which is the result of a comparison between expectations before making a purchase and after purchasing (Indrajaya, 2019). In another research regarding customer satisfaction was conveyed by Kotler (2002: 177) in (Indrajaya, 2019) is the emotional response of clients upon receipt of the outcomes derived from their utilization of a specific service or product.

According to Lupiyoadi and Hamdani (2006) in (Butarbutar, Efendi, Sudirman, & Lie, 2019), there are four main factors related to increase customer satisfaction is contingent upon four factors: the quality of products or services, the price of products or services, the convenience of procedures, and consumer support. Then the conclusion of the research conducted by Jamali et al. (2018), Judson et al. (2012), Musa et al. (2016), Nisar et al. (2016) in (Suharto, Junaedi, Muhdar, Firmansyah, & Sarana, 2022) customer satisfaction is often regarded as a significant precursor to achieving customer loyalty. Therefore, users prefer to reuse products or services that provide a good experience according to their expectations. The findings will support the contention that customer satisfaction constitutes a critical determinant and initial step towards building customer loyalty.

2.6. Customer Loyalty

According to (Haryandika & Santra, 2021) creating customer loyalty is a key to the success of a company, but this requires companies to focus on understanding consumer desires and creating added value to the products or services provided so that customers will purchase goods and services from the company continuously. Loyalty predicts the establishment and maintenance of associations between customers and the enterprise.

Trust and commitment are the determining factors for a lasting relationship and build customer loyalty, the goal of customer loyalty is to develop happy customers who will return to buy and even recommend others to use the company's products or services (Hudda, Fitriyani, & Nurcahyo, 2017). Based on (Indrajaya, 2019), customer satisfaction is one of the important indicators in determining customer loyalty. Zeithaml, Parasuraman, and Berry (1996) in (Dimyati & Subagio, 2016) states that there are three indicators of customer loyalty. First, say positive things, provide recommendations, and repurchase intention.

3. Research Methodology

The population of this study was a maxim apps user, especially use maxim bike service at least once. Based on the data from Maxim, included up to 600.000 of total orders from all users in Maxim apps and Slovin technique is the method that used to calculate of the sample size in this study as follows:

$$n = \frac{N}{1 + N.e^2}$$

From the above formula, the error rate of 5% from 95% confidence level with the required number of samples from 600.000 population. Therefore, the result of sample size that used in this study was 400 samples. As following result below:

$$\mathrm{n} = \frac{600000}{1 + 600000 \times (0.05)^2}$$
$$\mathrm{n} = 399.7335$$

After that, the data will be gathered through online questionnaires (Google Forms), there are several question points that need to be answered by respondent. The collected data will undergo thorough evaluation and scoring procedures. The rankings derived from The questionnaire will primarily rely on The Likert scale. The analysis tools of this research use SmartPLS 3.2 which contains data analysis technique, namely PLS-SEM. PLS or Partial Least Square is an alternative method of SEM (Structural

Equation Modeling) based on variance or component-based structural equation modeling, which assumes the research data is distribution-free. The evaluation model in PLS (Partial Least Square) has two stages, there are the outer (measurement) model and the inner (structural) model (Anisa & Tjhin, 2023).

Regarding the research of (Mahsyar & Surapati, 2020) and (Kencana, 2018), the effect on service quality and price towards customer satisfaction is realized through customer needs of delivery accusation in balancing customer expectations. Then a better-price and the higher quality of the product or service, it will increase customer satisfaction more. Moreover, social media marketing has impact to customer satisfaction is provided information according to customer needs. They will be satisfied if the provided information is appropriate when consuming a product or service. However, customer satisfaction does not directly affect customers when they see advertisements on social media (Suharto, Junaedi, Muhdar, Firmansyah, & Sarana, 2022). Therefore, users prefer to reuse products or services that provide a good experience according to their expectations, research by Jamali et al. (2018), Judson et al. (2012), Musa et al. (2016), Nisar et al. (2016) in (Suharto, Junaedi, Muhdar, Firmansyah, & Sarana, 2022). All the reviews above can be described in Figure 1.

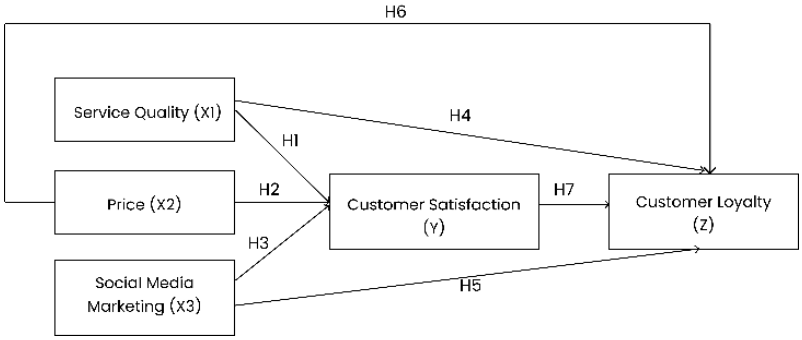

Fig 1: Research Model and Hypothesis

From described the research model and hypothesis on Figure 1, the research hypotheses can be formulated as follows:

H1: Service Quality (X1) towards Customer Satisfaction (Y).

H2: Price (X2) towards Customer Satisfaction (Y).

H3: Social Media Marketing (X3) towards Customer Satisfaction (Y).

H4: Service Quality (X1) towards Customer Loyalty (Z).

H5: Social Media Marketing (X3) towards Customer Loyalty (Z).

H6: Price (X2) towards Customer Loyalty (Z).

H7: Customer Satisfaction (Y) towards Customer Loyalty (Z).

This study was required the measurement of variables that reflect to the questions in the questionnaire. The indicators are:

Table 1: Variable and Indicator

No	Variable	Indicator	Reference
1.	Service Quality (X1)	Feature Accuracy Empathy Tangibility Rapidity Responsiveness Interface Reliability Alternative	(Ramya, Kowsalya, & Dharanipriya, 2019)
2.		Discounted Price	

No	Variable	Indicator	Reference
	Price (X2)	Competitor Price Payment Method E-Wallet	(Butarbutar, Efendi, Sudirman, & Lie, 2019), (Dimyati & Subagio, 2016)
3.	Social Media Marketing (X3)	Up to date Information Suitability Information Sharing Information	(Bismoaziiz, Suhud, & Saparuddin, 2021)
4.	Customer Satisfaction (Y)	Quality of products or services The price of products or services Consumer Support	(Butarbutar, Efendi, Sudirman, & Lie, 2019)
5.	Customer Loyalty (Z)	Say Positive Thing Recommendation Repurchase Intention	Zeithami, Parasuramanand Berry (1996) in (Dimyati & Subagio, 2016).

4. Results and Discussion

The validated data of 400 maxim users who ordered maxim bike service from questionnaire respondents, 255 were male (63.7%), and 145 were female (36.2%). Most of the respondents were aged between 18 and 26 (62%), with the occupation (private employee) (76%), and frequency of using maxim application (less than 3 times a week) was 76.2%. Furthermore, they were aggregated and used with SmartPLS 3.2 program. For the model estimation as shown in Figure 2.

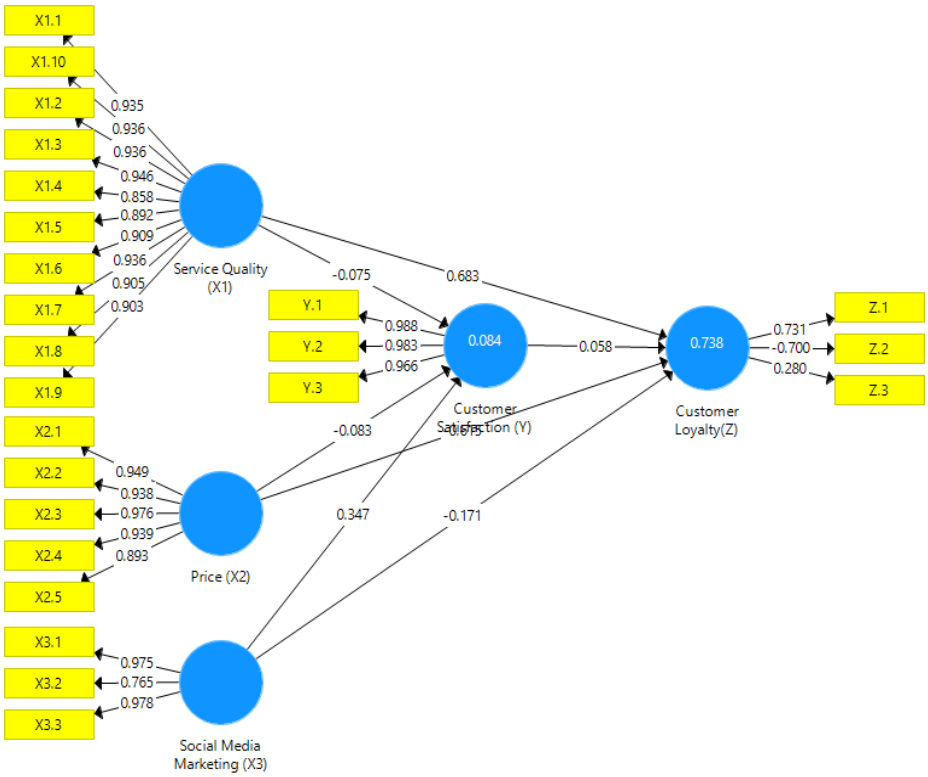

Fig 2: SEM modeling before the PLS Algorithm

In processing data, the assessment of model conducts with the measurement and structural model where the validity and reliability tests.

4.1. Measurement Model

Measurement models (external models) consist of two data that will be evaluated namely, validity and reliability data. The measurement model was assessed in two phases. First, the first-order reflective structures' suitability was assessed. For the convergent validity, we evaluated the value of Loading Factor (LF), AVE, α, and CR. The accepted indicators must have LF value greater than 0.70 (STATCAL, 2019).

Moreover, evaluation of discriminant validity can be done by undertaking a comparative analysis of the square root of AVE with the correlations observed between other constructs encompassed within the model. For AVE, minimum value of variables that can be accepted were between 0.5 or above Fornell & Larcker 1981 in (Ghozali, 2014). Meanwhile, in reliability test consists Composite Reliability (CR) and Cronbach's alpha. All the values of the CR and Cronbach's alpha are above than the cut-off value of 0.7, for all constructs. The testing result is as follows:

Table 2: Construct Validity and Reliability

Variable	Indicator	LF	AVE	CR	CA	Description
Service Quality (X1)	X1.1	0.9337	0.8388	0.9741	0.9688	Valid
	X1.2	0.9342				Valid
	X1.3	0.9459				Valid
	X1.4	0.8576				Valid
	X1.5	0.8941				Valid
	X1.6	0.9104				Valid
	X1.7	0.9346				Valid
	X1.8	0.9061				Valid
	X1.9	0.9035				Valid
	X1.10	0.9348				Valid
Price (X2)	X2.1	0.9389	0.8767	0.9726	0.9665	Valid
	X2.2	0.9498				Valid
	X2.3	0.9779				Valid
	X2.4	0.9461				Valid
	X2.5	0.8651				Valid
Social Media Marketing (X3)	X3.1	0.9633	0.8388	0.9941	0.9882	Valid
	X3.2	0.7983				Valid
	X3.3	0.9671				Valid
Customer Satisfaction (Y)	Y.1	0.9866	0.9584	0.9858	0.9784	Valid
	Y.2	0.9818				Valid
	Y.3	0.9684				Valid
Customer Loyalty (Z)	Z.1	1.0000	1.0000	1	1	Valid

The first order construct customer satisfaction and loyalty in Figure 1 consisted of some indicators with factor loadings under than 0.70. So, two of the three indicators of customer loyalty were removed. Those indicators' value is under 0.70. Based on Table 2 illustrates the results of CR, α, and AVE were valid and reliable.

Then exhibits cross-loading analysis where the related construct's outer loading on the indicator is greater than any of its cross-loadings on other constructs and value will be over 0.7 in each variable. First, we evaluated the result of Fornell-Larcker Criterion in Table 3 constructs, and the value will be over 0.7 on a variable.

Table 3: Fornell-Larcker Criterion

	Z	Y	X2	X1	X3
Z	1.0000				
Y	0.2148	0.9790			
X2	-0.1651	-0.0937	0.9363		
X1	0.8289	0.2631	-0.0859	0.9158	
X3	0.7494	0.2800	-0.0182	0.9468	0.9130

According to Table 3, the maximum value of each variable was right on their construct variable, except the maximum value of Social Media Marketing (X3) was on Service Quality (X1). So, on Social Media Marketing (X3) indicators with the lowest factor loading is Suitability Information (X3.2) will be removed.

Furthermore, the cross-loading values in Table 4 shows 3 indicators from Service Quality (X1) will be removed, since those indicators that related construct's outer loading are above with any of its cross-loadings on other constructs. It will be caused by the lack of cross loading, even if it was greater than 0.7. Therefore, in Table 4, indicator Accuracy (X1.2), Responsiveness (X1.7), and Reliability (X1.9) were removed.

Table 4: Cross Loading

	Z	Y	X2	X1	X3
X1.1	0.7121	0.2654	-0.0634	0.9337	0.8641
X1.10	0.7133	0.2691	-0.0670	0.9348	0.8653
X1.2	0.7338	0.2793	-0.0841	0.9342	0.9942
X1.3	0.7796	0.2160	-0.0880	0.9459	0.8572
X1.4	0.6737	0.1679	-0.0694	0.8576	0.7582
X1.5	0.7586	0.2798	-0.0264	0.8941	0.7989
X1.6	0.7450	0.1780	-0.0667	0.9104	0.8619
X1.7	0.7279	0.2692	-0.0814	0.9346	0.9941
X1.8	0.7726	0.2491	-0.0675	0.9062	0.8168
X1.9	0.9249	0.2274	-0.1559	0.9035	0.8027
X2.1	-0.1045	-0.0645	0.9389	-0.0640	-0.1031
X2.2	-0.1784	-0.1021	0.9498	-0.1019	-0.0462
X2.3	-0.1612	-0.0712	0.9779	-0.0759	-0.0651
X2.4	-0.1915	-0.1120	0.9461	-0.0886	-0.1084
X2.5	-0.0299	-0.0557	0.8651	-0.0306	-0.0719
X3.1	0.7279	0.2692	-0.0814	0.9346	0.9941
X3.3	0.7338	0.2793	-0.0841	0.9342	0.9942
Y.1	0.1937	0.9869	-0.1020	0.2306	0.2468
Y.2	0.2141	0.9820	-0.1033	0.2419	0.2411
Y.3	0.2203	0.9680	-0.0732	0.2927	0.3144
Z.1	1.0000	0.2147	-0.1651	0.8289	0.7352

4.2. Structural Model

There is also a hypothesis test through path coefficient is as shown in Figure 3.

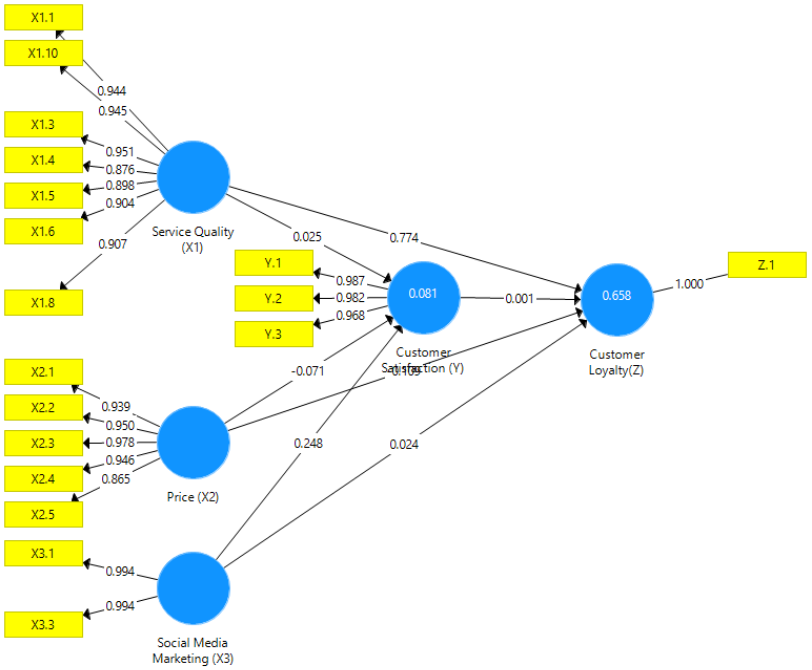

Fig 3: Hypothesis Testing

The hypothesis testing findings are presented in Table 5 in summary form, given the path coefficients that indicate the parameter coefficients and the t-value of statistical significance, we can ascertain the following. For 95% confidence level with 5% Alpha, then the t-statistic value is > 1.96. The path coefficient shows that the hypothesis is acceptable which has value is < 0.05.

Table 5: T Statistic and P Values

		T Statistics	P Values	Result
H1	X1 -> Y	0.2038	0.8386	Rejected
H2	X2 -> Y	1.5065	0.1326	Rejected
H3	X3 -> Y	2.0167	0.0443	Accepted
H4	X1 -> Z	6.8430	0.0000	Accepted
H5	X3 -> Z	0.2096	0.8341	Rejected
H6	X2 -> Z	3.8300	0.0001	Accepted
H7	Y -> Z	0.0303	0.9758	Rejected

Based data on Table 5 illustrates the t-statistics and p-values showing the effects among the study variables mentioned. There are 3 influential hypotheses, social media marketing towards customer satisfaction, service quality towards customer loyalty, and price towards customer loyalty. This research indicates to several conclusions, which are discussed which 3 out of 7 hypotheses were accepted, specifically for:

H1: Service Quality on Customer Satisfaction

Based on hypothetical results, it was found that the p value was 0.8386 > 0.050 and t statistic 0.2038 < 1.96, From this, it was concluded that the quality of service exerts a favorable influence on customer satisfaction, however it is not significant. Therefore, the hypothesis was rejected.

This contradicts with previous research by (Hutagaol & Erdiansyah, 2019) and (Sharma & Ch. S, 2015) which states that service quality effects on satisfaction where currently the horrible service quality in Maxim causes customers to feel dissatisfied. The best recommendations that can provide to Maxim offerings are to improve service quality both in apps and service side. For instance, Maxim can create proper features and design for the application. So, the information and functionality in Maxim apps is

presented clearly then user can feel more comfortable when use Maxim.

H2: Price on Customer Satisfaction

Based on hypothetical results, it was found that the p value was 0.1326 > 0.050 and t statistic 1.5065 < 1.96, so it was concluded that price has a positive influence on customer satisfaction, albeit not a statistically significant one. Therefore, this hypothesis was rejected.

These results were found to be in alignment with a previous study carried out by (Butarbutar, Efendi, Sudirman, & Lie, 2019) which establishes that price has an insignificant impact on customer satisfaction. However, it was not in accordance with previous studies conducted by (Khuong & Dai, 2016) indicates that price has a large impact on customer satisfaction. Therefore, the price of maxim still cannot reach customer satisfaction. The recommendation for Maxim, for example, is to match price to the service quality or provide promos such as discount during certain events.

H3: Social Media Marketing on Customer Satisfaction

The third hypothesis proves that Maxim's social media marketing has a large positive effect towards customer satisfaction, is accepted. The acceptance of third hypothesis indicates that t-statistic 2.0167 > 1.96 and p-value 0.0443 < 0.05.

These findings concur with past studies by (Junaedi, Muhdar, Firmansyah, & Sarana, 2022) and (Sano, 2015) which state that the activity of SMM might can increase customer satisfaction. This shows that by managing social media with setting the target market appropriately, it will lead to an increase customer satisfaction. Therefore, maxim does more innovative marketing through social media consistently.

H4: Service Quality on Customer Loyalty

The fourth hypothesis proves that Maxim's quality was impactful to the satisfaction is acceptable. This proven by t-statistic 6.8430 > 1.96 and p-value 0.0000 < 0.05. The findings presented here are congruent with prior investigations carried out by (Dimyati & Subagio, 2016) and (Hutagaol & Erdiansyah, 2019) which state that service quality exhibits a positive influence upon the establishment of customer loyalty.

This shows that great service quality increases customer loyalty. At the time, if service quality was not satisfied, customers wouldn’t be loyal. Suggestions that may be made to pay more attention to the service quality like driver attitude to lead customer loyalty.

H5: Social Media Marketing on Customer Loyalty

The results of hypothesis test indicates that p-value was 0.2096 > 0.050 and t statistic 0.8341 < 1.96, therefore it was concluded that SMM positively influenced by CS, but not significant. Therefore, this hypothesis was rejected.

There is not like the research of (Sano, 2015) which explains, the importance of social media marketing activities has an effect to customer loyalty. It is suggested that by implementing good strategy to conduct digital marketing for the Maxim application through social media. For instance, Maxim pays more attention to the characteristics of the audience, demographics of the location, determining the types and ideas of what content is considered sufficient to attract the attention of maxim user.

H6: Price on Customer Loyalty

The result of hypothesis test prove that price has a positive impact towards customer loyalty, is accepted. The acceptance is indicated by t statistic 3.8300 > 1.96 and p value 0.0001 < 0.05. This is consistent with last studies conducted by (Dimyati & Subagio, 2016) and (Butarbutar, Efendi, Sudirman, & Lie, 2019) which states that price is directly affected by customer loyalty.

This may indicate that the better price (matching service quality, affordable, competitive) in customer's point of view, it leads to increased customer loyalty. However, the worst the price, will lead to lower customer loyalty and they will not use maxim application as their online transportation. It is suggested that Maxim should provide the better price without downgrade the service quality itself.

H7: Satisfaction on Customer Loyalty

Based on the hypothesis test results, p-values were determined 0.9756 > 0.050 and t-statistic 0.0303 < 1.96. Customer loyalty has been discovered to be improved from social media marketing, but this effect is not impactful. Therefore, this hypothesis was rejected.

This finding deviates with the previous research of (Indrajaya, 2019) and (Permana, 2020) where the impact of customer satisfaction on customer loyalty is highly significant. With the creation of satisfaction, it can make customers loyal to use products or services.

However, in this study, the level of consumer satisfaction was not met in the maxim application. This causes disloyal customers to use the services on the maxim application. This may prevent Maxim's performance from exceeding expectations in response to customer requirements. From this point of view, the Maxim customers don't have a high satisfaction and delight, so it makes them not to be a loyal customer.

5. Conclusions

In conclusion, there are several points that were formed based on research's results as follows:

1. SMM activities have a direct influence towards customer satisfaction significantly, the service quality influences customer loyalty in Maxim Application directly and significantly, and price has positive effect towards customer loyalty.
2. Several variables have a positive influence, but not significant to increase satisfaction. Service quality towards customer satisfaction, price towards customer satisfaction, SMM towards customer loyalty, and customer satisfaction on loyalty.

The results of hypotheses test indicate that several points can be considered for Maxim to increase customer satisfaction and loyalty, especially in maxim apps as research's recommendation as follows:

1. The impact of service quality in Maxim apps is a noteworthy determinant in relation to customer loyalty. As the suggestion, Maxim should be focused on the service quality in their apps, such as increasing the level of accuracy of maps on the Maxim application to find pick-up points, by integrating with Google Maps.
2. This study finds out that social media marketing is the most influenced factor on customer loyalty. Furthermore, Maxim can build the right strategy in conducting digital marketing, such as creating innovative and impactful content to attract customers then post frequently through social media.

For practitioners, the results of this study have implications while discovering factors to increase customer satisfaction and loyalty in Maxim applications. However, the next researchers can complete the limitations of this research by adding other social media marketing indicators considered relevant to customer satisfaction and loyalty in online transportation apps.

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