



Original Article

Investigating the Service Quality Improvement Strategy at PT. Kereta Api Indonesia (PERSERO) Divre I North Sumatera, Indonesia

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Abstract: The public continues to place a high demand on the Indonesian train as a mode of transportation. However, the fact that there is a train does not guarantee dominance over other transportation such as planes, buses, and other modes of transportation. The rail transportation mode is lacking in making improvements through the provision of appropriate service quality that encourages the public to switch to using the train. This study aimed to identify the factors that comprise the strengths, weaknesses, opportunities, and threats as well as to design strategies to improve service quality at PT. Kereta Api Indonesia (Persero) Divre I North Sumatra. This study used a qualitative method with descriptive techniques, such as data reduction, data presentation, and the conclusion of SWOT analysis. Based on the results of this study, it can be concluded that the Internal Factors Matrix (IFAS) and External Factors Matrix (EFAS) have several strength factors, namely safety, variations in ticket prices, skills or abilities, and facilities. Meanwhile, the weakness factors are facilities and infrastructure, public services, service performance, and timeliness. Opportunity factors are consumer satisfaction, comfort, passenger capacity, and technology. Furthermore, threat factors for the company include competition among modes of transportation, more efficient price competitiveness, consumer confidence, and insurance. These findings show that the quality of service in the company PT. Kereta Api Indonesia (Persero) Divre I North Sumatra is in quadrant I with a very favorable strategic planning situation. This company also has opportunities and strengths that allow it to take advantage of existing opportunities. The strategy that must be applied in the current conditions is to promote an aggressive growth policy (Growth Oriented Strategy).

Keywords: internal and external factors; service quality; strategy; SWOT analysis.



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1. Introduction

Today, the public continues to place a high demand on the Indonesian train as a mode of transportation. However, the fact that there is a train does not guarantee dominance over other transportation such as planes, buses, and other modes of transportation. The rail transportation mode is considered to be lacking in making improvements through the

provision of appropriate service quality that encourages the public to switch to using the train. PT Kereta Api Indonesia (Persero) is required to continuously enhance the quality of service to visitors or the general public who continue to seek services with various modes of transportation (Juliyanto et al., 2015). Kereta Api Indonesia (Persero) is a popular mode of transportation among the public. There are always visitors and travelers at the railway station. Visitors' responses to the level of service supplied by PT. Kereta Api Indonesia (Persero) would depend on how satisfactorily the employees of PT Kereta Api Indonesia (Persero) have met their expectations for the services they have provided. This is evident from the benefits and characteristics of railways, which make them the most attractive mode of transportation. In response to numerous public requests, the company continues to create a series of innovations by introducing new services. PT. Kereta Api Indonesia (Persero) Divre I North Sumatra is a company engaged in rail transportation services. Regional Division I North Sumatra (Divre I) is the KAI Divre in the Province of North Sumatra which is led by a Head of Regional Division (Kadivire) and is under and responsible to the Directors of PT. Indonesian Railroad (Persero). In this case, PT. Kereta Api Indonesia (Persero) Divre I North Sumatra always continues to develop strategies in its services to achieve the goals expected by the company.

Table 1. Level of Service Quality Based on CSI Divre I SU

Year	Realization		
	Physical	Non-physical	CSI
2018	4.00	4.01	3.90
2019	4.00	4.01	3.98
2020	4,12	4,17	4,14
2021	4,40	4,45	4,40
2022	4,33	4,41	4.37

Source: Data of PT. Kereta Api Indonesia (Persero) Divre I North Sumatera

Table 1 captures the levels of service quality at PT. Kereta Api Indonesia (Persero) Divre I North Sumatra experienced changes from 2018 to 2022, therefore the level of physical and non-physical realization decreased slightly in 2022. On the basis of this phenomenon, the researchers conducted a pre-survey at PT Kereta Api Indonesia (Persero) Divre I North Sumatra. The survey is based on service standards in the company. From the pre-survey conducted, it was found that there were several complaints from 30 respondents or passengers.

Table 2. Pre-Survey of Passenger Service Quality KAI Divre I

No.	Item	Yes		No	
		Freq.	Percentage	Freq.	Percentage
1.	Speed, accuracy, and friendliness of employee service	10	33%	20	67%
2.	The ability of employees to handle passenger complaints rapidly	12	40%	18	60%
3.	Knowledge and ability of employees in handling passenger complaints	11	37%	19	63%
4.	Employees pay attention and seriousness in handling passenger complaints	15	50%	15	50%
5.	Effectiveness of employee communication with passengers	9	30%	21	70%

Table 2 shows several external factors, such as slow speed, inaccurate accuracy, and unfriendly employee service, become impediments. This is evidenced by the 67% of passengers who said no. Employees' capacity to respond quickly in resolving passenger complaints is felt to be inadequate, with 60% of respondents saying no, and employees' ability to be responsive in handling passenger complaints is also felt to be inadequate, with 63% of respondents saying no. In terms of employees paying attention and seriousness in responding to passenger complaints, 50% of respondents answered "no". Furthermore, in terms of effective employee communication with passengers, as many as 70% of respondents said no.

2. Literature Review

2.1. Internal factors

Safety refers to the protection of a person's physical well-being against injury associated with a state or physical, or mental condition in general (Kutsyuruba et al., 2015). According to Djaelani & Darmawan (2021), price or tariff is the amount of money paid for goods and services or the amount of value that consumers exchange to get benefits from owning or using goods and services. Henri (2020) added that competencies are skills and abilities that are owned and needed so that the process of providing services to customers is by the situation and conditions. Ibrahim & Hamidah (2017) defines facilities are everything that is physical equipment and is provided by service sellers to support consumer safety. In other words, facilities are physical resources that exist before a service can be offered to consumers. According to Moenir (2006), facilities are all types of equipment that function as the main tool or direct tool to achieve goals, while infrastructure is a set of tools that function indirectly to achieve goals. Public service is a form of action or deed by a person or group to assist others through certain systems, procedures, and methods to fulfill the interests of other people according to their rights (Brewer et al., 2000). According to Liao & Chuang (2004), service performance is focused on efforts to fulfill customer needs and desires as well as the provision of delivery to balance customer expectations. Also, Kusumasondjaja & Tjiptono (2019) added that punctuality has the availability of information for decision-makers when needed before the information loses its ability to influence a decision.

2.2. External Factors

Consumer satisfaction is the level of a person's feelings that arise after comparing the product performance received with his expectations (Winowatan et al., 2021). If the performance received is lower than expected, the consumer will feel dissatisfied. Conversely, if the performance received is as expected, the consumer will be satisfied. Kuijt-Evers et al. (2004) defines comfort is divided into three: Physical comfort; which is a feeling of well-being or physical well-being. Environmental comfort; is a sense of well-being or comfort felt in or with the environment. Social convenience; is a state of well-being or comfort in social situations. According to Zeithaml et al. (2002), the number of passengers is the total number of customers who use the company's services regarding the usefulness of a product based on perceptions of what is received and what is given. Reich & Benbasat (1996) stated that information technology, namely the utilization of information technology must be used wisely so that what is the goal of the organization can be achieved effectively and efficiently. Thus, unwanted things will not happen if the user is by existing procedures. Adisasmita & Hadipramana (2011) mentioned that transportation is an activity that has been needed by humans since ancient times until now to meet human needs. Transportation infrastructure such as planes, trains, buses, public transportation, and other vehicles are used to carry out various transportation operations. Motta (1993) asserts that when a company offers a superior quality product than its rivals, price competition occurs. However, the company must be aware that competitors can change their prices in response to company prices. If the company's offer is of inferior quality, the company cannot charge a higher price than its competitors. Zahara et al. (2021) said consumer trust is all the knowledge possessed by consumers and all conclusions made by consumers about objects, attributes, and benefits. According to Lopulisa et al. (2018), insurance is an agreement between the insurer or insurance company and the insured or insurance participant who receives a premium from the insured in which the insurer promises to pay a sum insured for the insured.

3. Materials and Methods

This study is descriptive research with a qualitative approach. The population in this study is all passengers at the train station. The research sample was determined based on a purposive sampling technique to obtain 15 passengers as research respondents. This research was conducted in PT. Kereta Api Indonesia (Persero) Divre I North Sumatra. This study employed a pre-survey strategy using interviews and questionnaires to acquire data. Data analysis was carried out by researchers using SWOT analysis to formulate an appropriate strategy for this study. Rangkuti (1998) suggests an approach that can be used as an instrument in selecting a basic strategy through SWOT analysis. SWOT analysis identifies external opportunities and threats as well as internal strengths and weaknesses. The data obtained were based on pre-surveys and interviews as well as questionnaires. This observation activity was performed directly at the research location, utilizing qualitative data to obtain meaning and analyze the final results.

4. Results

This study used SWOT analysis to perform a study on determining strategies to improve service quality at PT. Kereta Api Indonesia (Persero) Divre I North Sumatra. This analysis is used to maximize strengths (S) and opportunities (O) while minimizing weaknesses (W) and threats (T). This analysis is used to compare external factors and internal factors. External factors consist of opportunities and threats, while internal factors consist of strengths and weaknesses. In this research, internal factors (strengths and weaknesses) and external factors (opportunities and threats) were

identified. From these identifications, it was found that services on railroads require strategies in several aspects to improve them. For this reason, researchers analyzed the IFAS and EFAS matrices on the research sample which consisted of 15 respondents from the Indonesian Railways (Persero) Divre I North Sumatra.

Table 3. Internal Factor Analysis Summary

No	Internal factors	Freq.	Weight	Ratings	Score
Strength					
1	Safety	49	0.12	3	0.36
2	Ticket Price Variations	53	0.13	4	0.52
3	Skills or abilities	50	0.12	3	0.36
4	Facility	54	0.13	4	0.52
Total		206	0.50		1.76
Weakness					
1	Facilities and infrastructure	51	0.13	3	0.39
2	Public service	52	0.13	3	0.36
3	Service Performance	48	0.12	3	0.36
4	Punctuality	48	0.12	3	0.36
Total		195	0.50		1.47
Total		401	1.00		3,23
Difference					0.29

Table 3 displays the IFAS matrix produces a value of 3.23 of the total internal factors. This is indicated by a value with a strength value of 1.76 and a weakness of 1.47. Based on the total of all internal strategic factors, the smallest value is a weakness, while the highest value is a strength. Based on the total of all internal strategic factors, the focus on improving or minimizing the weaknesses by maximizing strengths should be conducted.

Table 4. External Factor Analysis Summary

No.	External Factors	Freq.	Weight	Ratings	Score
Opportunity					
1	Consumer Satisfaction	51	0.13	3	0.39
2	Comfort	53	0.13	4	0.52
3	Passenger Capacity	50	0.12	3	0.36
4	Technology	52	0.13	3	0.39
Total		206	0.51		1.66
Threat					
1	Competition between Modes of Transportation	45	0.11	3	0.33
2	More Efficient Price Competition	52	0.13	3	0.39
3	Consumer Trust	55	0.13	4	0.52
4	Insurance	50	0.12	3	0.36
Total		202	0.49		1.60
Total		408	1.00		3,26
Difference					0.06

Table 4 shows the EFAS Matrix produces a value of 3.26 of the total external factors. This is indicated by the value with an opportunity value of 1.66 and a threat of 1.60. Based on the total of all external strategic factors, the smallest value is a threat, while the highest value is an opportunity. Thus, based on the total of all external strategic factors,

companies need to take advantage of existing opportunities and avoid or reduce the impact of threats from outside the company.

Table 5. SWOT Matrix Analysis

IFAS	Strength (S) Safety Ticket Price Variations Skills or Abilities Facility	Weakness (W) Facilities and infrastructure Service Performance Public service Punctuality
EFAS		
Opportunity (O)	SO strategy	WO strategy
Consumer Satisfaction Comfort Passenger Capacity Technology	Maintain safety for the protection and security of comfortable passengers, by utilizing consumer satisfaction. (S1, O1) Providing information services regarding passenger needs according to the ability of officers to try to maintain passenger satisfaction for the services that have been provided by officers. (S3, O1) Develop or provide facilities owned by KAI, by improving technology that is growing until now to support the fulfillment of passenger needs. (S4, O4)	Improving service performance that is not yet optimal and conducting periodic evaluations by utilizing passenger satisfaction when boarding the train. (W2, O1) Complementing inadequate facilities and infrastructure by maintaining passenger comfort to obtain facilities owned by KAI. (W1, O2) Maintaining the relationship between officers and passengers by growing and improving good service so that passengers have a sense of satisfaction and comfort according to expectations. (W3, O1, O2)
Threat (T)	ST Strategy	WT Strategy
Competition Between Modes of Transportation More Efficient Price Competition Consumer Trust Insurance	Improving and providing facilities owned by KAI, to avoid various competition between other modes of transportation. (S1, T1) Promoting or offering attractive promos for special train ticket fares when purchasing tickets online on various application platforms, to avoid more efficient price competition. (S2, T2) Optimizing protection and security in the safety of passengers when boarding the train by providing insurance for the benefit of long journey safety. (S1, T4)	Provide and improve KAI's facilities and infrastructure to increase consumer confidence by avoiding competition between other modes of transportation. (W1, T1, T3) Building service performance that is more effective than before, as well as creating competition in modes of transportation as a reference for increasing alternative criteria for price rates, passenger safety, and trust. (W3, T1, T2) Evaluate proper public services, by building a sense of satisfaction or trust in the services provided by officers to passengers. (W2, T3)

The total score of each is determined by the Strength factor of 1.76, Weakness of 1.47, Opportunity of 1.66, and Threats of 1.60. Thus, it was obtained that the difference in the total score of the Strength and Weakness factors is 0.29. Meanwhile, the difference in the total score of the Opportunity and Threats factors is 0.06. The SWOT analysis diagram for PT. Kereta Api Indonesia (Persero) Divre I North Sumatra is shown below. The results of these calculations are described in the cartecius diagram as follows:

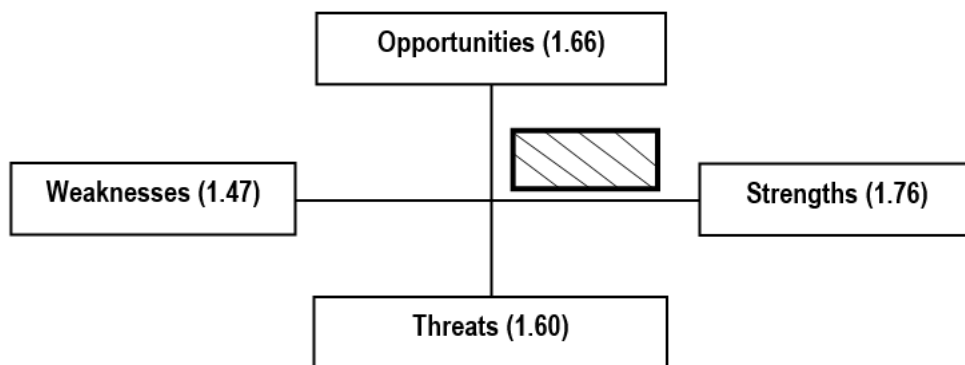


Figure 1. SWOT Analysis Diagram of PT. Kereta Api Indonesia (Persero) Divre I North Sumatra

Figure 1 shows the Cartecius diagram of the SWOT analysis above clearly shows the service quality of PT. Kereta Api Indonesia (Persero) Divre I North Sumatra is in Quadrant I (Growth). In terms of Strength-Opportunity, this quadrant is a situation that provides benefits. Thus, PT. Kereta Api Indonesia (Persero) Divre I North Sumatra will have opportunities and strengths to capitalize on existing opportunities. The strategy that must be applied in the current conditions is to promote an aggressive growth policy (Growth Oriented Strategy).

5. Conclusions

This study concludes that service quality at PT. Kereta Api Indonesia (Persero) Divre I North Sumatra is determined by two factors, namely internal factors and external factors. Strengths and weaknesses are internal factors that influence it. Strength factors include safety, variations in ticket prices, skills or abilities, and facilities. The weaknesses include facilities and infrastructure, public services, service performance, and timeliness. Furthermore, the external factors that influence service quality consist of opportunities and threats. Opportunity factors include consumer satisfaction, comfort, passenger capacity, and technology. Meanwhile, threat factors include competition between modes of transportation, more efficient price competition, consumer confidence, and insurance. As the strategy to improve service quality, PT. Kereta Api Indonesia (Persero) Divre I North Sumatra is suggested to plan a very favorable situation strategy, taking advantage of existing strengths and opportunities. As shown in the Cartesian diagram, the SWOT analysis discovered the quality of service at PT. Kereta Api Indonesia (Persero) Divre I North Sumatra is in quadrant I (Growth), namely: Strength-Opportunity, where this quadrant is a situation that provides benefits. Thus, PT. Kereta Api Indonesia (Persero) Divre I North Sumatra will have strengths and opportunities so that they can take advantage of the existing opportunities. The strategy that can be implemented by the company is the Strength-Opportunity strategy, which can be elaborated as follows:

- Use consumer satisfaction to maintain safety for the protection and security of comfortable passengers.
- Providing information services regarding passenger needs according to the ability of officers to maintain passenger satisfaction for the services provided by officers.
- Develop or provide KAI-owned facilities by advancing technology that has developed to this point to assist in meeting passenger needs.

This study strengths in the managerial implications at PT. Kereta Api Indonesia (Persero) Divre I North Sumatra. Strength variables include safety, variety, ticket prices, skills, and facilities. This situation can be used by the company to develop relevant and effective strategies as well as provide opportunities, such as optimizing passenger capacity by utilizing HR facilities, capabilities, or skills, as well as utilizing existing technology in the company. That way, the company will be able to improve the quality of company services at PT. Indonesian Railways (Perssero) Divre I North Sumatra, namely by fulfilling the needs and expectations of consumers. Thus, this study suggests that PT. Kereta Api Indonesia (Persero) Divre I North Sumatra can improve service quality in the following ways: (i) PT. Kereta Api Indonesia (Persero) Divre I North Sumatra should start providing free Wi-Fi services at stations and on trains. (ii) The service performance of PT. Kereta Api Indonesia (Persero) Divre I North Sumatra needs to be further improved by officers who will later produce positive results in terms of train passenger trust. (iii) PT. Kereta Api Indonesia (Persero) Divre I North Sumatra can develop a competitive mode of transportation that is different from other modes of transportation in terms of facilities and infrastructure, timeliness, and so on. This aims to maintain passenger trust so that they do not prefer to use alternative modes of transportation.

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