

Customer Switching Behavior of Patimban Port Service Users

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ABSTRACT

Tanjung Priok Port has been experiencing cargo congestion and a slowdown in the flow of goods, resulting in bottlenecks and congestion around the port. Patimban Port as the national strategic project is expected to synergize with Tanjung Priok Port and offer a solution to the problem. However, customer's switching from Tanjung Priok to Patimban remains low. The research aims to analyze the performance of port operational services, competitiveness between ports, and customer's switching behavior from Tanjung Priok to Patimban Port. Qualitative research was adopted with data collection taken from literature study, observation, and interviews. This study utilized the qualitative descriptive analysis method and two-round Delphi method for data analysis. The research results demonstrate that the operational service performance of Tanjung Priok Port and Patimban Port is satisfactory. In addition, Tanjung Priok Port shows superior competitiveness than Patimban. The competitive advantages offered by Tanjung Priok Port include facilities and capacity, easy road access, and port digitalization; meanwhile, Patimban Port offers advantages in terms of loading and unloading speed and more competitive rates. The switching of customers from Tanjung Priok Port is relatively not optimal due to service quality, loading and unloading speed, road accessibility, and logistics costs. Policy stimulus and promotional strategies are therefore necessary to encourage customer's switching behavior.

Keywords: port operational service performance; port competitiveness; customer's switching behavior

A. Introduction

Tanjung Priok Port facilitates a large number of transactions, though it is also the place where goods delivery slow down the most (Septi Utami, 2015). This is due to various factors, including the density of goods flow at the port, dense traffic conditions around the port, trucking delays, disruption to the auto gate system and network (Verawati et al., 2022). Such density and slowdown in the flow of goods at Tanjung Priok Port eventually created accumulation in storage warehouses

and subsequently excess capacity in the Tanjung Priok Port area (Andara & Mulyono, 2020; Pramono et al., 2022; Suprata et al., 2020; Verawati et al., 2022).

To address the problem of excess capacity at Tanjung Priok Port, the government provides strategies and solution through Patimban Port (Iryana, 2018). Patimban Port as the national strategic project is expected to synergize with Tanjung Priok Port and offers a solution to this problem. Patimban Port is not meant to compete with Tanjung Priok Port, but to complement and collaborate with

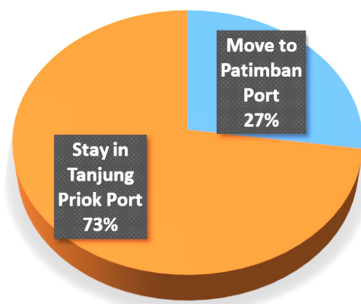
Tanjung Priok Port in answering the problem of its density and overcapacity (Malisan, 2017). However, Patimban Port only operates a vehicle terminal with a total capacity of 218,000 CBU, while the container terminal at Patimban Port is not yet functioned. There are significant differences between Patimban Port Master Plan and the implementation of current activities.

Patimban Port is expected to assist and synergize with Tanjung Priok Port in addressing overcapacity problems and supporting both domestic and international logistics activities. However, previous research conducted by Kansil and Fadillah (2022) identified that 72.7% of the total respondents were not interested in moving to Patimban Port.

Currently, logistics activities are predominantly centered at Tanjung Priok Port and there has been no significant switching towards Patimban Port. This shows that Patimban Port is not yet in demand by service users and Tanjung Priok Port remains the main choice. Intention to move ports from Tanjung Priok to Patimban is low due to several factors, such as road access, travel time, operational costs, loading and unloading time, and terminal services (Kansil & Fadillah, 2022). Therefore, several stimulus factors are required to trigger the switching behavior naturally.

According to Prasetya (2020), switching behavior is a pattern of moving from one brand to another brand. Brand switching is a phenomenon that often occurs in various markets, especially perfectly competitive markets where there are various types of similar products competing, making it easier for consumers to choose and achieve consumer satisfaction. Switching behavior is a concept of change when the next purchasing opportunity occurs, consumers move to another competing option rather than the option they usually buy (Pieters et al., 2019). Consumers generally remain loyal to their initial choice if they feel that they are still getting a greater benefit or value compared to those offered by competitors. Customer switching behavior

Customer Switching Intention



Source: (Kansil & Fadillah, 2022)
Figure 1 Customer Switching Intention

RESEARCH DESIGN

Condition of Tanjung Priok Port
1. Existence of Overcapacity and Load Density
2. Slowdown in the flow of goods at the port
3. Port Entrance/Exit Bottleneck
4. Congestion around the port
5. Logistics Costs Increase

ANALYSIS OF CUSTOMER SWITCHING BEHAVIOR AMONG PORT USERS (CASE STUDY OF PATIMBAN PORT)

Patimban Port National Strategic Project
1. Reduce Logistics Costs
2. Strengthening Economic Resilience
3. Reduce traffic jams in Jakarta

Customer Switching from Tanjung Priok Port to Patimban Port

Analysis of Customer Switching Behavior
1. Port Service Performance
2. Port Competitiveness
3. Port Customer Switching Behavior

Optimizing Customer Switching from Tanjung Priok Port to Patimban Port
1. Increasing Port Competitiveness
2. Port Customer Switching Behavior Stimulus

Figure 2 Research Design

can be explained using the concept of push-pull-mooring theory developed by Bansal et al. (2005), which states that switching is influenced by three main factors, namely push factors that encourage customers to switch from old service providers, pull factors that attract customers to switch to a new service provider, and mooring factors that prevent customers from switching.

Based on those explanation, the author is keen to analyze customer's switching behavior on port service users, using Patimban Port as the case study. The research design detailed as follows:

B. Methods

Qualitative research is used in this study, with data collection was taken from literature study, observation and interviews. The author determined the research subjects using purposive sampling technique. The participants were not selected randomly. They follow some selection criteria that are: (1) Participants are parties related to ports at Tanjung Priok Port and Patimban Port, (2) Participants have more than two years' experience in the port and transportation sector.

These criteria refer to participants who are part of the port authority in the port sector, who became key informants in this study. In addition, these criteria are also applied to shipping companies and agencies as port service users, who subsequently became informants for this study.

The research was carried out in Jakarta and West Java, especially in Tanjung Priok Port and Patimban Port areas. The data were collected within a two-month period, from November to December 2023. Qualitative descriptive analysis method was adopted by conducting observation, interviews, literature study and documentation, and two round Delphi method. The Delphi analysis method is a qualitative research method used to obtain opinions from experts about a particular phenomenon. In this case, the Delphi method

was used due to the incomplete available phenomenon information and the necessity of expert views from various perspectives.

C. Results and Discussion

1. Port Operational Service Performance

Port operational service performance standards are determined by each port authority and vary at each port according to the facilities, functions and size of the port which are evaluated every year. To assess the performance of port operational services, indicator guidelines listed in the Decree of the Director General of Sea Transportation No. UM002/38/18/DJM.11 are generally referred to.

Service performance measurement of Tanjung Priok Port is carried out using standard operational service performance standards in accordance with the Decree of the Head of the Tanjung Priok Main Port Authority Office Number HK.206/2/11/OP.TPK-2021, which is currently divided into 10 operator terminals, including different of work areas with details as presented in Table 1 below.

From the results of the analysis of 10 terminals at Tanjung Priok Port, it can be concluded that the performance of operational services at Tanjung Priok Port is satisfactory and is currently in accordance with the performance standard targets stipulated in the Decree of the Head of the Tanjung Priok Main Port Authority Office Number HK.206/2/11/OP.TPK-2021 concerning Port Operational Service Performance Standards at Tanjung Priok Port.

Service performance measurement of Patimban Port is carried out using its operational service performance standards, which are currently based on vehicle terminal operational services. However, due to limited data, the data obtained for the study only include performance data on the utilization of Patimban Port vehicle terminal facilities and equipment as presented in Table 2 below.

Based on Table 2, it can be stated that the operational services at Patimban Port is

Table 1 Tanjung Priok Port Operational Service Performance

Indicators	I. Ship Services			II. Loading and Unloading Services			III. Utilization of Facilities and Equipment			
	Waiting Time	Ap- proach Time	ET : BT (%)	Produc- tivity (T/G/J) / (B/C/H)	Re- ceiving Con- tainer	Delivery Container	BOR (%)	SOR (%)	YOR (%)	Equipment Readiness (%)
1. JICT										
Standard	0.91	1.90	85.00	26.00	85.00	117.00	70.00	-	65.00	80.00
Avg. 2023	0.46	1.33	91.14	25.46	95.25	104.46	48.12	-	43.50	97.87
Evaluation	Good	Good	Good	Pretty Good	Not Good	Good	Good	-	Good	Good
2. TPK Koja										
Standard	0.91	1.70	85.00	24.00	60.00	120.00	70.00	-	65.00	80.00
Avg. 2023	0.38	1.37	92.67	24.06	49.34	95.39	56.97	-	43.67	89.94
Evaluation	Good	Good	Good	Good	Good	Good	Good	-	Good	Good
3. NPCT 1										
Standard	0.91	2.00	85.00	26.00	60.00	75.00	70.00	-	65.00	80.00
Avg. 2023	0.36	1.56	86.36	30.04	37.18	40.32	41.91	-	34.91	99.00
Evaluation	Good	Good	Good	Good	Good	Good	Good	-	Good	Good
4. MAL										
Standard	0.91	1.60	75.00	23.00	30.00	60.00	70.00	-	65.00	80.00
Avg. 2023	0.33	1.30	77.27	24.91	19.18	33.00	32.91	-	53.27	89.27
Evaluation	Good	Good	Good	Good	Good	Good	Good	-	Good	Good
5. IPC TPK Area I										
Standard	0.91	1.90	55.00	18.00	57.00	60.00	60.00	-	60.00	70.00
Avg. 2023	0.58	1.18	66.25	20.66	21.46	25.32	18.52	-	21.27	94.90
Evaluation	Good	Good	Good	Good	Good	Good	Good	-	Good	Good
6. IPC TPK Area II										
Standard	0.91	1.90	70.00	22.00	57.00	60.00	60.00	-	65.00	80.00
Avg. 2023	0.58	1.18	75.80	22.87	26.74	48.70	17.56	-	41.74	94.79
Evaluation	Good	Good	Good	Good	Good	Good	Good	-	Good	Good
7. PTP Wilayah I										
Standard	0.91	1.90	67.00	67.00	-	-	70.00	70.00	65.00	80.00
Avg. 2023	0.63	1.16	56.15	118.33	-	-	51.00	5.30	19.50	99.12
Evaluation	Good	Good	Not Good	Good	-	-	Good	Good	Good	Good
8. PTP Wilayah II										
Standard	0.91	1.90	67.00	75.00	-	-	70.00	70.00	65.00	90.00
Avg. 2023	0.63	1.16	77.79	78.19	-	-	49.81	29.26	11.06	99.12
Evaluation	Good	Good	Good	Good	-	-	Good	Good	Good	Good
9. IKT										
Standard	0.91	2.00	70.00	125.00	-	-	70.00	-	65.00	85.00
Avg. 2023	0.33	1.33	75.80	181.07	-	-	49.86	-	50.16	98.09
Evaluation	Good	Good	Good	Good	-	-	Good	-	Good	Good
10. PNP										
Standard	1.00	2.00	65.00	18.00	57.00	60.00	60.00	-	65.00	80.00
Avg. 2023	0.62	1.21	65.57	20.05	23.60	49.74	49.34	-	47.30	81.25
Evaluation	Good	Good	Good	Good	-	-	Good	-	Good	Good

Table 2 Patimban Port Operational Service Performance

Indicators	III. Utilization of Facilities and Equipment			
	Terminal	BOR (%)	SOR (%)	Equipment Readiness (%)
1. Vehicle				
Standard		70.00%	-	80.00%
Average		19.89%	-	43.96%
2023				
Evaluation		Good	-	Good

considered satisfactory and is in accordance with the stipulated performance standard targets.

2. Competitiveness Between Ports

Evaluation of port competitiveness is based on port efficiency, with the ultimate objective of increasing port operator income and reducing costs incurred by port users (Rosyidi, 2019). The more effective and efficient a port is, the higher competitiveness of that port compared to others. Ports are monopolistic markets, competitiveness is therefore an essential factor. Service users tend to use ports with high competitiveness as competitiveness improves port services and provides more competitive logistics costs (Purnomo, 2021).

Based on the interview with Tanjung Priok Port Authority, the port offers three competitive advantages compared to Patimban. First, it has competitive advantages in port facilities and capacity. Tanjung Priok Port currently has more comprehensive facilities than Patimban Port. In terms of facilities, Tanjung Priok Port is superior to Patimban Port. Second, Tanjung Priok Port has better road access. Currently, there are many toll roads that help and facilitate access to Tanjung Priok Port, providing shorter distance from the industrial centers to Tanjung Priok Port. The third competitive advantage is port digitalization. Document processing at Tanjung Priok Port has been integrated online through smart ports and National Logistics Ecosystem (NLE) concepts. Smart ports and NLE are digital services developed to improve

connectivity in port areas to reduce waiting times and speed up loading and unloading process at the port. This is in line with research conducted by Almada and Fitri (2018).

Results of interviews with Patimban Port Authority suggest two competitive advantages of the port. First, Patimban Port offers faster speed of loading and unloading services. Patimban Port is classified as a new port, where the intensity of service users and the flow of goods is relatively low. Therefore, loading and unloading services at Patimban Port are fast and the flow of goods movement at the Port are relatively smooth. Second, Patimban Port offers more competitive rates. One of the strategies used to attract new service users is the promotion of tariff discounts and subsidies to reduce total costs in the hope that service users will eventually move to Patimban Port. Port service rates are an important consideration for users when determining the choice of port to use (Purnomo, 2021). Competitive tariffs from ports not only increase the competitiveness of the ports themselves, but can also increase the competitiveness of port service users as lower logistics costs enable service users' product prices to be more competitive (Miftach, 2018). Competitive tariffs will increase the competitive advantage of ports and this is in line with research conducted by Rosyidi (2019).

The results of this research on competitiveness are in accordance with the concept of resource-based view theory which states that the resources owned by a company that can be managed and utilized well by a

Table 3 Patimban Port Master Plan

Patimban	Year	Port Master Plan
Phase 1-1	2018-2021	Container Terminal Length 420m
		Container Yard Area 35 Ha
		Container Capacity 250.000 TEUs
		Vehicle Terminal Length 300m
		Vehicle Yard Area 25 Ha
Phase 1-2	2021-2023	Vehicle Capacity 218.000 CBU
		Container Terminal Length 1.740m
		Container Yard Area 66 Ha
		Container Capacity 3.750.000 TEUs
		Vehicle Terminal Length 390m
Phase 2	2024-2025	Vehicle Yard Area 25 Ha
		Vehicle Capacity 600.000 CBU
Phase 3	2026-2027	Container Capacity 5.500.000 TEUs
		Container Capacity 7.500.000 TEUs

company can provide a competitive advantage in efforts to compete between companies. Both ports have their respective competitive strengths and advantages in providing the best service and competitive prices for service users. However, port authorities do not compete among themselves because they act as instructed by the Ministry of Transportation. Tanjung Priok Port synergizes and collaborates with Patimban Port to divide port service areas, so that each region receive good port services, as well as overcoming congestion problems by making efforts to distribute cargo equally according to the capacity at each port.

Inter-port competition only takes place at the operator level, where each service provider operator has its own advantages and implements competitive strategies that are profit-oriented. There is no competition at the policy level between port authorities. Each port authority focuses on providing safe and comfortable ports. The division of port service areas has been determined, but service users are given the freedom to choose the port.

The competitiveness of a port is also influenced by the hinterland and the potential of industrial areas around the port. The hinterland and harbor areas are inseparable

and indirectly influence each other. The development of industrial economic areas around ports triggers the development of service facilities and port capacity, and vice versa. Improving port services and developing port capacity can also trigger economic growth and industrial areas in the port hinterland.

3. Customer's Switching Behavior of Port Service Users

Patimban Port is currently experiencing delays in the implementation and realization of its port master plan. The initial plan for the 2017 Patimban Port Master Plan states that Phase 1-1 and Phase 1-2 will be completed in 2023. However, when this research was carried out in 2023, Patimban Port had only implemented Phase 1-1, while Phase 1-2 was still under construction as seen in Table 3. Meanwhile, we can see the Tanjung Priok Port Master Plan in Table 4. Tanjung Priok Port focuses on developing container and multipurpose ports, while Patimban Port is expected to be able to synergize with Tanjung Priok Port in serving the demand for vehicle and container terminal capacity in West Java. Until now, the operation of Patimban Port does not appear to be optimal. Therefore, it is necessary to

Table 4 Tanjung Priok Port Master Plan

No	Commodity/Area	Unit	Existing	Short Term (2023-2027)	Intermediate (2023-2032)	Long Term (2023-2042)
1	Containers	TEUs/Year				
a	Kalibaru New Priok					
	- CT 1		1,500,000	1,500,000	1,500,000	1,500,000
	- CT 2		-	1,500,000	1,500,000	1,500,000
	- CT 3		-	-	-	1,500,000
b	IPC TPK Area I		1,910,000	1,910,000	1,910,000	1,910,000
c	IPC TPK Area II		600,000	600,000	600,000	600,000
d	JICT		2,500,000	2,500,000	2,500,000	2,500,000
e	TPK KOJA		1,000,000	1,000,000	1,000,000	1,000,000
f	MAL		300,000	300,000	300,000	300,000
g	Cabang Tanjung Priok		8,532	482,949	1,171,582	2,320,033
	Total		7,818,532	9,792,949	10,481,582	13,130,033
2	Multipurpose	Ton/Year				
a	PTP Wilayah 1		11,694,955	11,694,955	11,694,955	11,694,955
b	PTP Wilayah 2		18,028,080	18,028,080	18,028,080	18,028,080
c	Cabang Tanjung Priok		3,127,676	5,541,626	6,748,601	17,725,106
d	Kalibaru New Priok (PT 1)		-	445,000	445,000	445,000
e	Kalibaru New Priok (PT 1)		-	-	-	445,000
	Total		32,850,711	35,709,661	36,916,636	48,338,141
3	Car Terminal	Unit/Year				
a	IKT		956,736	956,736	956,736	956,736

carry out an analysis of the implementation conditions through the switching behavior of service users from Tanjung Priok to Patimban Port.

The switching of port service users was analyzed using Delphi method due to the lack of previous research regarding the concept of customer switching at ports and the lack of information on the phenomenon of user switching behavior from Tanjung Priok port to

Patimban port. The Delphi method was utilized as an effort to gather expert views from various perspectives to examine switching behaviors of customers from Tanjung Priok Port to Patimban Port. The Delphi 2 Round process is relatively complicated with processes shown as follows (Figure 3).

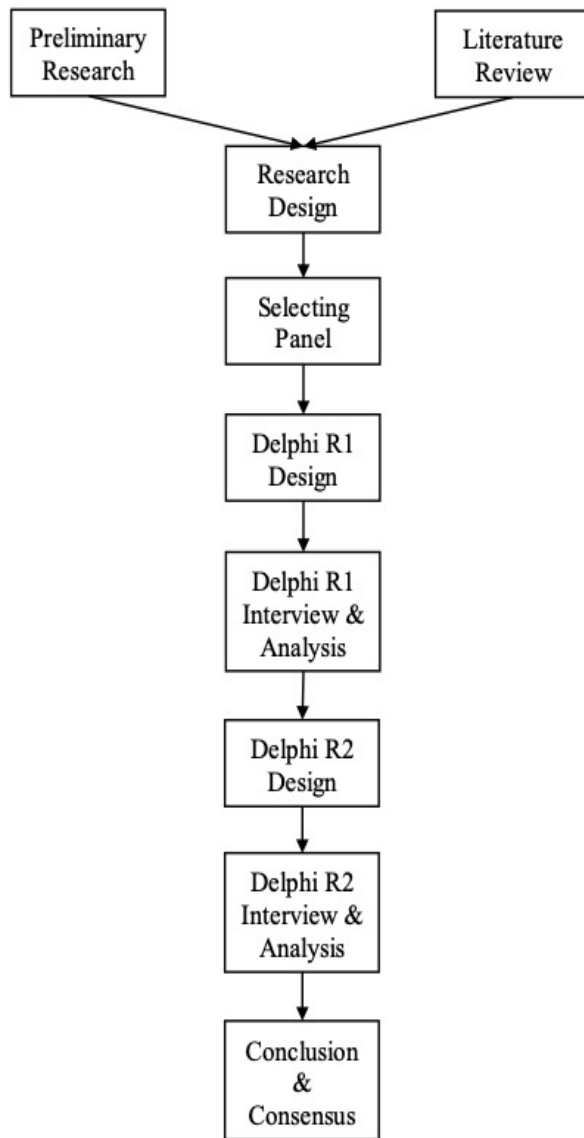


Figure 3 Delphi Analysis Method

The researcher conducted a literature study and preliminary research using unstructured interviews regarding the phenomenon of customer switching behavior from Tanjung Priok Port to Patimban Port. The preliminary research results are in the following: (1) There is an appeal to move routes from Tanjung Priok Port to Patimban Port. (2) Many customers apparently do not want to move from Tanjung Priok Port to Patimban Port. (3) The push-pull-mooring model approach can be used to analyze customer movements from Tanjung Priok Port to Patimban Port

Subsequently, a panel of experts was selected to assist the author in formulating interview guidelines and analyzing research results. Based on the phenomenon to be studied on customer switching behavior at Tanjung Priok Port and Patimban Port, Tanjung Priok Port Authority and Patimban Port Authority, especially those who handle port sector, were selected. In addition, specified participants were also determined to help provide information about this phenomenon, including shipping lines and agencies as they have a broader as well as general view and therefore can summarize and represent customers in the customer switching phenomenon.

After the expert panel was established, the author formulated an interview guide with the expert panel regarding the phenomenon by developing the results of the literature study and preliminary research that had been carried out previously. The formulation produced interview guidelines as follows: (1) There is an appeal to divert Tanjung Priok Port to Patimban. How interests do the users to use Patimban port? (2) Preliminary research concluded that there are users who do not want to switch. Do you agree? Why do some people do not want to switch to Patimban? (3) What factors influence the customer's switching from Tanjung Priok to Patimban?

The interview guide was used for the first round of interviews with key informants and informants, and produced the results of the first round of analysis as follows: (1) There is a route transfer policy to Patimban Port. Interest in changing ports is currently still low, and customers are switching because they are forced to do so as a result of the route transfer policy. (2) There are customers who do not want to switch because Patimban Port has not met their expectations and the accessibility of Patimban Port is not adequate. (3) Road access, depth facilities, tariffs, logistics costs, location, marketing strategy influence the transfer of users from Tanjung Priok Port to Patimban Port.

The analysis results were returned to the expert panel for more in-depth development

and reformulation. The reformulation resulted in improvements and interview guidelines as follows: (1) Is access to the port easy or difficult? (2) How is digitalization aspect of the port? (3) Will there be competition between Tanjung Priok and Patimban Port? (4) Will there be switching of customers from Tanjung Priok to Patimban Port? (5) Are there any regulations/stimulus/policies that can be provided to support port switching? (6) Are there any thoughts/complaints/suggestions/recommendations you would like to convey regarding the plan for Patimban Port as the partner of Tanjung Priok Port?

The interview guidelines were used for the second round of interviews with key informants and informants, and produced the results of the second round of analysis as follows: (1) Access to Tanjung Priok Harbor is relatively easy because there are many route options. Access to Patimban Port is difficult because the toll road is not adequate. (2) Digitalization of Tanjung Priok Port and Patimban Port is already satisfactory. (3) There is a competition to maintain service quality and competitive rates. (4) There will be a transfer when Tanjung Priok Port is full, Patimban road access is available, and logistics costs to Patimban Port are cheaper. (5) Route transfer policy, service work area division policy, tariff discount stimulus, subsidy stimulus, promotion strategies can support port switching. (6) Accelerating the construction of the Patimban Port's access toll road and accelerating the development of the container terminal at Patimban Port are recommendations for Patimban as a partner of Tanjung Priok

The results of the analysis were returned to the expert panel for analysis and formulation in order to reach consensus. The formulation of the first and second rounds resulted in the following consensus below: (1) Current switching is still not optimal and are forced due to route diversions. (2) Road access, logistics costs, service quality and loading and unloading speed influence customer switching. (3) Digitalization is a

standard that must exist in providing better quality service. (4) Competition only occurs at the operator level to maintain service quality and competitive rates, while there is no competition at the authority level to maintain safe and comfortable port operations. (5) Switching will occur in the future, along with the growth of industrial areas. (6) Policies, stimuli and promotional strategies are needed to help new ports and optimize switching. (7) Accelerating the development of road infrastructure and development of Patimban Port is key to synergize with Tanjung Priok Port in addressing problems at Tanjung Priok Port.

Based on the results of the Delphi method analysis, it can be concluded that the switching behavior of customer service users from Tanjung Priok Port to Patimban Port is currently not optimal. The results of this research are in accordance with research of Kansil and Fadillah (2022), which states that the intention to move ports from Tanjung Priok Port to Patimban Port is still low. Despite congestion at Tanjung Priok Port and a slowdown in the flow of goods and traffic jams, most service users still tolerate the problems and are more comfortable using Tanjung Priok Port. In the assessment of service users, the main factor influencing the minimal movement of service users is that the total accumulated logistics costs and road accessibility at Tanjung Priok Port are superior to Patimban Port.

According to an interview with shipping line staff, the density currently occurring in Tanjung Priok is apparently not as bad as projected at the beginning of planning for the development of Patimban. Tanjung Priok Port Authority confirmed that the current demand for port cargo services is different from previous projections. Current demand can still be accommodated with the current port capacity even though with congestion. This difference occurred due to the influence of COVID-19 on industrial growth and demand for cargo, resulting in a delay gap between

projections and the reality on the ground. The availability of this capacity has the effect of service quality and speed of loading and unloading at Tanjung Priok Port being better than previous projections, thereby diminishing the driving factors that encourage customers to move from Tanjung Priok Port. This is supported by research by Umagapi et al. (2016), which states that service quality and loading and unloading speed increase service user satisfaction, thereby increasing customer loyalty and reducing customers' intention to switch to new service users.

The current condition of growth in cargo demand is still in the post-COVID-19 recovery stage, and is just starting to experience an uptrend. Therefore, it is likely that service users' turnover intentions will increase over time, until the overcapacity conditions at Tanjung Priok Port can no longer be tolerated by services users, where up to a point, the accumulated logistics costs of Patimban Port

can be the same or even more competitive than Tanjung Priok Port.

Additionally, the main factor that most influences port switching behavior is the accessibility of the road to the port. Currently the toll road to Patimban Port is inadequate and under construction. The port can only be accessed via the Pantura road, which is risky for cargo transport vehicles to pass through. This means that the use of Patimban Port cannot be optimized for service users.

It can be concluded that the switching of users from Tanjung Priok Port to Patimban Port is currently dominated by several factors, such as the quality of service and speed of loading and unloading (driving factors for movement from Tanjung Priok Port), accessibility (pulling factor for moving to Patimban Port), and logistics costs (factor inhibiting movement from Tanjung Priok Port to Patimban Port). This research model can be depicted as follows:

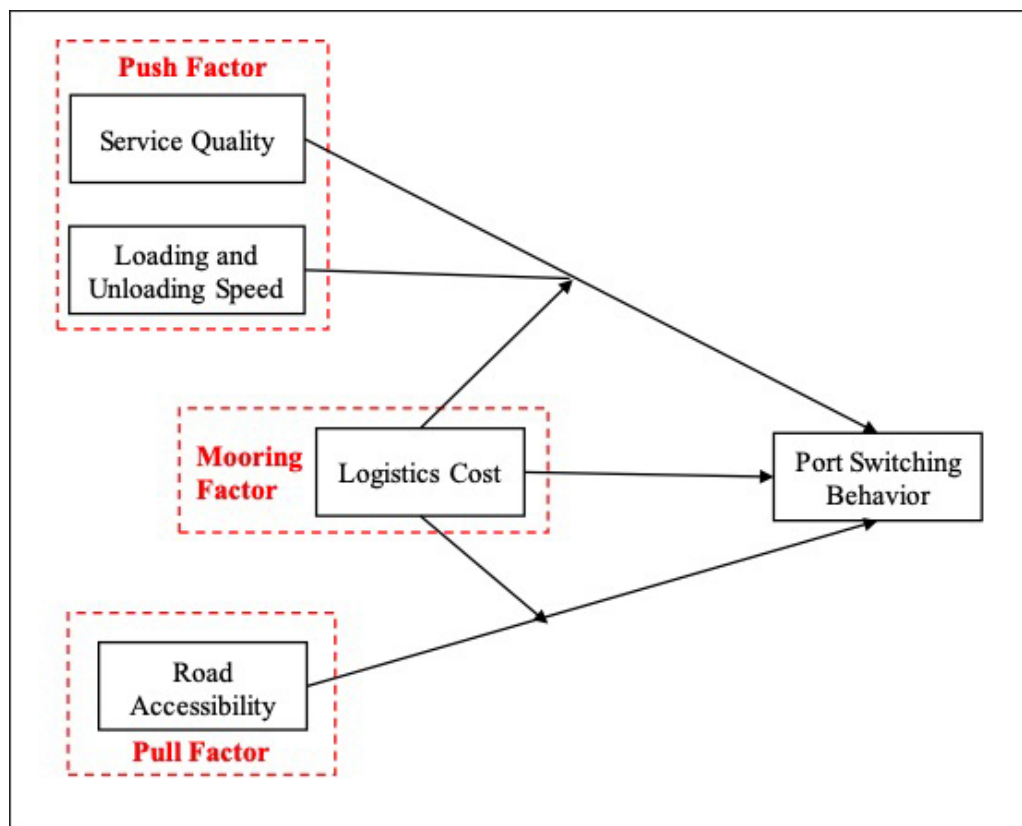


Figure 4 Research Model Results - Port Switching Behavior

This model is in accordance with the PPM framework developed by Bansal et al. (2005), in which customer switching behavior are influenced by push-pull-mooring factors. The research results are also in accordance with previous studies, which state that the intention to move ports from Tanjung Priok Port to Patimban Port is influenced by several factors, namely road access, travel time, operational costs, loading and unloading time, and terminal services (Kansil & Fadillah, 2022). This is also in accordance with previous research conducted by Riadi et al. (2021) in that service users choose ports based on tariffs, road infrastructure, distance and shipping lanes. This result is also supported by research conducted by Naoval et al. (2023), which states that the quality of service and speed of loading and unloading is one of the determining factors for dock productivity. Pier productivity will have an impact on increasing service user satisfaction and reducing service users' desire to switch to a new service provider.

Based on the large potential for development of industrial and economic areas, the growth in demand for port cargo is certainly faster than the capacity development of Tanjung Priok Port itself. Therefore, Patimban Port plays a big role as a synergy partner for Tanjung Priok Port. Hinterland in the middle of Patimban Port and Tanjung Priok Port can choose and optimize the port to use in the supply chain process.

From observations and interviews, the government has made several efforts to trigger the switch from Tanjung Priok Port to Patimban Port. One of them is through the Ministry of Transportation's policy to move the route, from the Tanjung Priok Port - Belawan Port route to the Patimban Port - Belawan Port route. This policy aims to lure service users to use services at Patimban Port, with the hope that, if Patimban Port's services are satisfactory, more service users on other routes will also switch to Patimban Port. Other stimuli provided to stimulate switching include

subsidies and price discounts to service users. These subsidies and discounts are offered with the aim of reducing the total accumulated logistics costs in the supply chain so that the logistics costs generated by using Patimban Port can be more competitive compared to Tanjung Priok Port. With the accumulation of more competitive logistics costs, it is hoped that service users will switch from Tanjung Priok Port to Patimban Port.

Apart from the stimuli provided to support customer switching behavior, competitive advantages as part of a port's competitive strategy can also be in the form of stimuli developed by the port. If a port demonstrates high competitiveness, it will be more likely to be considered by service users. Competitive advantages tend to be associated with the image built by a brand. Patimban Port is classified as a new port whose advantages may not be widely known by service users. Therefore, efforts must be made to introduce its advantages to service users. A port with a good image will certainly give the impression of providing competitive advantages to service users. Apart from the stimulus assisted by the government and the Ministry of Transportation, it is also necessary to formulate a good marketing strategy to promote Patimban Port to service users.

D. Conclusion

The operational service performance of Tanjung Priok Port and Patimban Port is satisfactory and in accordance with the operational service standards of each port. The results of this research are in accordance with research by Masnubi and Sekarsari (2019), which states that the operational service performance of the Tanjung Priok Port IPC is relatively good. The results are also in accordance with research conducted by Farid et al. (2022), which states that the operational service performance of Patimban Port can be categorized as ideal.

Tanjung Priok Port has superior competitiveness compared to Patimban Port.

Tanjung Priok Port is superior in terms of comprehensive facilities and capacity, ease of road access, and port digitalization. On the other hand, Patimban Port is superior in terms of loading and unloading speed and more competitive rates. Competitiveness in ports is an important factor to avoid monopoly in port operation. Ports do not compete with each other, but they still have to compete to maintain the best service standards and provide competitive tariffs. The results of this research are in accordance with the concept of resource-based view theory which states that the resources owned by a company that can be managed and utilized well by a company can provide competitive advantages in efforts to compete with other companies. In addition, the results of this research are also in accordance with previous research conducted by Purnomo (2021), which states that port facilities and capacity, ease of road access and connectivity from hinterland areas to ports, as well as loading and unloading speeds are factors that can increase the competitive advantage of ports. Subsequently, previous research conducted by Almaida and Fitri (2018) stated that the development of digital information technology can increase the competitiveness of ports. Furthermore, previous research conducted by Rosyidi (2019) stated that competitive tariffs will increase the competitive advantage of ports.

Customer transfers from Tanjung Priok Port to Patimban Port are still not optimal, influenced by service quality and the loading and unloading speed as a push factor, port accessibility as a pull factor and logistics costs as a mooring factor. The results of this research are in accordance with the PPM framework developed on previous research by Bansal et al. (2005) that customer switching behavior are influenced by push-pull-mooring factors. In addition, the results of this research are also in accordance with previous research by Kansil and Fadillah (2022), which states that the intention to switch ports from Tanjung Priok Port to Patimban Port is influenced by

several factors, namely road access, travel time, operational costs, loading and unloading time, and terminal service quality.

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