

Evaluation of Infrastructure Performance and Priority Management of Oebobo Type B Terminal Facilities Using SERVQUAL

Reyneldis Laurensia Fernandez¹, Anita Kurniati Al-Achmad Lamdu², Yovan Imanuel Nggaba³

¹²³ Program Studi Teknik Sipil, Fakultas Teknik, Universitas Citra Bangsa, Kupang, Indonesia

* Correspondence e-mail; nitalamdu@gmail.com

Article history

Submitted: 2026/06/01; Revised: 2026/07/11; Accepted: 2026/08/28

Abstract

Passenger terminals are transportation infrastructure assets whose performance must be maintained through effective operation, maintenance, safety management, and user-oriented services. Oebobo Bus Terminal in Kupang City still faces deficiencies in physical facilities and operational services. Previous studies largely use service-quality measurements to identify passenger satisfaction and priority attributes, while their translation into post-construction facility-management priorities remains limited. This study evaluates the gap between user expectations and perceptions and formulates facility-management priorities for the terminal. A quantitative survey involved 86 users selected through purposive sampling and assessed 25 attributes across tangible, reliability, responsiveness, assurance, and empathy dimensions. The results show negative gaps for all dimensions: tangible -1.30, reliability -1.06, responsiveness -0.91, assurance -1.44, and empathy -1.22. The largest problems concern security and evacuation facilities, nighttime lighting, departure punctuality, schedule-change information, and prayer facilities. The novelty lies in positioning perceived service gaps as user-based infrastructure-performance indicators to support safety management, preventive maintenance, operational reliability, accessibility, and information-management priorities during the post-construction stage.

Keywords

Facility Management, Infrastructure Performance, Preventive Maintenance, Service Quality, Bus Terminal



© 2026 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution 4.0 International (CC BY SA) license, <https://creativecommons.org/licenses/by-sa/4.0/>.

INTRODUCTION

Transportation is one of the infrastructure systems that supports the movement of people, distribution of goods, economic activities, and connectivity between regions. In the land transportation system, passenger terminals function as nodes for vehicle arrival and departure, passenger movement, provision of travel information, and integration with other modes. Therefore, the performance of a terminal is determined not only by the existence of buildings and facilities, but also by the

ability of the facility to maintain its functionality, safety, comfort, accessibility, and reliability of services during the life of operation.

In the perspective of Construction Management, asset performance does not stop at the successful completion of physical work. After the construction is completed, the infrastructure enters the operation and maintenance stage which is much longer than the construction period. At this stage, facility management is needed to ensure that assets continue to function according to the planned level of service. User-based evaluation is important because the condition of physically available assets does not necessarily result in services that are considered safe, convenient, accessible, and reliable. A study of the Makassar Metro terminal shows that the decline in building quality and completeness of facilities affects user comfort, while improvements in facilities and service reliability are needed to improve service levels (Abdullah, 2022).

Recent studies on public transportation show that reliability, information, comfort, accessibility, safety, and service interaction are important factors in the passenger experience. He et al. (2021) emphasized the importance of evaluating service quality from the perspective of users, while Tuan et al. (2022) pointed out that the priority of quality improvement needs to consider attributes that have a real influence on user perception. Ubaidillah et al. (2022) also show that service quality is related to bus user satisfaction in the context of developing cities. Göransson and Andersson (2023) place reliability, accessibility, convenience, and information as important components of public transportation appeal. Weng et al. (2023) further show that operating conditions, punctuality, and travel experience are closely related to user satisfaction.

In the context of bus terminals in Indonesia, the problem of facilities and services is still recurring. Setyawati et al. (2021) found that all attributes evaluated at the Pulo Gebang Terminal had negative gaps. Afandi and Hartatik (2024) show that several aspects of the comfort and safety of the Sidoarjo Larangan Terminal have not met user expectations. Kalangi et al. (2024) found that service attributes in transportation operating through the Karombasan Terminal needed improvement, while Primasworo et al. (2024) identified security facilities, toilets, travel disruption information, access for people with disabilities, and breastfeeding mothers as priorities for the Arjosari Terminal. Gaut et al. (2024) also showed that limited facilities and management contributed to the ineffectiveness of the Mena Terminal's performance.

Similar findings continue in recent research. Dano.Pa et al. (2025) show that there is a service gap in bus transportation on the Manado-Bitung route. Kamil et al. (2025) found that hygiene and lighting attributes have high potential for improvement, while Rahmawati et al. (2025) identified a number of priority variables at the type B terminal in Batu. Adhwa et al. (2025) show that written information regarding schedules, tariffs, storage of goods, and supporting facilities still needs improvement at the Pondok Cabe Terminal. Putri et al. (2025) emphasize the importance of service provider response and user engagement on feeder transport. In 2026, Illiyyin and Murtini (2026), Simanjuntak and Aryanni (2026), and Solossa et al. (2026) have again shown that physical facilities, cleanliness, timeliness, security, and accessibility remain important issues in terminal services.

The literature shows that terminal research over the past five years tends to focus on measuring satisfaction levels, service quality gaps, or mapping priority attributes using Service Quality, Importance Performance Analysis, satisfaction indexes, Kano models, and similar approaches (Setyawati et al., 2021; Aghajanzadeh et al., 2022; Kamil et al., 2025; Rahmawati et al., 2025; Simanjuntak & Aryanni, 2026). However, the results of these measurements are relatively rarely explicitly placed as input for facility management in the post-construction stage. The research gap of this research lies in the need to bridge user assessment with asset management decisions, specifically safety, maintenance, accessibility, operational reliability, and information systems.

Oebobo Bus Terminal is a type B terminal in Kupang City that serves the movement of Intercity Transportation within the Province to a number of areas in East Nusa Tenggara. Based on research data, some of the main facilities have been available, but problems are still found in vehicle lanes, waiting rooms, information boards, worship facilities, accessibility for people with disabilities, safety equipment, evacuation routes, lighting, drainage, cleanliness, and environmental management. The current implementation of passenger terminals refers to the Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 24 of 2021 concerning the Implementation of Road Transportation Passenger Terminals (Ministry of Transportation of the Republic of Indonesia, 2021).

Based on these conditions, the uniqueness of this study lies in the use of the expectation and perception gap as a user-based infrastructure performance indicator. The value of the gap does not stop at the diagnosis of service quality, but translates into the priority of facility management at the operation and maintenance stages. Thus, this study aims to evaluate the gap between user expectations and perceptions

of the service performance of the Oebobo Bus Terminal based on the five dimensions of Service Quality and formulate its implications for facility management priorities from the perspective of Construction Management.

METHODS

The study used a quantitative approach with a cross-sectional survey design carried out at the Oebobo Bus Terminal, Jalan Frans Seda, Oebobo District, Kupang City. The research population is the users of terminal services. A sample of 86 respondents was selected using non-probability sampling using purposive sampling techniques. Respondents meet the criteria of having used the Oebobo Terminal service, being at the terminal during the survey, being at least 17 years old, and willing to fill out the questionnaire. The consequence of the technique is that the results of the study represent the assessment of the surveyed users and are not intended as a probabilistic estimate of the entire population.

The instrument was in the form of a Likert scale questionnaire of 1–5 which measured the level of expectation and perception of 25 service attributes. Attributes are grouped into five dimensions, namely tangible, reliability, responsiveness, assurance, and empathy. The trial was carried out on 30 respondents, then the validity was re-examined on 86 respondents. The whole item has a correlation value greater than the r-table of 0.212. Cronbach's Alpha value on the main data was 0.982 for expectation and 0.899 for perception so that the instrument was judged consistent.

Table 1. Research Dimensions and Indicators

Dimensions	Number of Attributes	Scope
Tangible	8	Waiting room, seating facilities, lighting, information, toilets, places of worship, environment, cleanliness
Reliability	4	Timeline accuracy, ticketing system, procedural suitability, consistency of information
Responsiveness	5	Complaint response, willingness to help, schedule changes, complaints, officer professionalism

Dimensions	Number of Attributes	Scope
Insurance	4	Security, surveillance facilities, evacuation routes, lighting, goods security
Empathy	4	User attention, vulnerable groups, accessibility of disabilities, staff patience
Total	25	Service attributes of Oebobo Bus Terminal

Source: Research Data (2026)

The analysis uses the Service Quality approach by calculating the difference in perception and expectation on each attribute and dimension. Mathematically, $Gapi = P_i - E_i$, with $Gapi$ as the attribute gap or dimension i , P_i as the perception score, and E_i as the expectation score. A negative value indicates that the actual performance has not met expectations, a zero value indicates performance as expected, and a positive value indicates that the service exceeds expectations. A similar gap approach is used in the evaluation of terminals and public transportation to identify attributes that require managers' attention (Setyawati et al., 2021; Illiyyin & Murtini, 2026).

In the initial thesis manuscript, the summary of results listed a reliability gap of -1.60 , while the data table showed a mean expectation of 4.34 and a perception of 3.28 . This article uses the result of an arithmetic reconciliation of $3.28 - 4.34 = -1.06$ to be consistent with the mean value in the table. This value still needs to be confirmed using raw data before the manuscript is sent through the journal system. The results of the gaps are then translated into a group of facility management interventions including safety, physical maintenance, operational reliability, information systems, accessibility, and the environment.

FINDINGS AND DISCUSSION

Respondent Characteristics

A total of 86 terminal users became respondents. Male respondents amounted to 67 people or 78%, while women amounted to 19 people or 22%. The 17–25 year old age group is the largest group at 48%, followed by the 26–34 year old age group at 40%. As many as 52% of respondents used the terminal in the last three to six months, so most of them have relatively actual experience of service conditions.

Table 2. Respondent Characteristics

Features	Category	Quantity	Percentage
Gender	Male	67	78%

Features	Category	Quantity	Percentage
Age	Women	19	22%
	17–25 years old	41	48%
	26–34 years old	34	40%
	35–43 years old	9	10%
	>44 years old	2	2%
Frequency of use	First time	6	7%
	Last 1 month	28	33%
	Last 3–6 months	45	52%
	Last 1 year	7	8%

Source: Survey Results (2026)

The dominance of productive-age respondents shows that the assessment mainly describes the experience of young and adult users. The representation of a small elderly group needs to be considered when interpreting the accessibility and service needs of vulnerable groups. The limitations of these respondent characteristics do not reduce the function of the survey as an initial indicator of performance, but limit generalization to the entire user group.

Condition of Existing Facilities

Observations show that key facilities such as vehicle lanes, parking areas, counters, surveillance posts, waiting rooms, and information boards are available, but the quality of function and maintenance is not uniform. In supporting and safety facilities, there are still needs for improvement, especially places of worship, accessibility for disabilities, light fire extinguishers, evacuation routes, lighting, drainage, waste sorting, and hygiene systems.

Table 3. Existing Facility Conditions and Management Implications

Facilities Group	Identified Conditions	Implications of Facility Management
Vehicle lanes	Some surfaces and arrangements are not optimal	Pavement condition inspection and maintenance
Waiting room	Seating comfort is not optimal	Maintenance and improvement of amenities
Information	Schedules and rates have not been presented consistently	Strengthening operational information systems
Accessibility	Disability facilities are	Increased universal access

Facilities Group	Identified Conditions	Implications of Facility Management
	inadequate	
Safety	The scope of supervision, fire extinguishers, and evacuation routes is inadequate	Safety audits and periodic inspections
Description	Not enough, especially at night	Maintenance of electrical installations
Environment	Unstructured drainage, garbage, and cleanliness	Environmental maintenance and hygiene SOPs

Source: Observation Results (2026)

The findings show that the status of availability or unavailability is not enough to assess the performance of an asset. Infrastructure that is available but does not function consistently, is not secure, is not easy to use, or is not maintained on a regular basis still results in low service levels. These results are in line with Abdullah (2022), Primasworo et al. (2024), and Adhwa et al. (2025) who show that the completeness, quality, and functionality of facilities are an important part of the terminal user experience.

Gaps at the Attribute Level

Table 4. Service Quality Results on 25 Service Attributes

Code	Attributes	Hope	Perception	Gap
T1	Comfortable and clean waiting room	4,40	3,38	-1,02
T2	Seating facilities and shelter area	4,42	3,29	-1,13
T3	Adequate illumination at night	4,26	2,44	-1,82
T4	Schedule and fare information board	4,35	3,01	-1,34
T5	Adequate and clean toilets	4,26	3,23	-1,03

Code	Attributes	Hope	Perception	Gap
T6	Places of worship are available and functioning	4,37	2,62	-1,75
T7	The environment is organized and has green areas	4,22	3,40	-0,82
T8	Environmental cleanliness	4,40	2,90	-1,50
R1	Bus departure on schedule	4,58	2,79	-1,79
R2	Ticket system runs in an orderly manner	4,23	3,34	-0,89
R3	Officers serve according to procedures	4,20	3,74	-0,46
R4	Correct and consistent information	4,36	3,27	-1,09
RS1	Officers quickly respond to complaints	4,42	3,76	-0,66
RS2	Officers are ready to help	4,42	3,83	-0,59
RS3	Schedule changes are delivered on time	4,41	2,65	-1,76
RS4	Easily accessible complaint service	4,27	3,21	-1,06
RS5	Polite, friendly, and professional	4,42	3,93	-0,49

Code	Attributes	Hope	Perception	Gap
	staff			
A1	The safety of the terminal area is guaranteed	4,51	3,35	-1,16
A2	Surveillance facilities, guard posts and evacuation routes are available	4,49	2,63	-1,86
A3	Good evacuation description and signs	4,31	2,59	-1,72
A4	Security or custody of goods	4,20	3,20	-1,00
E1	Officers understand the needs of users	4,44	3,27	-1,17
E2	Priority for the elderly and disabled	4,43	3,16	-1,27
E3	Disabled access facilities available	4,48	3,13	-1,35
E4	Patient and attentive service	4,49	3,41	-1,08

Source: Analysis Results (2026)

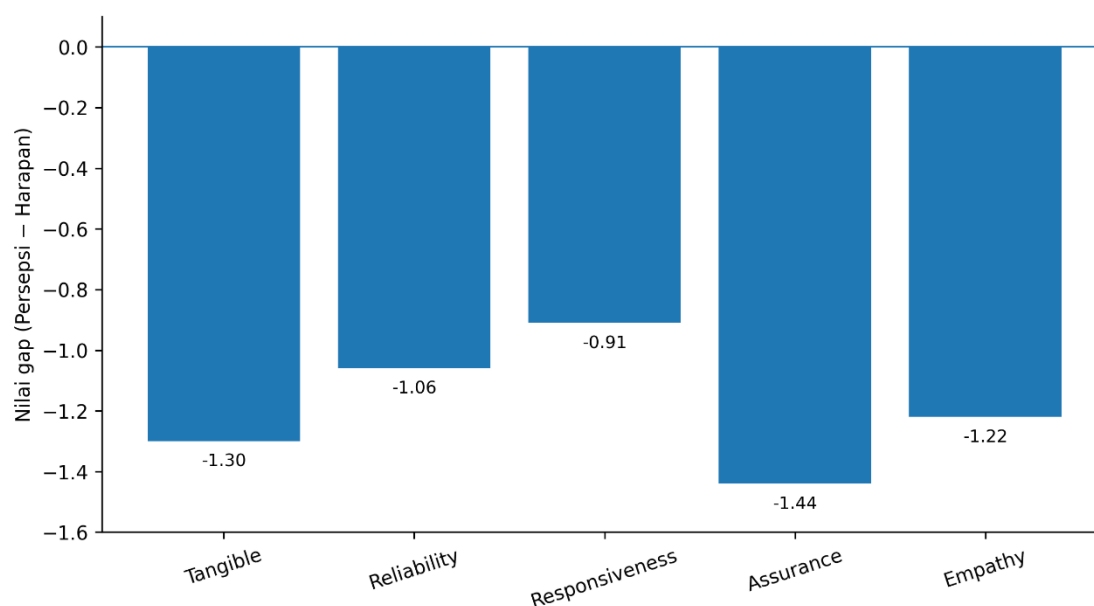
All 25 attributes result in a negative gap. The five largest gaps were surveillance facilities, guard posts, and evacuation routes (-1.86); nighttime illumination (-1.82); the accuracy of the departure schedule (-1.79); submission of schedule changes (-1.76); and worship facilities (-1.75). This pattern shows that the terminal critical point is a combination of the technical functions of the safety facility with the reliability of operation and information. These results are consistent with studies by Primasworo et al. (2024), Kamil et al. (2025), Adhwa et al. (2025), and Simanjuntak and Aryanni (2026) which also place security, lighting, basic facilities, schedules, and information as important attributes that need improvement.

Gaps Based on Service Quality Dimensions

Table 5. Summary of the Five-Dimensional Gap in Service Quality

Peringkat	Dimensions	Hope	Perception	Gap
1	Insurance	4,38	2,94	-1,44
2	Tangible	4,33	3,03	-1,30
3	Empathy	4,46	3,24	-1,22
4	Reliability	4,34	3,28	-1.06
5	Responsiveness	4,39	3,47	-0.91

Source: Analysis Results (2026)



Source: Analysis Results (2026)

Figure 1. Service Quality Gap Based on Service Quality Dimensions

Figure 1 shows the entire dimension below the zero line. *Assurance* had the largest gap of -1.44, followed by *tangible* -1.30, *empathy* -1.22, *reliability* -1.06, and *responsiveness* -0.91. Thus, the priority of improvement cannot be directed only to the behavior of officers. The dimension with the largest gap actually shows the strong problems of safety, facility function, and availability of physical facilities.

Assurance as a Priority for Infrastructure Safety

The assurance dimension is the first priority because of the gap -1.44. In the context of the Oebobo Terminal, this dimension is closely related to the security of the area, surveillance facilities, guard posts, evacuation routes, lighting, safety signs, and the security of goods. The attributes of surveillance facilities, guard posts, and evacuation routes had a gap of -1.86, while the lighting and evacuation signs had a gap of -1.72. Salisu et al. (2024) point out that safety and security are an important part of the quality of intercity terminals,

while Primasworo et al. (2024) and Simanjuntak and Aryanni (2026) also found security facilities as attributes that need to be prioritized.

From the perspective of Construction Management, the findings point to the need for risk-based facility management. Safety equipment, lighting, evacuation routes, and surveillance systems need to be treated as critical assets that have functional, inspection, and readiness requirements. Managers need to compile a list of safety assets, conduct periodic inspections, establish monitoring and lighting critical points, ensure the availability of extinguishers, mark evacuation routes, and document corrective actions. This approach shifts the maintenance pattern from reactive to preventive and risk-based.

Tangible and Preventive Maintenance Needs

The *tangible* dimension has a gap -1.30. Large gaps are found in night lighting (-1.82), worship facilities (-1.75), environmental cleanliness (-1.50), and information boards (-1.34). Kamil et al. (2025) also found cleanliness and lighting as attributes with high potential for improvement, while Illiyyin and Murtini (2026) showed that physical dimensions are one of the important aspects of the type B terminal. Preventive maintenance *programs* can be carried out through waiting room inspections, lighting system checks, toilet and public area cleaning schedules, vehicle lane inspections, maintenance of information boards and signs, and drainage and green space maintenance. Each action should be recorded in a *maintenance logbook* so that the history of condition, frequency of damage, corrective actions, and replacement needs can be monitored. This approach clarifies the identity of the research as a study of post-construction facility performance, not just a survey of user satisfaction.

Empathy and Universal Accessibility

The empathy dimension gained a gap of -1.22, while the expectation value of 4.46 was the highest among the five dimensions. Access facilities for persons with disabilities have a gap of -1.35 and priority for the elderly and disabled have a gap of -1.27. Simanjuntak and Ernawati (2025) and Solossa et al. (2026) show that the quality of facilities and attention to user needs contribute to the comfort of the terminal. In the context of infrastructure, empathy needs to be realized through universal accessibility, not just through the attitude of officers. Improvements can be directed at the provision of appropriate ramps, barrier-free access lanes, guiding blocks, accessible toilets, priority seating areas, easy-to-read information, and safe passenger transfer lanes. Infrastructure that can be used independently by vulnerable groups reduces reliance on officer assistance and improves asset quality inclusively.

Reliability and Terminal Operational Management

The reliability dimension has a gap of -1.06. The bus departure accuracy attribute shows a gap of -1.79 and is one of the most critical attributes. Weng et al. (2023) show that punctuality and quality of operations have an important relationship with user satisfaction, while Göransson and Andersson (2023) place reliability as a factor in the attractiveness of public transportation. Thus, improving physical facilities will be less effective if the terminal is unable to provide operational certainty. Repairs require arrival and departure recording procedures, coordination of managers with bus operators, regular schedule updates, late

recording and punctuality performance indicators. Managers can use the percentage of departures on schedule and average delays as operational indicators. This information can then be used to evaluate operators and improve the arrangement of vehicle movements within the terminal.

Responsiveness and Information Systems

The *responsiveness dimension* has the smallest gap, which is -0.91 , but a negative value indicates that the service still does not meet expectations. Officers were relatively better in their willingness to help and professional attitudes, but the delivery of schedule changes had a gap of -1.76 . This shows that the weakness lies not only in the behavior of the officers, but in the system that allows information to be received quickly and consistently. Putri et al. (2025) emphasized the importance of service provider response, while Adhwa et al. (2025) and Simanjuntak and Aryanni (2026) pointed out the need for improved travel information and complaint handling at terminals. Managers can improve performance through updated information boards, digital channels, easily accessible complaint services, response time standards, information officers during peak hours, and record of complaint types and resolution. The integration of information systems with schedule monitoring can also link improved *responsiveness* with increased *reliability*.

Facility Management Priorities in a Construction Management Perspective

The gap value can be used as an initial screening stage to determine the parts of the facility that need to be further inspected. Prioritization doesn't mean that the dimensions with the smallest gaps can be ignored, but rather helps managers sort intervention focuses based on user experience and asset functionality. The priority matrix in Table 6 links service findings to the form of facility management actions.

Table 6. Oebobo Terminal Facility Management Priority Matrix

Priorities	Key Findings	Construction Management Perspective	Key Interventions
1. Security	Surveillance, evacuation routes, lighting	Risk-based facility management	Safety audits, inspections, fire extinguishers, lighting, evacuation routes
2. Physical facilities	Waiting room, cleanliness, place of worship, information	Preventive maintenance	Periodic inspections, light rehabilitation, maintenance schedules
3. Accessibility	Vulnerable user facilities	Universal facility management	Ramp, guiding block, accessible toilets,

Priorities	Key Findings	Construction Management Perspective	Key Interventions
			priority areas
4. Operational	Timeline accuracy	Operational performance management	SOPs, schedule monitoring, punctuality indicators
5. Information	Schedule changes and complaints	Information management	Digital information, schedule boards, complaint channels
6. Environment	Drainage, hygiene, garbage	Environmental maintenance	Drainage, waste sorting, hygiene SOPs

Source: Research Synthesis Results (2026)

Short-term priorities can start from work with relatively smaller cost needs but have a direct impact on safety and service certainty, such as lighting inspections, evacuation route markings, inspection of surveillance systems, provision of extinguishing equipment, schedule updates, information structuring, and increased cleaning frequency. Medium-term strategies can be directed at the rehabilitation of waiting rooms, improvement of vehicle lanes, improvement of drainage, provision of worship facilities, improvement of accessibility for disabilities, and strengthening lighting and security installations.

For the sustainability of asset performance, managers need facility inventory, inspection schedules, maintenance checklists, maintenance logbooks, damage classifications, service level indicators, complaint mechanisms, and facility condition databases. This is in line with the idea that terminal quality affects user experience and behavior, so physical quality aspects need to be included in the design and evaluation process of facilities (Aghajanzadeh et al., 2022; Salisu et al., 2024). The results of the study are also consistent with Rahmawati et al. (2025) who emphasized the need for priority upgrades in type B terminals.

The research findings as novelty are that the Service Quality gap can be used as a user-based performance indicator to direct post-construction facility management. Different from research that stops at satisfaction categories or priority quadrants, this study translates the gap into six decision groups: safety, physical maintenance, accessibility, operations, information, and environment. This finding is a novelty of research. The framework establishes a conceptual relationship between user perceptions →performance gaps →critical facilities →operations and maintenance priorities →improving asset service levels. These

findings extend the use of a quality of service approach to the realm of Construction Management, specifically facility performance management during the operational phase.

CONCLUSION

The evaluation shows that all dimensions of the service quality of the Oebobo Bus Terminal have negative gaps. The assurance dimension had the largest gap of -1.44, followed by tangible -1.30, empathy -1.22, reliability -1.06, and responsiveness -0.91. At the attribute level, critical points are mainly related to surveillance facilities and evacuation routes, night lighting, departure accuracy, schedule change information, and places of worship. These results answer the research objective that the performance of the terminal has not met the expectations of users and that the priority of improvement must integrate the condition of the facility with the reliability of the operational process. From the perspective of Construction Management, service gaps can be used as user-based performance indicators to filter the needs of safety audits, preventive maintenance, accessibility improvement, information system strengthening, and operational control. Thus, the contribution of the research is to link service evaluation with asset management priorities in the post-construction stage.

Research has some limitations. First, the purposive sampling technique causes the results to not be probabilistic generalized to all terminal users. Second, the study was only conducted on one terminal and one observation period, so the variation of services based on season or time has not been analyzed. Third, the composition of respondents is dominated by the productive age group so that the representation of the elderly is relatively small. Fourth, measurements are subjective based on user perception and have not been integrated with the index of technical conditions, damage levels, component risks, maintenance costs, and the remaining life of the facility. Therefore, the results of the study are positioned as an initial screening of priorities that need to be followed by technical inspections and cost analysis before physical rehabilitation is carried out.

REFERENCES

- Abdullah, A. (2022). Tingkat pelayanan Terminal Makassar Metro sebagai tempat menunggu: Persepsi pengguna. *Jurnal LINEARS*, 5(1), 9–17. <https://doi.org/10.26618/j-linears.v5i1.7098>
- Adhwa, M., Dermawan, W. B., & Isradi, M. (2025). Analisis kepuasan penumpang terhadap pelayanan dan kinerja operasional Terminal Bus Pondok Cabe dengan metode IPA dan CSI. *RIGGS: Journal of Artificial Intelligence and Digital Business*, 4(3), 3239–3248. <https://doi.org/10.31004/riggs.v4i3.2461>
- Afandi, M. C., & Hartatik, N. (2024). Analisis tingkat kepuasan penumpang terhadap kenyamanan dan keselamatan di Terminal Larangan Sidoarjo menggunakan metode IPA. *Journal of Scientech Research and Development*, 6(1), 352–362. <https://doi.org/10.56670/jsrd.v6i1.353>
- Aghajanzadeh, M., Aghabayk, K., Esmailpour, J., & De Gruyter, C. (2022). Importance–Performance Analysis of metro service attributes during the COVID-19 pandemic.

- Case Studies on Transport Policy, 10(3), 1661–1672.
<https://doi.org/10.1016/j.cstp.2022.06.005>
- Dano.Pa, F. A., Lefrandt, L. I. R., & Pandey, S. V. (2025). Analisis tingkat kepuasan penumpang angkutan umum bus rute Manado–Bitung menggunakan metode Importance Performance Analysis. TEKNO, 23(91).
<https://doi.org/10.35793/jts.v23i91.60733>
- Gaut, M. G. A., Frans, J. H., & Sir, T. M. W. (2024). Kajian faktor penyebab ketidakefektifan kinerja Terminal Mena Kota Ruteng Kabupaten Manggarai. Jurnal Teknik Sipil, 13(2), 131–144.
- Göransson, J., & Andersson, H. (2023). Factors that make public transport systems attractive: A review of travel preferences and travel mode choices. European Transport Research Review, 15, 32. <https://doi.org/10.1186/s12544-023-00609-x>
- He, L., Yang, D., & Li, J. (2021). Improving the service quality of public transit with exclusive bus lanes: A perspective from passenger satisfaction. Journal of Advanced Transportation, 2021, 8599256. <https://doi.org/10.1155/2021/8599256>
- Illiyin, N., & Murtini, S. (2026). Kajian kesesuaian fasilitas dan kepuasan pelayanan Terminal Kertajaya Tipe B Kota Mojokerto menggunakan model SERVQUAL. Swara Bhumi, 1(1).
- Kalangi, J. I., Lefrandt, L. I. R., & Rompis, S. Y. R. (2024). Analisis tingkat kepuasan penumpang angkutan umum bus rute Manado–Kawangkoan dengan metode Importance Performance Analysis. TEKNO, 22(88).
<https://doi.org/10.35793/jts.v22i88.55292>
- Kamil, M. T., Wijayanto, D., & Djanggu, N. H. (2025). Rekomendasi peningkatan kualitas pelayanan di Terminal XYZ dengan menggunakan metode SERVQUAL dan PGCV. Jurnal Teknik Industri Terintegrasi, 8(4), 4395–4406.
<https://doi.org/10.31004/jutin.v8i4.51133>
- Kementerian Perhubungan Republik Indonesia. (2021). Peraturan Menteri Perhubungan Republik Indonesia Nomor PM 24 Tahun 2021 tentang Penyelenggaraan Terminal Penumpang Angkutan Jalan.
- Primasworo, R. A., Oktaviastuti, B., & Retang, M. M. (2024). Strategi peningkatan kualitas pelayanan Terminal Bus Arjosari Kota Malang. Jurnal Gradasi Teknik Sipil, 8(2).
<https://doi.org/10.31961/gradasi.v8i2.2331>
- Putri, A. A. A., Purwaningsih, R., Widharto, Y., & Fadli, D. A. (2025). Evaluating service quality and passenger satisfaction of feeder buses in urban public transportation. J@ti Undip: Jurnal Teknik Industri, 20(2), 69–75. <https://doi.org/10.14710/jati.20.2.69-75>
- Rahmawati, A., Takatoshi, M., Lestari, A., Wiguna, I. W. Y. M., & Ependi, A. (2025). Improving passengers' experience on Type-B terminal in Batu, East Java, using Importance Performance Analysis. Jurnal Teknologi Transportasi dan Logistik, 6(2), 123–134. <https://doi.org/10.52920/jttl.v6i2.475>
- Salisu, U. O., Gafar, M. O., Akanmu, A. A., Sanni, S. M., & Fasina, S. O. (2024). Users' satisfaction with intercity bus terminal quality in Lagos State, Nigeria. Scientific

- Journal of Silesian University of Technology. Series Transport, 123, 277–302. <https://doi.org/10.20858/sjsutst.2024.123.14>
- Setyawati, A., Nur Huda, M., Suripno, & Tannady, H. (2021). Analysis of integrated bus terminal services and their impact on customer satisfaction at Pulo Gebang. *Journal of Economics, Management, Entrepreneurship, and Business*, 1(1), 45–56. <https://doi.org/10.52909/jemeb.v1i1.5>
- Simanjuntak, V. N. M., & Aryanni, E. (2026). Service quality priorities at Purabaya Bus Terminal using Service Quality, Model Kano, and 5 Why's. *Academia Open*, 11(2). <https://doi.org/10.21070/acopen.11.2026.14297>
- Simanjuntak, V. N. M., & Ernawati, D. (2025). Analysis the level of passenger satisfaction with community services at Terminal Type A Purabaya using Service Quality methods. *Journal of Artificial Intelligence and Engineering Applications*, 4(2), 946–951. <https://doi.org/10.59934/jaiea.v4i2.787>
- Solossa, N., Pahmi, Irwan, A., & Amiruddin. (2026). Pengaruh kualitas pelayanan dan fasilitas terhadap kenyamanan penumpang Terminal Tipe B di Papua Barat Daya. *Jurnal Lentera Bisnis*, 15(2). <https://doi.org/10.34127/jrlab.v15i2.2388>
- Tuan, V. A., Van Truong, N., Shimizu, T., & An, N. N. (2022). Public transport service quality: Policy prioritization strategy in the importance-performance analysis and the three-factor theory frameworks. *Transportation Research Part A: Policy and Practice*, 166, 118–134. <https://doi.org/10.1016/j.tra.2022.10.006>
- Ubaidillah, N. Z., Sa'ad, N. H., Nordin, N. A., Baharuddin, N. N., Ismail, F., & Hassan, M. K. H. (2022). The impact of public bus service quality on the users' satisfaction: Evidence from a developing Asian city. *Review of Applied Socio-Economic Research*, 23(1), 83–96.
- Weng, J., Yu, J., Di, X., Lin, P., Wang, J.-J., & Mao, L.-Z. (2023). How does the state of bus operations influence passengers' service satisfaction? A method considering the differences in passenger preferences. *Transportation Research Part A: Policy and Practice*, 174, 103734. <https://doi.org/10.1016/j.tra.2023.103734>