



The Effect of Service Quality and Product Facilities on Consumer Satisfaction with Prices (Toll Free) as Intervening Variables (Case Study on Jasa Marga Mabar 1 Toll Gate)

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ABSTRACT

This study aims to determine the effect of service quality and product facilities on consumer satisfaction with tariffs (toll fees) as an intervening variable (Case Study on Jasa Marga Mabar 1 Toll Gate). This type of research is quantitative research. The population in this study is 118 thousand vehicles and the total sample is 100 toll net users. The data analysis technique in this study used multiple regression data analysis and hypothesis testing. The results of this study are the quality of service has a positive and significant effect on toll rates at the Mabar toll gate 1. Service quality has a positive and significant effect on consumer satisfaction at the Mabar toll gate 1. Product facilities have a positive and significant effect on toll rates at the Mabar toll gate 1. Facilities product has a positive and significant effect on consumer satisfaction at the Mabar toll gate 1. Toll tariffs have a positive and significant effect on consumer satisfaction at the Mabar toll gate 1. Service quality has a positive and significant effect on customer satisfaction through toll rates at the Mabar toll gate 1 Product facilities have a positive effect and significant to customer satisfaction through toll rates

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INTRODUCTION

With the increasing number of people, the need for transportation facilities and the growth of traffic flow have increased, causing congestion and road congestion. For this reason, it is necessary to build an adequate road network to be able to provide optimal services within the required capacity. In addition to road geometric planning, road pavement is part of road planning that must be planned effectively and efficiently. Because the demand for road service levels is getting higher, it is necessary to improve the quality of road systems and infrastructure. Among them is the need for safe and comfortable roads. In addition to the growing population and immigrants in every region in Indonesia, the number of vehicles also increases causing congestion problems, especially during peak hours such as going to work and coming home from work. Arterial roads, which were

previously used as long-distance traffic, have mixed functions, both with collector roads and local roads. This encourages demand for the construction of a barrier-free type of arterial road.

PT. Jasa Marga (Persero), which is a BUMN (State-Owned Enterprise) is a company that provides toll road services in Indonesia for the public interest and is tasked with managing the toll road network in Indonesia and maintaining all toll road sections so that they always function optimally. One of the toll roads being held is the Mabab 1 Toll Road which connects Binjai, Belawan, Tj Morawa, Amplas with a road length of 78 kilometers. Along with the increasing mobility of urban communities for activities, the manager of the Mabab 1 Toll Road, namely PT. Jasa Marga (Persero) must be able to provide good service to its customers. For this reason, the identification of factors and attributes that affect customer satisfaction is very important, to building customer satisfaction with services.

At one of the Mabab 1 toll gates, congestion occurs, where the Mabab 1 toll gate is one of the toll gates that is the entry access from Tanjung Morawa to Medan and vice versa and the majority of Mabab 1 toll gate users are dominated by large vehicles such as trucks, containers, and cars. other large quantities for industrial needs, resulting in prolonged congestion at the entrance of class III. The following is the number of vehicles that enter through the Mabab 1 toll gate throughout 2020.

Table 1. Number of Riders Entering Mabab 1 Toll Road 2020

No	Month	Number of Toll Users
1	January	118.000 vehicle
2	February	123.000 vehicle
3	Maret	110.000 vehicle
4	April	133.000 vehicle
5	Mei	113.000 vehicle
6	June	99.000 vehicle
7	July	98.000 vehicle
8	August	152.000 vehicle
9	September	123.000 vehicle
10	October	117.000 vehicle
11	November	116.000 vehicle
12	December	118.000 vehicle

Congestion that often occurs at this toll gate is during peak hours in the morning and evening working hours. The length of service time when making payment transactions that are not proportional to the arrival rate of vehicles can cause the queues at the toll booths to get longer, while the maximum number of vehicle queues per lane (per substation) is 3 vehicles (standard freeway geometry for toll roads, binamarga 2009) but in fact at the Mabab 1 toll gate every substation the queue of vehicles that will enter is more than 5 vehicles.

The quality of service on each toll road has standards and has been set by the government so that all toll roads have the same quality standards. By Government Regulation of the Republic of Indonesia Number 15 of 2005 concerning Toll Roads, Regulation of the Minister of Public Works of the Republic of Indonesia Number 16/PRT/M/2014 concerning Minimum Service Standards for Toll Roads.

The quality of toll road products can be seen in toll road construction, available facilities, tariff schemes that must be paid, and human resources. The product quality on the Mabab 1 toll road in the research period is:

1. Toll road construction, looking at the environmental conditions around the road construction, it has been designed according to the standard, only the materials used to build hard asphalt roads make vehicle tires wear out quickly and the sound produced is quite noisy.
2. The available facilities are not complete, such as the number of rest areas that are still small so that the distance between the rest areas is still far, there are still many road markings that have

not been equipped, street lights that are not fully available, and there are no Public Fuel Filling Stations (SPBU)

3. The toll tariff scheme, although it already has a standard tariff setting and the results of a government decision, the toll tariffs that must be paid are quite expensive.

Based on a customer satisfaction survey conducted at PT. Jasa Marga North Sumatra, there are still some services that have not reached the standard of satisfaction. Some of these services include handling queues when paying tolls, speed of handling travel disturbances by toll road patrol officers, speed of handling travel disturbances by crane officers, toll road surfaces, toll road lighting, greening along toll roads, toll road information services, police services. Highway (PJR), and handling of traffic violations by PJR. This shows that the services provided by PT. Jasa Marga North Sumatra is still considered not to meet customer satisfaction, this will have a negative impact if the level of customer satisfaction has a very different gap between the perceived service performance and expectations. [1] Lovelock and Wright, 2007 said that if service performance is below expectations, consumers will be disappointed. If service performance is in line with expectations, consumers will feel satisfied. As we know, one of the keys to winning the hearts of customers is to provide the best quality service. an important component that must be considered in providing excellent service quality [2]

To continue to provide quality service PT. Jasa Marga North Sumatra seeks to reduce queues to enter toll gates, jasa marga by preparing e-money payment facilities, this is expected to relieve congestion at toll entry gates, the public can obtain e-Toll Cards in all Bank Mandiri branches, and for the refill process, Bank Mandiri has provided an easy and widespread Top Up Machine through Bank Mandiri branches and toll road operator offices. This card can also be topped up via Mandiri Internet, Mandiri SMS, gas station offices, and through the Indomaret store network. Problems that are often faced by toll road users when top up at merchants appointed by Jasa Marga often experience connection problems and there is no e-toll top-up service via banking transfer, currently, only Bank Mandiri can top up E-toll and has not been spread to other banks. Seeing the conditions that occur, the author conducts research. Based on the above background, the writer is interested in conducting research with the title "The Effect of Service Quality and Product Facilities on Consumer Satisfaction with Tariffs (Toll Fees) as Intervening Variables (Case Study on Jasa Marga Mabar Toll Gate 1.

RESEARCH METHOD

The type of research used in this study is quantitative research. The population in this study are Mabar 1 toll users starting from January 2020 - December 2020 where the population is around 1.42 million with an estimated vehicle crossing the toll road per month 118 thousand vehicles. . The sampling method in this study uses a non-probability sampling method while for data collection techniques with purposive sampling where the individuals used as sampling are those who have experience or knowledge about the research topic. The population (N) is 1,420,000 vehicles and the error rate (e) is 10%, so the number of samples (n) that will be used in this study is 100 respondents. This research was conducted using SPSS version 22 software. The SPSS path analysis model aims to determine the effect of the independent variable on the dependent variable either directly or indirectly.

RESULTS AND DISCUSSIONS

Quality of service on toll rates at Mabar 1 toll gates

It is known that the service quality variable on the toll tariff value of the t-table from the results of n-k-2 ($100 - 2 = 98$) is 1.984. Because the value of t-count > t-table ($3.548 > 1.984$) and a significance value of $0.008 < 0.05$, H_a is accepted and H_o is rejected. This means that part there is a significant influence between service quality and toll rates at Jasa Marga Mabar Toll Gate 1. This study is in

line with research conducted by [12] Trans Ningsih (2019) which stated in its research that toll tariffs have a positive and significant effect on toll road user satisfaction.

Quality of service on customer satisfaction at the Mabar 1 toll gate

It is known that the service quality variable on customer satisfaction, the value of t table from the results of n-k-2 ($100 - 2 = 98$) is 1.984. And the value of t-count $>$ t-table ($2.582 > 1.984$) and a significance value of $0.035 < 0.05$, it can be concluded that the value of H_a is accepted and H_o is rejected. This means that part there is a significant influence on service quality on customer satisfaction at Jasa Marga Mabar Toll Gate 1. This study is in line with research conducted by stating in her research that service quality has a positive and significant effect on toll road user satisfaction at PT. . Jasa Marga (Persero) Tbk Surabaya Gempol Branch.

Product facilities against toll rates at Mabar 1 toll gates

It is known that the product facility variable on the resulting toll tariff of n-k-2 ($100 - 2 = 98$) is 1.984. Because the value of t-count $>$ t-table ($4.301 > 1.986$) and a significance value of $0.000 < 0.05$, H_a is accepted and H_o is rejected. This means that part there is a significant influence between Product Facilities on toll tariffs at Jasa Marga Mabar Toll Gate 1, this research is in line with Government Regulation No. 15 of 2005 article 21 which explains that the Toll Road Regulatory Agency (BPJT) itself is an agency formed by Minister, is under, and is responsible to the minister and his responsibilities include funding activities, technical planning, implementation of construction, operation, and maintenance.

Product facilities on customer satisfaction at the Mabar 1 toll gate

It is known that the product facilities variable on consumer satisfaction, the t-table value from the results of n-k-2 ($100 - 2 = 98$) is 1.984, and the t-count $>$ t-table ($3.518 > 1.984$) and a significance value of $0.001 < 0.05$, it can be concluded H_a is accepted and H_o is rejected. This means that part there is a significant influence between Product Facilities on customer satisfaction at Jasa Marga Mabar Toll Gate 1. This is in line with PUPR Ministerial Regulation No. 10 of 2018 concerning Rest Areas and Services on Toll Roads. For TIP type A, it has a wider area and has complete public facilities including ATMs, toilets, gas stations, health clinics, workshops, minimarkets, prayer rooms, kiosks, parking lots, and green open spaces for restaurants.

Toll rates on customer satisfaction at Mabar 1 toll gates

It is known that the toll rate on consumer satisfaction, the value of t table from the results of n-k-2 ($100 - 2 = 98$) is 1.984. Because the value of t-count $>$ t-table ($8.170 > 1.984$) then, the value of H_a is accepted and H_o is rejected. This means that part there is a significant effect between toll tariffs on consumer satisfaction at Jasa Marga Mabar Toll Gate 1. This research is in line with [13][14][15] where the level of community satisfaction with environmental road construction in Dwikora Village, Medan Helvetia District, Medan .

Quality of service to customer satisfaction through toll rates at Mabar 1 toll gates

It is known that service to customer satisfaction through the F-count tariff is $34.019 > 3.089$ (F table value) and a significance of $0.000 < 0.05$. More precisely, H_o is rejected and H_a is accepted, which means that there is a simultaneous significant effect between service quality and product facilities on customer satisfaction at Jasa Marga Mabar 1 Toll Gate.

Product facilities for customer satisfaction through toll rates

It is known that the value of F table ($df_2 = n-k = 100 - 2 = 98$) then F count is $30.672 > 3.089$ (table F value) and probability is $0.000 < 0.05$. More precisely, H_o is rejected and H_a is accepted, which means that there is a significant effect. There is a simultaneous significant relationship between service quality and product facilities on toll tariffs at Jasa Marga Mabar 1 Toll Gate.

CONCLUSION

Based on the results of analysis obtained through questionnaires distributed to users of the Mabar Gate 1 Toll road, the following conclusions are obtained, Service quality has a positive and significant effect on toll rates at Mabar 1 toll gates. Service quality has a positive and significant effect on customer satisfaction at the Mabar 1 toll gate. Product facilities have a positive and significant effect on toll rates at Mabar 1 toll gates. Product facilities have a positive and significant effect on customer satisfaction at the Mabar 1 toll gate. The toll tariff has a positive and significant effect on customer satisfaction at the Mabar 1 toll gate. Service quality has a positive and significant impact on customer satisfaction through toll rates at the Mabar 1 toll gate. Product facilities have a positive and significant impact on customer satisfaction through toll rates.

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