



Role Perceived Value As the Mediating Variable of The Effect of Service Quality on User Satisfaction (Study on KRI Operations At the Military Seaborne Command)

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ABSTRACT

Quality of service in general greatly affects the satisfaction of its users. Synopsis In this thesis, we conduct research on service quality on user satisfaction in KRI operations at the Military Cross-Sea Command. This thesis uses a quantitative research method based on preliminary data, a structural equation model, used to examine data sourced from the Military Maritime Command. The conclusions from this study are that Perceived Value is influenced by the Quality of Service for KRI Kolinlamil users.

Keywords: *Influence, Perceived Value, Quality of Service, Users*

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INTRODUCTION

Transformation continues to occur in all fields and this affects organizations including the Indonesian National Armed Forces (TNI). The Indonesian National Navy (TNI AL) as one of the dimensions of the TNI has the main task of operating the defense and security of the Unitary State of the Republic of Indonesia and upholding legal jurisdiction at sea. Based on Presidential Regulation number 66 of 2019 Kolinlamil as the operational municipality is in charge of organizing TNI sea transportation operations both in the framework of military operations for war (OMP) and military operations other than war (OMSP) and sea transportation assistance in accordance with the policy of the TNI Commander.

The role of the Indonesian Navy's Colinlamil which is very crucial in the defense of the country at sea requires adequate defense capabilities and strength. This ability and strength is manifested in the form of readiness of the technical condition of the defense equipment

which is always ready to carry out operational tasks. The readiness of technical conditions can only be realized through optimal logistical support. The role of the Indonesian Navy's logistics support which is effective and efficient greatly influences the success of this main task. The success of carrying out this task is determined by the readiness of the defense equipment to carry out operations, so that the role of logistics becomes very decisive. In order to realize the readiness of defense equipment, the Indonesian Navy is required to be able to prepare and provide materials, facilities and services effectively and efficiently through the implementation of Logistics Support Development.

The quality of service or logistical support for the Indonesian Navy can be measured by the readiness of the defense equipment and other operational needs in carrying out each operation. Good logistical support can provide satisfaction for soldiers on duty. Perceptions of value and quality of service are the most important components in shaping soldiers' logistical satisfaction.

Based on the results of personal communications with the Operations Assistant of the Commander of the Kolinlamil, there was an increase in cargo loads during 2018-2020, on the other hand there was a trend of decreasing operational efficiency and personnel loads. Data on the number of personnel loads, materials transported and efficiency in carrying out operations up to FY 2020 are obtained in the following table:

Table 1. Level Personnel Payload, Materials and Operations efficiency

Year	2018	2019	2020
Personnel Load	24,499	29,932	21,935
Goods Load	15,236	17,872	26,555
Operation Efficiency	120.64 %	84,79	82.13 %

Source: Opslat Report (2020)

Based on the data above, there was an increase in cargo loads during 2018-2020. In 2018 the load of goods transported by the Kolinlamil Operations Staff was 15,236 tons of goods for a year, then increased in 2019 to 17,872 tons of goods. Then it increased again in 2020 to 26,555 tons. On the other hand, there is a downward trend in operational efficiency and personnel cargo. In 2018, the personnel cargo carried by the Kolinlamil Operations Staff was 24,499 people for a year, then increased in 2019 to 29,932 people. And there was a decrease in 2020 to 21,935 people. Operational efficiency decreased from 120.64% in 2018 to 84.79% in 2019 and again decreased to 82.13% in 2020.

In addition, the limited facilities on the KRI, especially the ATF class, to support troop shifts at 1 Battalion level (\pm 500 people) and their equipment, especially with long (long) shipping routes, greatly affect the satisfaction or comfort as well as the psychology of the troops who will carry out operational tasks. Coupled with this, the KRI's operation was not optimal (it was more than 50 years old and had a seaworthy status) which resulted in the Colinlamil Elements' Operational Efficiency not being achieved. Kolinlamil has 13 KRIs, but 7 of them are old so they are less effective in supporting operations because their speed has decreased and they are prone to leaks and fire hazards. AT and ATF KRI types do not have sufficient cargo space to accommodate troop shifts with a Battalion-level number (\pm 500 people) or more. Troops were often on open decks by means of tents. Operational logistics support (UMO) for the implementation of sea transport operations to support shifting units of TNI units is less realistic in the face of current ship logistics needs.

Based on the pre-survey conducted by the Kolinlamil soldiers, the results show that the soldiers are sufficiently satisfied with the survey results as follows:

Table.2 Results of the Pre-survey Questionnaire regarding Satisfaction of TNI Soldier Logistics Users

No	Statement	YES	NO	TOTAL SAMPLE
1	I am satisfied with the logistical services provided by the Indonesian Navy Colinlamil	73 %	33%	30
2	The logistics services provided by the	70 %	30 %	30

	Indonesian Navy's Colinlamil are timely			
3	Complete KRI facilities in providing services.	50 %	50 %	30
4	Sufficient cargo space to accommodate troop shifts	63 %	37 %	30
5	I am satisfied with the Operational Efficiency of the Indonesian Navy's Colinlamil	70 %	30 %	30

Source: processed data from questionnaire results (2021)

Based on the table above, it can be seen that soldiers are quite satisfied with the logistics services provided. As many as 73% were satisfied with the logistics services provided by the Indonesian Navy Colinlamil. However, only 50% of soldiers felt that the KRI facilities were complete in providing logistical services. The condition of old ships and limited load capacity are the main obstacles in providing quality services to the satisfaction or logistical comfort of soldiers. The soldier's perception of the logistics services provided was low due to the KRI's old condition.

To carry out its duties, the operational readiness of the Indonesian Navy's system of defense equipment is very important. In carrying out sea operations, the Indonesian Navy oversees three Regional Fleet Commands (Koarmada I based in Jakarta, Koarmada II based in Surabaya and Koarmada III based in Sorong). The Regional Fleet Command as the builder and operational user of the system's defense equipment (KRI / Indonesian Warships) is responsible for fulfilling the conditions for the KRI to be ready to sail and fight both personnel and material carried out by ship units. The Ship Unit consists of 20 combat ships of various types, including the Domestically Produced Missile Escort Destroyer (PKR) class which is equipped with the Vertical Laucher System (VLS), the Van Speijk class which is equipped with Harpoon missiles, the Yakhont C-108, the Sigma class with advanced technology. latest, the Corvette class with missile and large-caliber cannon capabilities and the Parchim class with anti-submarine capabilities. KRIs of each class have a large enough role to carry out the tasks of sea operations even though most of the ships are more than 35 years old.

At the executive command level, Kolinlamil oversees three command units numbered, namely the 1st Military Seaborne Unit in Jakarta, 2nd Military Seaborne Unit in Surabaya and 3rd Military Maritime Crossing Unit in Makassar. Military Sea Crossing Unit 1 based at Mako Kolinlamil, Jakarta. With elements of KRI as follows: KRI Banda Aceh 593, KRI Tanjung Kambani 971, KRI Teluk Amboina 503, KRI Teluk Manado 537, KRI Teluk Hading 538 and KRI Mentawai 959. And Military Sea Crossing Unit 2 based in Surabaya with elements of KRI elements as follows: KRI Banjarmasin 592, KRI Teluk Bintuni 520, KRI Teluk Parigi 539 and KRI Teluk Lampung 540. Meanwhile, the Military Seaborne Unit 3 is based in Makassar.

Based on data from globalfirepower, the total number of Indonesian marine fleets is 221 ships as of 2020. It consists of 8 frigates, 24 corvettes, 5 submarines, 139 patrol boats and 11 sea warfare bases, which consist of various ages of service, type and size as well as various technical conditions readiness status. Technical condition data shows that around 67% of ships are over 20 years old. Of all the existing ship strength, only about 25 KRI (16%) were in a truly combat-worthy condition. The rest are in a limited or even unprepared state of combat readiness.

Based on the description above, it was identified that the satisfaction of TNI AL service users was still not maximized due to the readiness of the defense equipment conditions to carry out operations. The quality of service or logistical support for the Indonesian Navy is highly dependent on the readiness of the main defense equipment and other operational needs in carrying out each operation. Good logistical support can provide satisfaction for soldiers on duty. The condition of the KRI and its supporters is needed so that the Indonesian Navy can provide optimal logistics services. Perceived value and service quality are the most important components in shaping logistics convenience and satisfaction so as to achieve optimal performance.

Basically User Satisfaction is not only for profit companies, but it is important for all organizations including the TNI to provide optimal service while on duty. Service quality and perceived value are very important so that they can provide the best service for users (Hapsari, Clemes, & Dean, 2016). Service quality and perceived value are two constructs that cannot be separated from user satisfaction in each evaluation process. Studies on the relationship between service quality, perceived value and user satisfaction have been carried out before (Liu & Lee, 2016). However, the mediating and moderating effect of perceived value on the relationship between service quality and user satisfaction is still little discussed (Keshavarz & Jamshidi, 2018).

In previous studies there were also differences in the results of research on the relationship between service quality and customer satisfaction levels. In Kusuma's research (2018) the results showed that perceived value and service quality had an effect on customer satisfaction and had no effect on loyalty. On the other hand Zakiy & Azzahroh (2017) explained that service quality has no effect on satisfaction.

From the background of the problem, research on the phenomenon of gaps and research gaps, the title can be taken: "The Role of Perceived Value as a Mediation Variable from the Influence of Service Quality on User Satisfaction (Case Study of Maritime Transportation Management at the Military Sea Crossing Command)".

METHODS

In research, to test between theory and practice in the environment to be studied, a population, sample, and sampling technique are needed so that they can be studied so that conclusions can be drawn from the research results. The population of this study were 250 TNI AL personnel. The sampling technique used is the Simple Random Sampling technique. Determination of the sample when all members of the population use the Slovin formula with an established error tolerance limit of 10%. In accordance with the technique used, the size of the sample taken in this study was 100 respondents, in this case 100 TNI AL personnel were sampled in this study. This research used quantitative research with primary data through the method of distributing questionnaires to respondents which were processed by researchers.

Data collection in this study was carried out by asking questions to the audience which were designed in the form of a Likert scale. this scale the statements given are equipped with five answer choices and the weight for each choice. The values of each option are: Strongly Agree = 5, Agree = 4, Undecided = 3, Disagree = 2, and Strongly Disagree = 1. The researcher used the Path Analysis technique. the relationship between the independent variable and the dependent variable either directly or indirectly

RESULTS AND DISCUSSION

Hypothesis test

In the prerequisite analysis test, there is a correlation between the free variable and the locked variable, which is in a straight line. Normal subsidy data, and variations of fixed variables with the same basic free variable.

Prerequisite analysis has been met, one of the conditions that must be met is a significant relationship between the variables associated with other variables. The value of the coefficient relationship indicates how much the level of relationship is found from the data in the field, after passing the correlation test carried out with the SPSS24 program with the results summarized in the form of a matrix as shown in the image below:

Table 3.

Simple Correlation Matrix Between Variables

		correlations		
		X1	X2	Y
X1	Pearson Correlation	1	.553**	.640**
	Sig. (1-tailed)		.000	.000
	N	40	40	40
X2	Pearson Correlation	.553**	1	.601**
	Sig. (1-tailed)	.000		.000
	N	40	40	40
Y	Pearson Correlation	.640**	.601**	1
	Sig. (1-tailed)	.000	.000	
	N	40	40	40

** . Correlation is significant at the 0.01 level (1-tailed).

Description = The correlation coefficient is very significant at an alpha of 0.00

The table above shows all the correlation coefficients between the research variables are positive and the basis used in the calculations is that the correlation coefficients are shown to be very influential at the real alpha level = 0.01. Regarding this, it can be concluded that there is a positive correlation between the research variables.

Furthermore, the path analysis calculation using SPSS 24.0 is as follows:

Table 4.

Calculation results of path coefficients and and t-count dependent variable Y

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	std. Error	Betas	t	Sig.
1	(Constant)	15,050	7,197		2091	043
	X1	.447	.141	.444	3.174	003
	X2	.281	.111	.355	2,541	.015

a. Dependent Variable: Y

Table 5.

Calculation results of path coefficients and and t-count dependent variable X2

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	std. Error	Betas	t	Sig.
1	(Constant)	14.151	10,301		1,374	.178
	X1	.704	.172	.553	4,091	.000

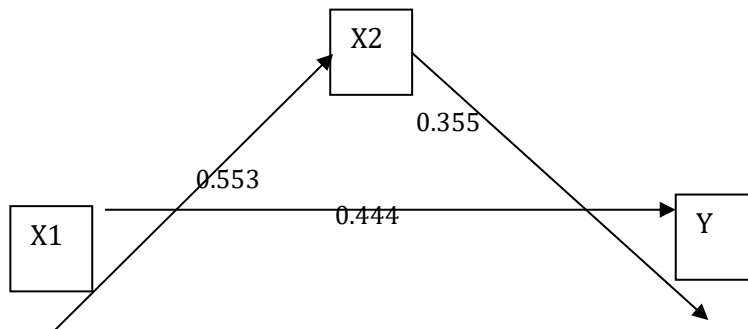
a. Dependent Variables: X2

Table 6.

Summary of Path Coefficient Values Between Variables

Track	Path Coefficient	Path Coefficient Value
X1Y	β_{y1}	0.444
X2Y	β_{y1}	0.355
X1X2	$\beta_{x3.1}$	0.553

Correlation matrix and path coefficient between variables as presented in the table 2. and 4. above can be presented in a structural model as shown in the following figure:



From the hypothesized model it can be stated that all paths are significant to User Satisfaction. Table 7. presents the details of the path coefficient calculation results.

Table 7.

Summary of Structural Model Path Coefficient Calculation and Testing Results

Variable	Coefficient β	tcount	ttable (α)	
			0.05	0.01
X1 - Y	0.444	3,174**	2,021	2,074
X2 - Y	0.355	2,541*	2,021	2,074
X1 - X2	0.553	4,091**	2,021	2,074

From the table above it can be concluded that the hypothesized structural model meets the path analysis requirements.

Hypothesis test

First Hypothesis Test

The first hypothesis states that "service quality (X1) has a direct effect on user satisfaction (Y).

$H_0 : \beta_{yX1} = 0$

$H_1 : \beta_{yX1} > 0$

The results of calculating the path coefficient for the hypothesized causal model obtained the value of the path coefficient $\beta_{yX1} = 0.444$ with tcount = 3.174 and ttable = 2.021 at $\alpha = 0.05$. Because tcount > ttable, the path coefficient is significant, then H_0 is rejected. That is, the first hypothesis is proven, that the service quality variable has a direct effect on the User Satisfaction variable.

Second Hypothesis Test

The second hypothesis states that "perceived value (X2) has a direct effect on user satisfaction (Y).

$$H_0 : \beta_{yX2} = 0$$

$$H_1 : \beta_{yX2} > 0$$

The results of calculating the path coefficient for the hypothesized causal model obtained the value of the path coefficient $\beta_{yX2} = 0.355$ with $t_{count} = 2.541$ and $t_{table} = 2.021$ at $\alpha = 0.05$. Because $t_{count} > t_{table}$, the path coefficient is significant, then H_0 is rejected. That is, the second hypothesis is proven, that the perceived value variable has a direct effect on the User Satisfaction variable.

Third Hypothesis Test

The third hypothesis states that "service quality (X1) has a direct effect on perceived value (X2).

$$H_0 : \beta_{X2 X1} = 0$$

$$H_1 : \beta_{X2 X1} > 0$$

The results of calculating the path coefficient for the hypothesized causal model obtained the value of the path coefficient $\beta_{X2 X1} = 0.553$ with $t_{count} = 4.091$ and $t_{table} = 2.021$ at $\alpha = 0.05$. Because $t_{count} > t_{table}$, the path coefficient is significant, then H_0 is rejected. That is, the third hypothesis is proven, that the ship's seaworthiness variable has a direct effect on the perceived value variable.

Fourth Hypothesis Test

The fourth hypothesis states that ship seaworthiness (X1) has an indirect effect on user satisfaction (Y) through mediation (X2)

CONCLUSION

Starting from the discussion of the research results, the findings from the results of this study indicate that;

1. There is a direct influence on the quality of service (X1) of the KRI Kolinlamil elements on user satisfaction (Y) for TNI troops by 19.71% with a path coefficient of 0.444.
2. There is a direct influence on the perceived value (X2) of TNI troops as users on user satisfaction (Y) of 12.6% with a path coefficient of 0.280.
3. There is a direct influence on the quality of service (X1) of the KRI Kolinlamil elements on the perceived value (X2) of TNI soldiers as users of 30.58% with a path coefficient of 0.553.
4. There is an indirect effect of the service quality (X1) of KRI Kolinlamil elements on user satisfaction (Y) of TNI troops through X2 of 2.78%.

From the findings of this study that user satisfaction is directly influenced by the variables of service quality and perceived value, and indirectly by service quality and perceived value. Therefore to optimize user satisfaction at Kolinlamil. can be done through the optimization of these variables.

REFERENCE

- Abbas Salim. 2016. Transportation Management. Jakarta: PT Raja Grafindo Persada.
- Alfred, O. (2013). Influences of Price And Quality On Consumer Purchase Of Mobile Phone In The Kumasi Metropolis In Ghana A Comparative Study. European Journal of Business and Management ISSN : 2222-2839, 5(1), 179-199.
- Ali, Y., Mohamad, TI, & Shamsudeen, A. (2010). The impact on quality of students through participation in international challenge project - A case study on UKM's students. In 2010 2nd International Congress on Engineering Education: Transforming Engineering Education to Produce Quality Engineers, ICEED 2010

- Bernstein, P. (2014). Customer Satisfaction Takes a Hit. *Customer (Technology Marketing Corporation)*, 8–9.
- Caruana, A. (2002). Service loyalty : The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*, 36(7/8), 811–828. <https://doi.org/10.1108/03090560210430818>
- Ferdinand, A. (2011). *Management Research Methods*. Semarang: UNDIP.
- Fornell, C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*, 56(1), 6. <https://doi.org/10.2307/1252129>
- Hume, M., & Sullivan, G. (2010). The consequence of appraisal emotion, service quality, perceived value and customer satisfaction on repurchase intent in the 95 performing arts. *Journal of Services Marketing*, 24(2), 170–182. <https://doi.org/10.1108/08876041011031136>
- Jones, SC (2007). Fast cars, fast food, and fast fixes: Industry responses to current ethical dilemmas for Australian advertisers. *Journal of Public Affairs*, 15(1), 14–21. <https://doi.org/10.1002/pa>
- Khan, N., Latifah, S., & Kadir, SA (2011). The impact of perceived value dimension on satisfaction and behavior intention: Young-adult consumers in the banking industry, 5(16), 7055–7067. <https://doi.org/10.5897/AJBM09.237>
- Kotler, P., & Keller, KL (2007). *Marketing Management (Second Edition)*. Jakarta: Erlangga.
- Kotler, P., & Keller, KL (2009). *Marketing Management (Keti Edition)*. Jakarta: Erlangga.
- Lewis, RC, & Shoemaker, S. (1997). Price-Sensitivity Measurement: A Tool for the Hospitality Industry. *Cornell Hotel and Restaurant Administration Quarterly*, 38(2), 44–54. <https://doi.org/10.1177/001088049703800223>
- Lupiyoadi, R. (2013). *Service Marketing Management: Competency-Based (Keti Edition)*. Jakarta: Salemba Empat.
- Milorad, K., Svetlana, N., & Andrejic, M. (2016). Measurement of logistics service quality in freight forwarding companies A case study of the Serbian market. *The International Journal of Logistics Management*, Volume 27 (Issue 3), Pp 770-794. <https://doi.org/10.1108/IJLM-04-2014-0063>
- Miro, F. 2005. *Transportation Planning for Students, Planners, and Practitioners*. Erlangga. Jakarta.
- Oliver, R. (1999). Whence Consumer Loyalty? *The Journal of Marketing*, 63(Journal Article), 33–44. <https://doi.org/10.2307/1252099>
- Paul, J., Mittal, A., & Srivastav, G. (2016). Impact of service quality on customer satisfaction in private and public sector banks. <https://doi.org/10.1108/IJBM03-2015-0030>
- Porter, M. (1993). *Competitive Advantage*. Jakarta: Erlangga.
- Ryu, K., Lee, H., & Gon Kim, W. (2012). The influence of the quality of the physical environment, food, and service on restaurant image, customer perceived value, customer satisfaction, and behavioral intentions. *International Journal of Contemporary Hospitality Management*, 24(2), 200–223. <https://doi.org/10.1108/09596111211206141>
- Sahin, A., Zehir, C., & Kitapçı, H. (2011). The Effects of Brand Experiences , Trust and Satisfaction on Building Brand Loyalty ; An Empirical Research On Global Brands. *Social and Behavioral Sciences*, 24, 1288–1301. <https://doi.org/10.1016/j.sbspro.2011.09.143>
- Stephen P. Robbins, Mary A. Coulter (2018). *Management, Global Edition, 14th Edition*
- Santouridis, I., & Trivellas, P. (2010). Investigating the impact of service quality and customer satisfaction on customer loyalty in mobile telephony in Greece. *TQM Journal*, 22(3), 1754–2731. <https://doi.org/10.1108/17542731011035550>
- Schiffman, LG, Hansen, H., & Kanuk, LL (2008). Market Segmentation. In *Consumer Behavior: A European Outlook* (p. 494). Retrieved from <https://books.google.com/books?id=hOt8Cud4FMwC&pgis=1>
- Siddiqi, KO (2011). Interrelations between service quality attributes, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. *International Journal of Business and Management*, 6(3), 12–36.

- Smith, AE, & Swinehart, KD (2001). Integrated systems design for customer focused health care performance measurement: A strategic service unit approach. *International Journal of Health Care Quality Assurance*, 14(1), 21–28. <https://doi.org/10.1108/09526860110366232>
- Somantri, A. (2006). *Statistical Applications in Research*. Bandung: Faithful Library.
- Sugiati, T., Thoyib, A., Hadiwidjono, D., & Setiawan, M. (2013). The Role of Customer Value on Satisfaction and Loyalty (Study on Hypermart's Customers), 2(6), 65–70. 97
- Sumaedi, S., & Yarmen, M. (2015). Perceived sacrifice index of public transport passengers. *International Journal of Applied Engineering Research*, 10(13), 33466–33469.
- Sumarwan, U. (2014). *Consumer Behavior (Second Edition)*. Bogor: Ghalia Indonesia.
- Tjiptono, F. (2012). *Service Management Realizing Service Excellence*. Yogyakarta: ANDI.
- Tjiptono, F. (2014). *Service Marketing*. Yogyakarta: ANDI Publisher.
- Tjiptono, F., & Chandra, G. (2005). *Service Marketing & Satisfaction*. Yogyakarta: ANDI.
- Vargo, SL, & Lusch, RF (2008). Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1–10. <https://doi.org/10.1007/s11747-007-0069-6>
- Wang, Y., Lo, H.-P., & Yang, Y. (2004). An Integrated Framework for Service Quality, Customer Value, Satisfaction: Evidence from China's Telecommunication Industry. *Information Systems Frontiers*, 64, 325–340. <https://doi.org/10.1023/B>
- Wibisono, D. (2003). *Business Research*. Jakarta: Main Gramedia.
- Zhafira, NH, Andreti, J., Akmal, SS, & Kumar, S. (2012). The Analysis of Product , Price , Place , Promotion and Service Quality on Customers' Buying Decision of Convenience Store : A Survey of Young Adults in Bekasi , West Java , Indonesia *International Journal of Advances in Management and Economics*, 72–78.

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