

Character Analysis and Service Strategy for Sleeper Bus Consumers on The Malang – Jakarta Route Based on User Perspective

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ABSTRACT

This study aims to analyze the character and service strategy for sleeper bus consumers on the Malang–Jakarta route based on the user perspective. Through a survey approach involving questionnaire instruments, this study integrates the Kano and SERVQUAL methods to identify customer needs and evaluate the gap between expectations and perceptions of service quality. Analysis of user needs characteristics was carried out to understand which attributes are considered important and significantly affect the level of satisfaction in the context of sleeper bus services. The results show that some service attributes fall into the must-be and one-dimensional categories, which are proven to have a strong impact on user satisfaction. Meanwhile, SERVQUAL analysis identified negative gaps in several service dimensions, especially in terms of reliability and responsiveness. Based on these findings, this study formulates a service improvement strategy that focuses on optimizing priority attributes, improving operational processes, and strengthening comfort and security aspects. This research is expected to contribute to the development of a more responsive and customer-oriented intercity transportation service strategy.

Keywords: Sleeper Bus, Service Strategy, User Perspective, Canoe Analysis, SERVQUAL, Service Quality.

INTRODUCTION

Land transportation plays an important role in societal mobility, especially for long-distance intercity travel. One increasingly popular mode of transportation is the sleeper bus service, which offers greater comfort for passengers than conventional buses (Goulart et al., 2024; Pan et al., 2021; Prajapati et al., 2024; Prasetyo et al., 2023). The Malang – Jakarta route experiences high demand due to substantial community mobility between these cities for business, education, and tourism purposes. When selecting a sleeper bus service, users consider various factors, such as service quality, price, comfort, and other operational aspects (Ajinkya, 2016; Firmansyah & Bahalwan, 2021; Nguyen et al., 2021).

The facilities offered include seats that double as beds, as well as private cabins that ensure passenger privacy. Some bus operators providing Sleeper Bus services include Juragan 99 Trans, Rosalia Indah, Sinar Jaya, Gunung Harta, DAMRI, Handoro, Lorena, Hariyanto, Agra Mas, Harapan Jaya, Mtrans, and 27 Trans. This service allows passengers to rest comfortably throughout the journey, making it more enjoyable and fatigue-free (Gumalag et al., 2024; Jumini & Realize, 2020; Junior et al., 2024; Natalie, 2016).

This study analyzes the factors influencing the selection of sleeper bus services on the Malang – Jakarta route from the users' perspective, with a focus on the quality of services offered. Through the Service Quality (SERVQUAL) approach and the Kano Model, it identifies the dimensions of service quality that most influence user satisfaction, such as tangibles, reliability, responsiveness, assurance, and empathy. In addition, the study

categorizes service attributes based on their importance in meeting user needs and provides strategic recommendations to enhance sleeper bus service quality.

Its novelty lies in integrating the Kano and SERVQUAL methods to assess customer satisfaction and service quality, offering a comprehensive understanding of user needs and service gaps in the sleeper bus industry. The objectives are to identify key service attributes influencing consumer satisfaction, evaluate service quality gaps, and propose effective strategies to improve sleeper bus services. The research benefits include actionable insights for providers to enhance customer experience by prioritizing critical attributes such as cleanliness, punctuality, reliability, and responsiveness. Additionally, the findings support customer-oriented strategies to boost service quality, leading to greater user satisfaction and loyalty. This work contributes to the broader field of transportation management by providing a practical framework for improving service quality in intercity bus transportation.

METHOD

The questionnaire was prepared by selecting attributes relevant to sleeper bus services, such as bed comfort, cleanliness, officer services, and additional facilities. Each attribute was evaluated using functional and dysfunctional questions. Respondents—sleeper bus passengers who had used the service—rated each attribute based on their experience. Data collection occurred both online and offline to broaden respondent reach.

Collected data were analyzed by grouping attributes into Kano model categories. The Kano calculation derived from respondents' answers to functional (describing appropriate cost-service alignment) and dysfunctional (describing cost-service inconsistencies) statements. Data from the Kano questionnaire were inputted into the Kano Evaluation Table to determine categories.

The SERVQUAL method assessed service quality by comparing customer expectations and perceptions. Questionnaires were prepared based on its five dimensions and distributed to sleeper bus users who had used the service. Respondents rated their expectations and actual experiences. Data collection used online surveys and in-person interviews.

Analysis calculated gaps between expectation (E) and perception (P) scores for each dimension. Negative gaps indicated improvement areas; positive gaps showed satisfactory aspects. Gap rankings identified priorities, with larger gaps signaling greater discrepancies for management focus (Mauidzoh & S, 2020).

Data collection targeted sleeper bus users on the Malang – Jakarta route via questionnaires and structured individual interviews at Arjosari Terminal. Simple random sampling was employed.

Before data collection, researchers designed the questionnaire by identifying attributes linked to SERVQUAL dimensions (tangibles, empathy, assurance, reliability, responsiveness), as shown in Table 1. This research focused solely on Sleeper class users on the Malang – Jakarta route, limiting its generalizability but offering targeted improvements.

At the attribute identification stage, attributes were grouped by SERVQUAL dimensions, followed by pre-questionnaire compilation. The pre-questionnaire test distributed items to assess validity and consumer relevance, refining questions for the main survey. Final categorization determined Kano classifications for each attribute based on respondent responses.

RESULTS AND DISCUSSION

Servqual Analysis and Canoe Model

Expectations and Reality as well as the level of customer satisfaction with the Servqual dimension. Overall, while there are several individual statements in each dimension that indicate satisfaction (positive GAP), the majority of Servqual's dimensions show a negative gap (expectations higher than reality) in key statements, indicating a level of customer dissatisfaction in key areas (Harfi & Nurrohmah, 2017; Nurhadi et al., 2022; Ramadani et al., 2024; Sarja Y K A, 2018).

Table 1. Expectations and Statements of customer satisfaction level with Servqual dimensions

No	Statement	Hope		Fact		GAP (PERFORMANCE - EXPECTATIONS)	INFO RMA TION
		JML	AVERAGE2	JML	AVERAGE2		
TANGIBLE							
X1.1	The bus facilities look modern and clean	814	4,40	799	4,32	0,08	SATI SFIE D
X1.2	Condition of Flight Attendant / Flight Attendant Bus Clean	775	4,19	808	4,37	-0,18	
X1.3	Sleeper <i>seat</i> is comfortable and neat	805	4,35	822	4,44	-0,09	
X1.4	Toilets and additional facilities (charging port, WiFi, blankets) work well	774	4,18	825	4,46	-0,28	DISS ATIS FIED
	SUM	792	4,28	814	4,40	-0,5	
RELIABILITY							
X2.1	Buses depart and arrive on schedule	739	3,99	818	4,42	-0,43	DISS ATIS FIED
X2.2	Friendly Flight Attendant/Bus Attendant Service	771	4,17	817	4,42	-0,25	
X2.3	Prices with the quality of service according to	782	4,23	808	4,37	-0,14	SATI SFIE D
X2.4	Service and Facilities information available	783	4,23	812	4,39	-0,16	
	SUM	769	4,16	814	4,40	-0,97	
RESPONSIVENESS							

No	Statement	Hope		Fact		GAP (PERFORMANCE - EXPECTATIONS)	INFO RMA TION
		JML	AVERAGE2	JML	AVERAGE2		
X3.1	Officers are quick to respond to passenger needs	816	4,41	762	4,12	0,29	SATI SFIE D
X3.2	Information is conveyed clearly and on time	759	4,10	819	4,43	-0,32	DISS ATIS FIED
	SUM	788	4,38	791	4,27	-0,03	
INSURANCE (Guarantee)							
X4.1	Passenger items stored in the baggage of the bus are safe	811	4,38	824	4,45	-0,07	
X4.2	The officers look professional and are able to provide a sense of security	795	4,30	819	4,43	-0,13	
X4.3	Ticket seat number with seats on the Bus according	833	4,50	821	4,44	0,06	SATI SFIE D
X4.4	Safety and security protocols are well implemented	799	4,32	823	4,45	-0,13	
X4.5	The Office/Company provides insurance if something happens	751	4,06	810	4,38	-0,32	DISS ATIS FIED
	SUM	798	4,31	819	4,43	-0,58	
EMPATHY							
X5.1	The bus staff provided friendly attention and service	776	4,19	822	4,44	-0,25	DISS ATIS FIED
X5.2	Passengers feel treated personally and valued	785	4,24	818	4,42	-0,18	SATI SFIE D
	SUM	781	4,22	820	4,43	-0,43	

Source: Researcher's Processed Results, 2025

The Tangible dimension in aggregate shows a negative GAP (-0.5). Although the bus facilities look modern and clean (X1.1) are quite satisfactory (+0.08), there is significant dissatisfaction with the unclean condition of the bus attendants (X1.2: -0.18) and especially with the toilets and additional facilities (charging port, WiFi, blankets) that are not functioning properly (X1.4: -0.28). Bed comfort (X1.3) also still has a negative GAP (-0.09). Some passengers still complained about the X1.3 indicator, which included supporting facilities such

as charging ports that are not compatible with the user's USB type, suboptimal WiFi availability (either because it is not available or not functional during the trip), and the blankets provided are considered to be less thick and do not provide maximum comfort. Users expect better cleanliness and functionality on the bus crew as well as supporting facilities on the bus.

The Reliability dimension in aggregate had the largest negative GAP (-0.97). This is the dimension with the highest level of dissatisfaction. The critical point is the punctuality of the departure and arrival of the bus (X2.1: -0.43) which is very unsatisfactory and is the biggest problem. The friendly flight attendant/flight attendant service (X2.2: -0.25) and the availability of service and facility information (X2.4: -0.16) also showed dissatisfaction. Although the price of service quality corresponds (X2.3) indicates satisfaction (+0.14), this does not sufficiently cover the large gap on the other points. There are still some Bus Companies (PO) that are not on time for departure and arrival, causing users to have to wait for a relatively long time without getting adequate information before departure from the operator. Companies urgently need to improve reliability, especially when it comes to timeliness.

The Responsiveness dimension in aggregate has a negative GAP (-0.03). Although the attendants responded quickly to passenger needs (X3.1) satisfactorily (+0.29), there was significant dissatisfaction with the information conveyed clearly and in a timely manner (X3.2: -0.32). There are still complaints from users regarding the lack of information or reminder messages from PO Bus regarding the pick-up schedule. Passengers do not receive notifications a few hours before departure, making it difficult to estimate the waiting time at the predetermined pick-up point. Companies need to improve their information delivery systems to be clearer and more timely to customers.

The Assurance dimension in aggregate has a negative GAP (-0.58). There is significant dissatisfaction with insurance coverage in case something happens (X4.5: -0.32). In addition, passenger items stored in bus baggage (X4.1: -0.07), officers who are professional and able to provide a sense of security (X4.2: -0.13), and safety protocols (X4.4: -0.13) also show dissatisfaction, albeit minor. Only seat comfort (X4.3) shows satisfaction (+0.06). The PO Bus still does not provide adequate guarantees or insurance to passengers in the event of an accident or obstacle during the trip, including for passengers' personal belongings. This causes users to feel less secure, especially in terms of insurance protection and overall sense of security while using the service. Customers feel less secure, especially when it comes to insurance and overall security.

The Empathy dimension in aggregate has a negative GAP (-0.43). Significant dissatisfaction was seen in bus attendants who did not provide friendly attention and service (X5.1: -0.25). Although passengers feel treated personally (X5.2) show satisfaction (+0.18), this does not adequately cover the gap in the hospitality and attentiveness aspects of the officers. It is necessary to improve the attitude and behavior of bus officers to be more friendly and give personal attention to passengers.

Overall, although there are some aspects of service that have met or exceeded customer expectations, the company has a big PR in improving service quality, especially in the dimensions of Reliability (reliability and punctuality), Assurance (guarantee and safety, especially insurance), Tangible (cleanliness of bus crew and facility functions), Responsiveness (clarity of information), and Empathy (friendliness and attention of officers). Negative gaps in key attributes indicate that customer expectations have not been met in many

important areas. Primary priority should be given to improving the aspects with the greatest negative GAP values to improve overall customer satisfaction. Meanwhile, in Table 4.36 the Kano Model provides a strategic roadmap on which types of attributes need to be focused, and the CS/DS value gives how much of an impact those attributes have on customer satisfaction and dissatisfaction.

Table 2. Canoe Identification

No	Customer Requirement	I	A	O	M	A+O	O+M	A+O+M+I	CS	Rank. CS	DS	Rank. DS
1	Fully recline bed facility is available	33	91	47	3	138	50	174	0,793	6	0,287	8
2	Private blankets and pillows available	26	92	51	1	143	52	170	0,841	2	0,306	6
3	Personal entertainment screen	51	97	21	4	118	25	173	0,682	11	0,145	11
4	Personal reading lamp	67	85	17	5	102	22	174	0,586	12	0,126	12
5	Charging port (USB)	25	90	55	3	145	58	173	0,838	4	0,335	5
6	WiFi during the trip	45	91	37	3	128	40	176	0,727	10	0,227	10
7	Toilets on the bus	34	80	56	6	136	62	176	0,773	7	0,399	1
8	Snack and beverage service	28	105	41	0	146	41	174	0,839	3	0,236	9
9	Personal belongings security (small lockers/surveillance cameras)	39	83	43	8	126	51	173	0,728	9	0,295	7
10	Punctuality of departure and arrival	33	81	50	9	131	59	173	0,757	8	0,341	3
11	Courtesy and professionalism of the bus crew	26	86	53	6	139	59	171	0,813	5	0,345	2
12	Bus interior cleanliness	19	85	63	6	148	69	173	0,855	1	0,29	6

Source: Researcher's Processed Results, 2025

Attributes with the Highest Satisfaction Impact (CS Rank 1-3) Cleanliness of the bus interior (CS: 0.855), Blankets and personal pillows available (CS: 0.841), and Snack and beverage service (CS: 0.839). These attributes have the highest potential to create satisfaction when available. Interestingly, "Cleanliness of the interior of the bus" (Must-be) and "Private blankets and pillows" (Attractive) have the highest CS, indicating that while one is basic and the other is a delighter, both are highly valued when they are.

Attributes with the Highest Dissatisfaction Impact (DS Rank 1-3) / Most Avoidant Dissatisfaction (low DS) Toilets on the bus (DS: 0.399), Professionalism of the bus crew (DS: 0.345), and punctuality of departure and arrival (DS: 0.341). These attributes, all of which are "Must-be", have the highest DS value (or the highest DS which means most critical if they don't exist). This confirms their "Must-be" nature; If it fails to meet these standards, customers will be very dissatisfied. The "Indifferent" attribute in the context of CS and DS, Personal

entertainment screens (CS: 0.682, DS: 0.145) and Personal reading lights (CS: 0.586, DS: 0.126) have relatively low CS and DS values, especially DS, which further reinforces their classification as "Indifferent". That is, its existence or absence does not affect customer satisfaction or dissatisfaction too much.

CONCLUSION

Sleeper bus passengers on the *Malang – Jakarta* route were predominantly private employees earning over Rp5,000,000 monthly, traveling for vacations, family visits, or official trips, with decisions driven by facilities and services. SERVQUAL analysis revealed significant service gaps: tangibles (-0.5) due to unclean crew, toilets, and missing amenities like charging ports, WiFi, and blankets; reliability (-0.97) from delayed departures/arrivals and poor service information; responsiveness hampered by unclear communication despite quick officer responses; assurance (-0.58) lacking in insurance and baggage protection; and empathy undermined by unfriendly staff attitudes. Recommended strategies include enhancing cleanliness, adding facilities, improving punctuality, and boosting responsiveness through better information, friendliness, and attention. Future studies could longitudinally track service improvements post-implementation or expand to other routes using mixed methods, incorporating passenger demographics and real-time digital feedback for broader generalizability.

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