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# A Model to Estimate the Level of Passenger Satisfaction With the High-Speed Train

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#### **Abstract**

Passenger satisfaction must be measured by operators providing high-speed train services, as it is directly related to passenger loyalty, which in turn ensures the business's sustainability. This study aims to measure passenger satisfaction with the Jakarta-Bandung high-speed train by developing a model that considers various factors significant in influencing user satisfaction. The quantitative method was developed by distributing questionnaires to 300 respondents, and the results were analyzed using SEM. The results of this study prove the existence of a model built from 5 (five) dimensions: the availability of information, accessibility, train comfort, emergency actions, and responses to complaints. The results of this study are expected to provide recommendations to the operator of the Jakarta-Bandung High Speed Train to evaluate the factors of 5 (five) dimensions that are considered important in forming a user satisfaction model for the service using a performance analysis matrix (IPA Diagram). According to the results of the IPA diagram, it is evident that the most urgent task for the operator is to consolidate with third parties related to the availability of modes to serve passengers who will continue their journey to Bandung, particularly for work and tourism purposes.

 $\textit{Keywords:} \ High-Speed \ Train; HSR \ Jakarta \ Bandung; Indonesian \ Project; Passenger \ Loyalty; Passenger \ Satisfaction.$ 

#### 1. Introduction

The satisfaction of users of the Jakarta-Bandung high-speed train service is crucial to evaluate, considering that this is a strategic Indonesian project that must ensure benefits to the community, generate good profits, and be managed professionally [1, 2]. Passenger satisfaction leads to passenger loyalty [3], which in turn impacts long-term business acceptance and sustainability [3, 4]. Prayudi et al. (2025) [1] have analyzed several factors that are considered to influence the satisfaction of users of the Jakarta-Bandung High-Speed Train (HST) but have not specifically modeled the influence of each factor that is considered to influence so that the proportion of each factor cannot be seen in influencing passenger satisfaction. The proportion of each factor must be modeled to ensure that the operator managing the Jakarta-Bandung high-speed train can make decisions in developing steps to improve the Jakarta-Bandung high-speed train service. Yilmaz & Ari (2017) [5] stated that the loyalty of passengers on fast trains in Turkey has been proven to improve the company's image in the long term, thereby positively impacting the company's business. Chao et al. (2014) [6] identified five service quality attributes in High-Speed Train (HST) services in China: cleanliness of the train, neatness of employee appearance, employee service attitude, comfort of the air conditioner, and on-time performance. Zhen et al. (2018) [7] found that passenger satisfaction is paramount to increasing loyalty and the number of HSR passengers. Some factors considered important include staff attitude, ease of ticket purchase, and ease of travel access.

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The potential for people to switch from other modes to the Jakarta-Bandung Fast Train is very high. This has been researched by Kusuma et al. (2017) [8], where the study found that the possibility of switching modes to the Jakarta-Bandung fast train is above 90% for current passengers who access other modes. This was also conveyed by Tjahyono et al. (2020) [9] and Liu & Putro (2024) [10], the possibility of passengers changing modes to the Jakarta-Bandung Fast Train. Observing the phenomenon of a high number of passengers switching modes to the Jakarta-Bandung HST, several improvements are needed to increase passenger satisfaction. Sunandar et al. (2021) [11] found several attributes to be immediately improved by the Jakarta-Bandung high-speed train project management to improve communication and collaboration with strategic partners to obtain good value in the management of the Jakarta-Bandung high-speed train (HST) [12-14].

From the previous research above, it has not been agreed that passenger satisfaction will increase passenger loyalty, which has a long-term impact on the HST business. This study confirms and complements previous research with the location of research on passengers of the Jakarta-Bandung high-speed train located in Indonesia while providing an optimal model for consideration by operators in improving the Jakarta-Bandung high-speed train service where this is for the Jakarta-Bandung high-speed train, no one has researched it to produce a model as a recommendation for operators managing the Jakarta-Bandung high-speed train. This model is a fundamental novelty in production. The results of the model in this study will be analyzed using the Important Performance Analysis (IPA) diagram [7] to provide clear direction for the operationalization carried out. Integrating mathematical models and IPA diagram matrices will be an important and operational finding for the operator of the Jakarta-Bandung HST. Previous studies have not included the factors of availability of information, accessibility, train comfort, and emergency actions and responses to complaints simultaneously; the majority of studies only include train cleanliness and ease of ticket access as research variables, so this study will be new knowledge in developing high-speed train passenger satisfaction, especially related to services that will be developed for the next project or other country locations that have the same characteristics.

#### 2. Literature Review

#### 2.1. Satisfaction in HST

High-Speed Train (HST) passenger satisfaction, as revealed in previous studies, is influenced by various factors that significantly impact HST user satisfaction. Figure 1 is a description of the Schematic Literature Review (SLR) conducted from various previous studies on factors considered to influence HST passenger satisfaction.



Figure 1. SLR for passenger satisfaction in HSR [5-7, 15-21]

Figure 1 illustrates that HST user satisfaction is broadly summarised in 6 (six) dimensions: Integration, Availability of data and information, accessibility, train conditions, station conditions, Ticket/Pass services, emergency/complaint response. These factors are used in this study to develop a model for determining the satisfaction of Jakarta-Bandung High-Speed Train users, as factors were asked of respondents through a questionnaire. Furthermore, the questionnaire was analysed using SEM to develop a user satisfaction model, which was then recommended to the Jakarta-Bandung high-speed train operator.

## 2.2. Relationship Between Passenger satisfaction and Passenger Loyalty in HST

#### 2.2.1. Passenger Satisfaction (CS)

Passenger or Consumer satisfaction is the key to long-term relationships between passengers and Jakarta Bandung High-Speed Train providers. [22-24]. Passenger Satisfaction is a psychological decision made based on a particular service encounter when the passenger and the service provider are in direct contact [25, 26]. Passenger Satisfaction is a response to consumer fulfilment, the degree to which the level of fulfilment is pleasant or unpleasant [27-29]. Consumer loyalty is the result of service providers encouraging customers to use their services again. Passenger Loyalty can be described as repeat purchases from service providers [30, 31]. Passenger Loyalty as a sustainable competitive resource for the service sector. Chou et al. (2014) [6] argue that the two most effective ways to ensure Passenger engagement are by providing high-quality products and excellent service, as well as demonstrating a satisfactory attitude. Passenger loyalty can be linked to the consequences of Passenger satisfaction, repeat purchases, price tolerance, or psychological attachment, which is defined as the passenger's continued behaviour towards a particular service provider [32]. Research shows that service quality affects Passenger satisfaction, and Passenger satisfaction affects Passenger loyalty, with a strong relationship between them [6].

Figure 2 illustrates the effect on passenger satisfaction for the Jakarta Bandung High-Speed Train, which consists of five dimensions: availability of information, accessibility, train comfort, emergency actions, and response to complaints.



Figure 2. Factors affecting passenger satisfaction

## 2.3. IPA Diagram

Important and Performance Analysis (IPA) [33] The diagram is very effective for mapping the level of urgency associated with the activities to be carried out. The IPA Diagram has four quadrants defined to describe the priority scale of what will be done. Importance Performance Analysis is a technique used to identify the key performance factors that an organization must demonstrate to meet the satisfaction of its service passengers [3]. Figure 3 illustrates four quadrants in the IPA Diagram, which are divided into four key activities, namely keep up the good work, possible overkill, low priority and concentrate here, where each has the following explanation:

- Maintaining good work means that the factors in this quadrant are considered important in supporting passenger satisfaction; therefore, the Jakarta Bandung Fast Train operator must continue to improve its performance.
- Possible overkill means that the factors in this quadrant are not considered important by passengers and are not expected, so their priority needs to be shifted to other factors that have a higher priority for handling and require improvement.
- Low priority means that the factors in this quadrant have low performance and are not considered important for increasing passenger satisfaction, so they are not prioritized for improvement.
- Concentrate here means that the factors in this quadrant are considered important and expected by passengers. However, the current condition does not yet meet high-performance standards, so resources need to be allocated to improve these factors.

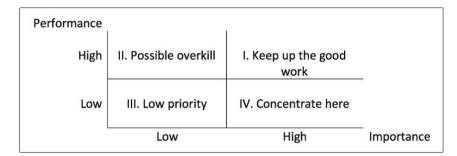


Figure 3. IPA Diagram [7]

# 3. Methodology

#### 3.1. Data Collection

Data collection was conducted by distributing questionnaires to 300 passengers of the Jakarta-Bandung fast train, who were met directly at Padalarang Station and Halim Station. Respondents were given questions about 36 factors that are considered to influence user satisfaction [34-37]. The profile of Jakarta-Bandung high-speed train users consists of public servants (42%), private (33%), students (19%) and businessmen (6%). The travel purposes consist of 50% for work, 11% for education, 7% for family visits, and 32% for travel.

Furthermore, the data were processed using SEM to determine the selected factors, where statistical tests were carried out on 36 factors using SEM. Previous studies [38, 39] identified 24 selected factors that passed the statistical test using SEM. Furthermore, modelling was carried out to provide optimal recommendations to the Jakarta Bandung Fast Train operator.

#### 3.2. Research Methodology

This research was conducted in Indonesia, specifically at the Jakarta-Bandung High-Speed Train location. The location is on the island of Java as depicted in the following map. Figure 4, the research location in Jakarta, Bandung HST, is on the island of Java, which is currently the operating location of Jakarta Bandung HST. This research uses quantitative methods [34, 36] by distributing questionnaires to 300 respondents. The selection of respondents is based on the needs of SEM analysis, with a minimum of 150 respondents, considering the v-p-value according to the sample size, with detailed research steps as follows.

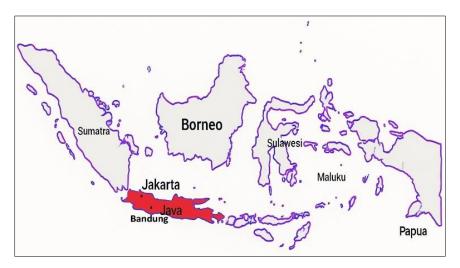


Figure 4. Location of research on the Indonesian map

Figure 5 illustrates the research methodology of this study, namely the use of a quantitative method by distributing questionnaires to respondents, which are then analysed using SEM to form a model and formulate operational strategies through IPA diagrams. The step-by-step process of this research consists of:

**Step 1:** Formulate a research idea, prepare a research framework, and conduct a schematic literature review to map previous research relevant to passenger satisfaction in HST. This mapping determines the position of the research conducted, making the gap or novelty clear. Next, find the dimensions and factors that influence determining passenger satisfaction in HST.

- Step 2: Design a questionnaire based on factors considered influential in determining passenger satisfaction. The selection of factors used to compile the questionnaire through expert FGD is carried out using the Delphi method. After selecting the factors, the questionnaire is designed and tested on a limited sample of 30 people. Following this initial test, a complete questionnaire is distributed to 300 respondents.
- **Step 3:** conducting quantitative analysis of the questionnaire results using SEM to select selected variables and compile a Y (passenger satisfaction) model influenced by X, consisting of 5 dimensions, namely X1, X2, X3, X4, and X5. The model formed is one that is tested for validity and reliability using appropriate statistical tests.
- **Step 4:** The model formed is then grouped based on the quadrants on the IPA diagram to compile a further action plan as a research recommendation to the operators and regulators of HST Jakarta Bandung.
- **Step 5:** preparing recommendations to be followed up operationally for regulators and operators to improve passenger satisfaction based on the results of the IPA diagram.

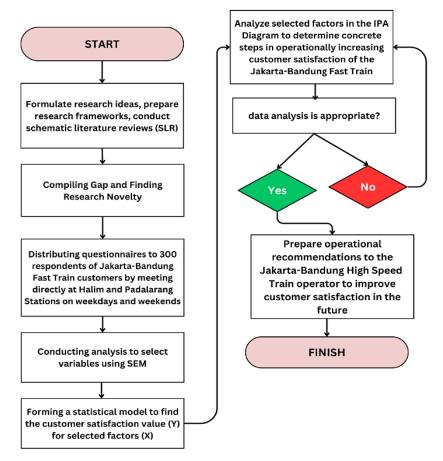


Figure 5. Research Methodology

The operational definition for each variable is presented as follows (Table 1):

Table 1. Operational definition variable

No.	Definition	Indicators	Type of Variable
X1	Information services	Availability of necessary information, both verbal and written, in the Terminal Building area, and prompt communication of schedule changes by the operator.	Independent
X2	Accessibility	Ease of accessing train services from the passenger's residence	Independent
X3	Train Services	Friendly and polite personnel, caring, skilled and responsive personnel, reliability of facilities and infrastructure (2 places), using a Single ticket system, Affordable price	Independent
X4	Train comfort	Noise under standard conditions, entertainment, seat comfort, cleanness of the train and travel safety	Independent
X5	Emergency	Speed of handling emergencies & Security disturbances, response to complaints and passenger health	Independent
Y	Passenger Satisfaction	Meeting the expectations with the reality desired by passengers in enjoying the Jakarta Bandung HST service.	Dependent

Table 1 provides the operational definitions of each variable used in the research, comprising five independent variables (X) and one dependent variable (Y).

## 4. Results

From data processing with SEM, 36 factors are distributed by questionnaires to respondents. Then, variable selection is carried out to consider 24 factors that influence the satisfaction of Jakarta-Bandung HST Passengers. After conducting statistical tests with loading factors, validity, and reliability, as well as the Heterotrait-Monotrait ratio and Formal Likert Criterion [38, 39], a path diagram will be created, consisting of Y as the dependent variable and X as the independent variable. The X dimension is developed from 5 dimensions: information service, accessibility, train services, train comfort, and emergency actions and responses to complaints. The Figure 6 illustrates the relationship between variables X and Y using a path diagram.

From Figure 6, it is illustrated that Y is built from 5 dimensions consisting of factors that compose it with a total of 26 factors; from each dimension, the results can be described as follows:

- Train Comfort (0.467) has the most significant influence on Passenger Satisfaction. The main factors in train comfort include travel safety, train cleanliness, and seat comfort.
- Accessibility (0.217) contributes to satisfaction, including aspects of integration with other modes and connected travel schedules.
- Train Service (0.238) also affects satisfaction, with indicators such as affordable ticket prices and a single ticket system.
- Emergency (0.160) shows that the speed of response in emergencies and security disturbances also affects satisfaction.
- The Information Service (-0.002) does not have a significant influence on satisfaction, although it encompasses aspects of voice and written information related to station and train travel.

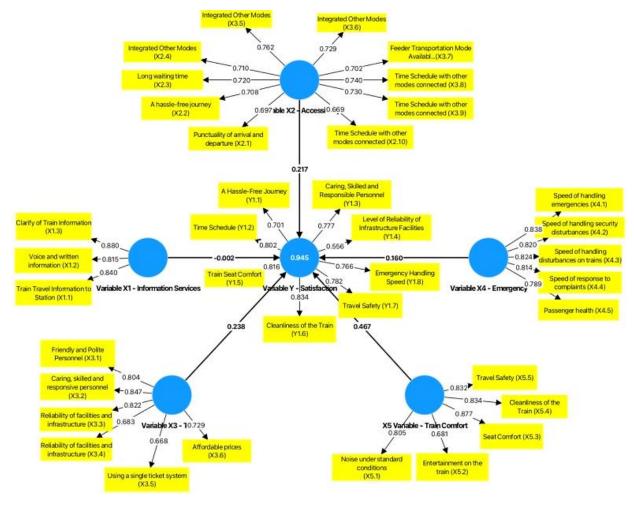


Figure 6. Relationship variable Y and X

Table 2 presents the results of the validity and reliability tests for each variable. All variables exhibit high reliability, with Cronbach's Alpha and Composite Reliability exceeding 0.7, and all variables have an AVE above 0.5, indicating convergent validity. The variables with the highest reliability are Accessibility (0.895) and Satisfaction (0.892).

Information Services has the highest convergent validity (AVE = 0.715). The analysis can conclude that this research instrument is sufficiently robust to be used in further studies.

Table 2. Reliability and convergent validity analysis

Deskripsi	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Var X1 – Information services	0.800	0.804	0.883	0.715
Var X2 – Aaccessibility	0.854	0.870	0.892	0.580
Var X3 – Train Services	0.895	0.898	0.914	0.514
Var X4 – Train comfort	0.877	0.883	0.910	0.668
Var X5 - Emergency	0.866	0.881	0.904	0.654
Var Y – Passenger Satisfaction	0.892	0.900	0.915	0.576

Table 3 is the result of the Heterotrait-Monotrait Ratio (HTMT) test showing that all HTMT values are below the recommended limit of 0.90, except for the relationship between Variable X3 - train service with Variable Y - Satisfaction (1.001) and Variable X4 - Train Comfort with Variable Y - Satisfaction (1.024), which exceeds the limit. This suggests a potential issue with discriminant validity between these variables, indicating that some constructs may share high conceptual similarities. Overall, most variables have met the criteria for discriminant validity. However, more attention is needed on relationships exceeding the threshold of 0.90 to ensure that the constructs are genuinely different.

Table 3. HTMT analysis

Description	Var X1 – Information Services	Var X2 – Accessibility	VarX3 –Train Services	VarX4 – Train Comfort	VarX4 - Emergency	Var Y – passenger satisfaction
Var X1 – Information services						
Variabel X2 – Accessibility	0.831		0.838			
Var X3 – Train Services	0.815					
Var X4 – Train comfort	0.822	0.743	0.927	0.839		0.839
Var X5 - Emergency	0.694	0.718	0.813			
Var Y – Passenger Satisfaction	0.867	0.912	1.001	0.913	1.024	0.913

Table 4 is the result of the Fornell-Larcker Criterion test, showing that the AVE (Average Variance Extracted) root value on the main diagonal is greater than the correlation between constructs outside the diagonal. This indicates that each latent variable exhibits quite good discriminant validity, except for Variable Y - Satisfaction, which is highly correlated with Variables X3 - Train Service (r=0.886) and X4 - Train Comfort (r=0.920). This high correlation suggests the possibility of overlapping concepts between passenger satisfaction with ticket factors and train comfort, which may affect the clarity of the relationship between the constructs in the research model. In general, discriminant validity is satisfactory, but further evaluation is necessary for variables with high correlations.

Table 4. Fornell's lacker criterion analysis

Description	Var X1 – Information Services	Var X2 – Accessibility	Var X3 – Train Services	Var X4 – Train Comfort	Var X4 - Emergency	Var Y – passenger satisfaction
Var X1 – Information services	0.846					
Var X2 – Accessibility	0.718	0.717	0.743			
Var X3 – Train Services	0.676		0.762			
Var X4 – Train comfort	0.681	0.669	0.800	0.809	0.742	
Var X5 - Emergency	0.587	0.651	0.715		0.817	
Var Y – Passenger Satisfaction	0.727	0.809	0.886	0.920	0.816	0.759

Table 5, the Model Fit analysis results show that the SRMR (Standardised Root Mean Square Residual) value of 0.087, which is close to the threshold of 0.08, indicates that the model has a level of fit that is still acceptable, although slightly above the ideal value. The d\_ULS (Squared Euclidean Distance) value of 5.294 indicates a potential mismatch in the structural model, which needs further examination. Meanwhile, the infinite Chi-square value and the unavailability of the d\_G (Geodesic Distance) and NFI (Normed Fit Index) values indicate that some aspects of the fit model cannot be calculated using the current method. Therefore, although this model remains acceptable overall, further analysis is necessary to ensure that the results remain valid and can be adequately interpreted.

Table 5. Model fit analysis

	Saturated Model
SRMR	0.087
$d\_ULS$	5.294
Chi-square	Infinite
NFI	n/a

Based on the results of the SEM-PLS analysis, the R-square (R²) value of 0.923 indicates that the independent variables in this model can explain 92.3% of the variability of passenger satisfaction (Y). At the same time, the rest is influenced by other factors outside the model. The sample mean (M) value of 0.924 represents the average estimate of the R-squared value obtained through the bootstrapping process. The standard deviation (STDEV) of 0.010 indicates the level of variation in the estimate. With a T-statistic of 93.544 and a P-value of 0.000, these results indicate that the R-squared value in this model is highly significant, suggesting that the model has strong predictive power for passenger satisfaction (Table 6).

Table 6. Results of R-squared

Description	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
R-square	0.923	0.924	0.010	93.544	0.000

The results of the Variance Inflation Factor (VIF) analysis show that all independent variables have VIF values below five, with the highest value at Total X3 (3,648) and the lowest value at Total X5 (2,441). This indicates that there are no serious problems related to multicollinearity in the model, as all values remain within acceptable limits. In addition, the high T-statistic value and P-values of 0.000 indicate that each variable has a significant influence on the model. Thus, these results strengthen the validity of the regression model used in the study.

The results of Table 7, the Standardised Coefficients analysis, show that the Total X4 variable (Train Comfort) has the most significant influence on Passenger Satisfaction, with a coefficient of 0.386 and a T-statistic of 11,290, followed by Total X2 (Accessibility) with a coefficient of 0.268. Meanwhile, Total X3 (Train Service) and Total X5 (Emergency & Complaint) also have a significant effect with coefficients of 0.222 and 0.183, respectively. However, Total X1 (Availability of Information Services) has an insignificant effect on passenger satisfaction, with T-statistics of 0.841 and P-values of 0.400, which is far above the significance limit (0.05). Thus, the model indicates that the Train Comfort and Accessibility factors have the most significant impact on passenger satisfaction, while the Availability of Information Services makes a non-significant contribution (see Table 8).

Table 7. Results of VIF

D	escription	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values
	Total X1	2.831	2.916	0.304	9.319	0.000
	Total X2	2.937	3.023	0.343	8.561	0.000
	Total X3	3.648	3.754	0.466	7.833	0.000
	Total X4	3.384	3.475	0.403	8.401	0.000
	Total X5	2.441	2.510	0.297	8.224	0.000

Table 8. Results of standardized coefficients

Description	Original sample (O)	ample Sample mean Standard deviation (M) (STDEV)		T statistics ( O/STDEV )	P values
Total X1	0.028	0.028	0.033	0.841	0.400
Total X2	0.268	0.269	0.034	7.838	0.000
Total X3	0.222	0.221	0.036	6.154	0.000
Total X4	0.386	0.386	0.034	11.290	0.000
Total X5	0.183	0.183	0.033	5.531	0.000

Statistical testing is done using the formula: df = n - k - 1

where: n = number of samples; k = number of independent variables in the model; df = degree of freedom; 301–5–1: df = 295. From the t-distribution table for df = 295 and  $\alpha =$ 0.05 (two-sided) with t-table  $\approx$  1.968

From Table 9, the calculation shows that the t-statistic is greater than the t-table value (t-table = 1.96 for large degrees of freedom), and the variable is declared significant. So, the final model is Y = 0.028 X1 + 0.268 X2 + 0.222X3 + 0.386 X4 + 0.183 X5 with a t table of 1.96.

Description	Coefficient (β)	SE (STDEV)	t-statistics
X1 - Information Services	0.028	0.033	0.85
X2 - Aaccessibility	0.268	0.034	7.88
X3 - Train Service	0.222	0.036	6.17
X4 - Train Comfort	0.386	0.034	11.35
X5 - Emergency and response to complaints	0.183	0.033	5.55

Table 9. Results of statistical analysis

#### 5. Discussion

Based on the modelling results above, an operational strategy formulation will be carried out using the IPA Diagram to evaluate the factors considered to influence the satisfaction of Jakarta Bandung high-speed train passengers significantly. The Table 10 categorizes factors based on their dimensions and presents an assessment of the evaluation results conducted by researchers. The assessment is carried out using a score of 0-5, with the explanation that 0 (zero) represents the lowest degree of importance on the scale. At the same time, five is the highest degree considered important by respondents.

Table 10 shows that passengers consider several factors very important and have a degree of five. In almost all dimensions, some factors are considered very important. This is in line with research conducted by Ricardianto et al. (2020) [40], which compared the development of HST in Asia, especially Japan, with that in Indonesia. The study states that the Japanese HST, built 40 years ago, remains the most popular choice among passengers today. The development of the Jakarta-Bandung high-speed rail infrastructure must be prioritised because development is essentially a planned effort to improve quality of life [41]. This aligns with the opinion of Karim et al. (2020) [42], who stated that the rapidly growing garment industry in Bangladesh creates an increasing demand for international transportation of raw materials, intermediate products, and finished goods.

No **Dimension** Score Information Service 0 2 3 4 Clarity of Train Information 1 V Travel Information available Voice and Text Information Available ν 0 2 3 Accessibility 1 4 Integrated Other Modes (3 modes) Time Schedule With Other Modes connected (train, bus, others) Long waiting time A hassle-free journey Punctual arrival and departure The feeder transportation mode is available. 0 2 3 4 5 1 Train Service V Friendly and polite personnel ν Caring, skilled, and responsive personnel Reliability of facilities and infrastructure (2 places) V Using a Single ticket system V Affordable price V

Table 10. Scoring important analysis

	Train Comfort	0	1	2	3	4	5
	Noise under standard conditions						V
4	Entertainment		V				
4	Seat comfort				V		
	Cleanness of the train					V	
	Travel safety						V
	Emergency and Response to Complaints	0	1	2	3	4	5
	Speed of handling emergencies						V
_	Speed of handling security disturbances					V	
5	Speed of handling disturbances of trains						V
	Speed of response to complaints					V	
	Passenger health				V		

Furthermore, Karim et al. (2020) [42] stated that the railway network is most capable of serving anticipated trade patterns while offering alternative transportation options to existing flows. In addition, by utilising the competitive advantages of long-distance rail transportation, it plays a significant role in providing a more equitable distribution of economic opportunities and benefits. Paudel (2019) [43] argues that the elimination of trade barriers, reinforced by the opportunity for uninterrupted physical access, is likely to have a transformative impact on more underdeveloped and landlocked countries/regions, such as Bangladesh, Yunnan, the North-eastern States of India, Myanmar, and Thailand. The characteristics of countries like Indonesia are like those of a developing country with a highly productive population, making it very important for passengers on the Jakarta-Bandung HST to improve service quality. Recommended improvements to enhance passenger satisfaction on the HST in Indonesia can be prioritised based on the current mapping presented through the IPA diagram, making the IPA Diagram an important operational recommendation.

Figure 7 illustrates several areas that need improvement, with nine points in quadrant IV. Conversely, areas that need to be maintained are highlighted with 10 points in quadrant I. In contrast, aspects that are not considered a priority currently include friendly staff, as they have met expectations, and the absence of excessive service on the train, given the short trip between Jakarta and Bandung. Some things that passengers consider excessive are the presence of text and voice information, the use of ticket machines and entertainment on the train.

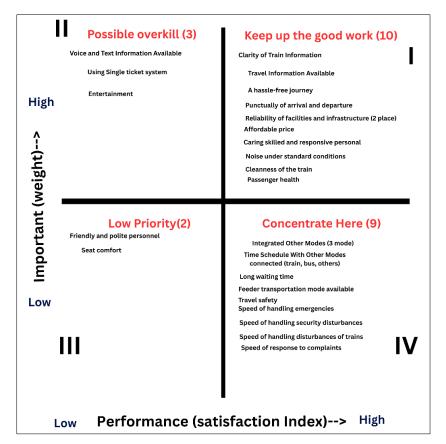


Figure 7. Analysis IPA Diagram

#### 6. Conclusion

The level of passenger satisfaction of the Jakarta-Bandung high-speed train is influenced by 24 factors divided into five dimensions with the model Y = 0.028. This model, through statistical testing, has a very fit model and can be used to predict the level of passenger satisfaction of the Jakarta-Bandung high-speed train for operators managing the Jakarta-Bandung high-speed train. Several operational strategies can be developed by mapping factors that are considered to influence the IPA Diagram, where nine factors must be improved, particularly the problem of passenger feeder mode availability for a continued journey to Bandung City. Considering the passenger profile and the purpose of passengers using the Jakarta-Bandung high-speed train, it is necessary to immediately consolidate advanced modes to increase public interest in Bandung City, particularly for travel purposes. This improvement is important because the existence of trains will encourage economic growth, eliminate several obstacles, and, in the long term, become the preferred mode of choice for passengers, as is the case in Asian countries such as Japan. This recommendation is crucial for operators and regulators of the Jakarta-Bandung High-Speed Train (HST). The developing conditions in Indonesia can serve as a lesson for the development of HST in other regions, considering that the islands in Indonesia are currently not yet connected to the HST. Other plans that can be developed with the HST include the Jakarta-Surabaya and Lampung-Padang (West Sumatra) routes, where the HST has a minimum distance of 150 km.

#### 7. Declarations

## 7.1. Author Contributions

Conceptualization, P. and E.M.S.; methodology, A.T.M.; software, P.; validation, E.M.S., A.T.M., and N.; formal analysis, P. and E.M.S.; investigation, A.T.M.; resources, N.; data curation, P.; writing—original draft preparation, P., E.M.S. and A.T.M.; writing—review and editing, N.; visualization, A.T.M.; supervision, A.T.M.; project administration, E.M.S.; funding acquisition, P. All authors have read and agreed to the published version of the manuscript.

## 7.2. Data Availability Statement

Data sharing does not apply to this article.

#### 7.3. Funding

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## 7.5. Conflicts of Interest

The authors declare no conflict of interest.

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