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## Evaluation of Customer Satisfaction with Railway Company Services in Area VI Yogyakarta

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**Abstract:** This study evaluates customer satisfaction with the service facilities of PT Kereta Commuter Indonesia (KCI) in Area VI Yogyakarta. As the number of Commuter Line (KRL) users continues to grow, understanding customer needs and expectations is crucial for improving service quality. A quantitative survey approach was employed using a Likert scale and multiple customer satisfaction measurement tools, including the Customer Satisfaction Index (CSI), Net Promoter Score (NPS), and Importance–Performance Analysis (IPA). The findings reveal that the CSI score reached 86.50%, indicating a high level of customer satisfaction, although several service dimensions particularly schedule punctuality and facilities for persons with disabilities still require improvement. To the best of the authors' knowledge, this is one of the first studies focusing on customer satisfaction in Area VI Yogyakarta that integrates CSI, NPS, and IPA simultaneously. The results provide valuable insights for PT KCI in formulating customer-centric service improvement strategies to further enhance overall satisfaction and service performance.

**Keywords:** Customer Satisfaction, Public Transportation, Service Quality, Loyalty, Facilities

### INTRODUCTION

PT Kereta Commuter Indonesia (KCI) is a major provider of electric train (KRL) services and plays a crucial role in Indonesia's public transportation system, including Area VI Yogyakarta. The rapid growth of urbanization has led to a significant increase in KRL users, making service quality improvement essential to ensure customer satisfaction and strengthen user loyalty. Customer satisfaction in public transportation is shaped by factors such as punctuality, comfort, accessibility, reliability, and responsiveness, and shortcomings in these areas may reduce passenger trust and shift preferences to alternative transport modes. (Aprilla & Amalia, 2019; Aryani & Rosinta, 2010; "Kualitas Jasa Yang Mempengaruhi Loyalitas Dan Relevansinya Terhadap Kepuasan," 2010)

To maintain high service performance, PT KCI must continuously adapt to technological advancements and evolving passenger expectations. Tools such as the Customer Satisfaction

Index (CSI), Net Promoter Score (NPS), and Importance–Performance Analysis (IPA) are widely used to evaluate service quality and identify priority areas for improvement. This study aims to assess customer satisfaction with KCI services in Area VI Yogyakarta using these analytical approaches to provide strategic recommendations for service enhancement.(Indriyati, 2023; I. Indriyati et al., 2018)

Digital innovations including real-time information systems, mobile ticketing, and automated customer support have become important in improving the commuter experience. Accessibility also remains a key concern, especially for passengers with disabilities, reinforcing the need for facilities such as ramps, elevators, and designated seating. In addition, safety and security measures, train frequency, and schedule reliability significantly influence passenger satisfaction and long-term loyalty. The role of commuter rail services in supporting environmental sustainability further highlights the importance of improving operational efficiency to reduce congestion and encourage eco-friendly mobility.(Indriyati et al., 2022)

Overall, a systematic evaluation of service quality is necessary for PT KCI to optimize its operations and maintain a reliable and customer-centric transportation system. By addressing service gaps, leveraging digital transformation, and strengthening passenger engagement, PT KCI can enhance commuter rail performance and ensure continued preference for KRL services in Yogyakarta and surrounding regions.(Marthaleina Ruminda, Yulianti Keke, Euis Saribanon, Mustika Sari, 2021)

In addition, strengthening collaborative efforts between PT KCI, local governments, and other transportation stakeholders is essential to ensure an integrated and seamless mobility ecosystem for commuters. Effective coordination in transport planning—such as synchronization of schedules between KRL and feeder services, enhanced intermodal connectivity, and improved pedestrian access to stations—will increase overall travel convenience and reduce commuting barriers. Furthermore, involving passengers in the service evaluation cycle through structured feedback channels, participatory forums, and periodic customer satisfaction reviews can support more responsive and inclusive decision-making. Such collaborative and user-driven approaches not only accelerate service improvement but also reinforce passenger ownership and trust in the public transportation system. Ultimately, developing a commuter rail service that is safe, accessible, efficient, and responsive requires a shared commitment among institutions, stakeholders, and the community.(S. Indriyati et al., 2023)

The increasing competitiveness of public transportation services in Indonesia encourages operators to adopt more customer-oriented management approaches. Passengers today no longer assess transportation services solely based on accessibility and affordability, but also on perceived value, convenience, digital experience, and emotional satisfaction during travel. This shift in passenger expectations highlights the need for continuous performance monitoring through structured satisfaction assessment. Evaluating commuter experiences specifically in Area VI Yogyakarta is particularly important given the region's growing population mobility, dependence on rail transportation for daily commuting, and increasing demand for real-time information and safe travel conditions. A systematic investigation of customer satisfaction can therefore provide critical insights for PT KCI to tailor service improvement policies that reflect the unique needs of KRL users in Yogyakarta rather than relying solely on general service strategies implemented at the national level.(Large et al., 2011)

## **METHOD**

### **Research Design**

This study adopts a quantitative research design to evaluate customer satisfaction with PT Kereta Commuter Indonesia (KCI) services in Area VI Yogyakarta. A survey method was employed using structured questionnaires and a 5-point Likert scale (1 = Very Dissatisfied, 5 = Very Satisfied) to measure passenger perceptions of key service attributes. Customer

satisfaction was assessed using three complementary metrics: the Customer Satisfaction Index (CSI), Net Promoter Score (NPS), and Importance–Performance Analysis (IPA). This multi-metric approach enables a comprehensive evaluation of both satisfaction and loyalty as well as the prioritization of service improvements.

### Population and Sample

The target population consists of passengers using KRL (Commuter Line) services operated by PT KCI in Area VI Yogyakarta. A total of **393** respondents participated in the survey, selected through stratified random sampling to ensure representation across different user groups. Stratification was based on:

- a) Frequency of use (daily, weekly, occasional users)
- b) Purpose of travel (work, education, leisure, other)
- c) Demographic characteristics (age, gender, occupation, income level, education)

This sampling strategy was used to capture diverse commuter experiences and reduce sampling bias.

### Survey Instrument

The questionnaire comprised two main sections:

#### 1. Demographic Information

This section collected data on gender, age, marital status, education level, occupation, income, and frequency of KRL usage. These variables were used to describe the respondent profile and to interpret satisfaction patterns across different user segments.

#### 2. Service Evaluation

This section measured perceptions of service quality using a 5-point Likert scale. The following dimensions were assessed:

- a) Punctuality (schedule reliability, train frequency)
- b) Comfort (cleanliness, seating availability, temperature/air circulation)
- c) Accessibility (facilities for persons with disabilities, ease of station access)
- d) Safety and Security (presence of security personnel, surveillance, emergency preparedness)
- e) Customer Service and Information (staff responsiveness, clarity of information, website, mobile app, social media)

Additional items captured perceptions of ticketing systems (ticket counters, vending machines, electronic payment, tap-in/tap-out system) and station facilities.

### Data Collection Procedures

Data were collected through on-site distribution of questionnaires at selected stations in Area VI Yogyakarta during operational hours. Respondents were briefed on the study's purpose and assured of anonymity and confidentiality. Only fully completed questionnaires were included in the analysis, resulting in 393 valid responses suitable for statistical processing.

## RESULTS AND DISCUSSION

The survey results show a relatively balanced gender composition, with 46.6% male and 53.4% female respondents, indicating that Commuter Line services are used extensively by both men and women. The majority of passengers (95.9%) are in the 18–55 years age group, reflecting a dominance of productive-age users who typically rely on KCI for daily commuting to work, education, and other routine activities. In terms of marital status, 63.6% of respondents are single and 36.4% are married, suggesting a sizable proportion of younger users such as

students and early-career professionals. Educational attainment is relatively high, with 32.8% holding a high school diploma and 53.7% holding a bachelor’s degree. Most respondents (72.5%) report monthly incomes of less than IDR 3 million, indicating that KCI services are especially important for lower-middle-income groups who depend on affordable public transport.

This demographic profile supports the notion that KCI plays a central role in providing accessible, affordable mobility for productive-age and lower- to middle-income residents in Yogyakarta.

### Customer Satisfaction Level

Understanding the level of customer satisfaction is crucial in evaluating the effectiveness of public transportation services and identifying areas for improvement. Measuring customer perceptions through structured survey methods allows PT KCI to gauge the overall commuter experience and make data-driven enhancements to service quality.(Deshwal et al., 2014; Pantouvakis & Bouranta, 2012; Saha & Theingi, 2009a)

The Customer Repurchase Index (CRI) score of 92.3% indicates a strong intention among customers to continue using this service in the future. Meanwhile, the Net Promoter Score (NPS) of +55 places the service in the "good" category, suggesting that customers are willing to recommend Commuter Line to others.(Saha & Theingi, 2009b; Swan & Bowers, 1998)

The survey results indicate that the overall customer satisfaction level falls into the "very satisfied" category, with a Customer Satisfaction Index (CSI) score of 86.5%. This reflects that most customers feel that PT KCI Area VI services meet or even exceed their expectations.

**Table 4.1 Gender Distribution**

Gender	Total
Male	183 (46.6%)
Female	210 (53.4%)
Total	393 (100%)

The survey respondents consisted of 46.6% male and 53.4% female, with a slightly higher proportion of female respondents. This indicates a balanced representation between genders.

**Table 4.5 Age Distribution by Route**

Age	Total
< 18 years	13 (3.3%)
18 - 55 years	377 (95.9%)
> 55 years	3 (0.8%)
Total	393 (100%)

The majority of respondents belong to the 18-55 years age group (95.9%), suggesting that the primary users of Commuterline are productive-age individuals who likely use the service for work, school, or daily activities.

**Table 4.6 Marital Status Distribution**

Marital Status	Total
Single	250 (63.6%)
Married	143 (36.4%)
Total	393 (100%)

A total of 63.6% of respondents are single, while 36.4% are married. This suggests that the Commuterline is predominantly used by younger individuals, such as students, university students, or young professionals.

**Table 4.7 Education Level Distribution**

Education Level	Total
Elementary School (SD)	3 (0.8%)
Junior High School (SMP)	8 (2.0%)
High School (SMA)	129 (32.8%)
Diploma (D3)	36 (9.2%)
Bachelor’s Degree (S1)	211 (53.7%)
Master’s/Doctoral (S2/S3)	6 (1.5%)
Total	393 (100%)

The majority of respondents hold a high school diploma (32.8%) or a bachelor's degree (53.7%), indicating a relatively high level of education among Commuterline users.

**Table 4.8 Income Distribution**

Income Level	Total
< IDR 3 million	285 (72.5%)
IDR 3-5 million	107 (27.2%)
IDR 5-10 million	1 (0.3%)
Total	393 (100%)

The majority of respondents earn less than IDR 3 million per month (72.5%), showing that most Commuterline users belong to the lower-middle-income class.

### General Interpretation

Analyzing customer satisfaction data provides valuable insights into passenger perceptions of PT KCI services, highlighting both strengths and areas requiring improvement. A thorough interpretation of these findings allows PT KCI to better understand commuter expectations, prioritize service enhancements, and develop strategic initiatives to ensure a high-quality travel experience. By evaluating key service attributes, this study identifies factors contributing to overall satisfaction and potential challenges that need to be addressed for long-term service improvements.(Olorunniwo et al., 2006)

The survey results reveal that passenger satisfaction is influenced by multiple factors, including service reliability, comfort, accessibility, and safety. High ratings in specific areas indicate successful service delivery, whereas lower ratings highlight opportunities for targeted improvements. Understanding the distribution of satisfaction levels helps PT KCI refine operational strategies, allocate resources efficiently, and implement necessary changes to enhance the commuter experience.(Griffiths et al., 2001; Liljander & Roos, 2002; Twing-Kwong et al., 2013)

Furthermore, examining customer feedback across different demographic groups provides deeper insights into the diverse needs of passengers. Daily commuters may prioritize punctuality and frequency, whereas occasional travelers may focus more on convenience and ticketing efficiency. By segmenting responses based on travel habits, PT KCI can tailor its service improvements to better meet the expectations of various passenger segments.(Hu et al., 2016; Sumaedi et al., 2016)

The interpretation of satisfaction scores also helps in benchmarking PT KCI’s performance against other public transportation services. Comparing key performance

indicators with industry standards can guide PT KCI in adopting best practices and innovative solutions to maintain and further improve service quality. Ultimately, a well-rounded understanding of customer perceptions allows PT KCI to make informed, data-driven decisions that foster passenger loyalty and contribute to the long-term success of commuter rail services.

**High Satisfaction Aspects:**

- 1) Cleanliness and Comfort (90.5%) – Passengers appreciate KCI’s efforts in maintaining cleanliness and comfort.
- 2) Directional Signs (89.1%) – Clear station navigation signs are well received.
- 3) Tap In & Tap Out System (90.6%) – The electronic gate system is considered efficient.

**Lower Satisfaction Aspects:**

- 1) Ticket Machines (79.8%) – Users experience issues with ticket availability or reliability.
- 2) Website (75.6%) – Needs improvement in navigation, speed, and information completeness.
- 3) Social media (83.3%) – Needs improvement in responsiveness and communication.

These findings provide valuable insights for PT KCI in enhancing service quality based on customer needs and expectations.

The findings from the survey indicate both high satisfaction aspects and areas requiring improvement in PT KCI’s commuter services. Understanding these key satisfaction drivers and pain points allows for targeted service enhancements that align with passenger expectations.

**High Satisfaction Aspects**

1. Cleanliness and Comfort (90.5%) Passengers highly appreciate PT KCI’s commitment to maintaining cleanliness and comfort both in trains and at stations. A clean and well-maintained environment contributes significantly to a positive commuting experience, enhancing passenger trust and satisfaction. The high rating suggests that PT KCI’s sanitation protocols, seating arrangements, and air circulation systems effectively meet customer expectations.
2. Directional Signs (89.1%) Clear and strategically placed station navigation signs help passengers move efficiently within stations, reducing confusion and ensuring smooth transitions between platforms and exits. This aspect is particularly important for first-time users and those unfamiliar with the station layout. The high satisfaction score indicates that the signage system is well-designed and contributes to overall ease of travel.
3. Tap In & Tap Out System (90.6%) The electronic gate system used for entry and exit receives high satisfaction ratings due to its efficiency, reliability, and ease of use. A well-functioning electronic ticketing system minimizes congestion at station gates, enhances security, and speeds up passenger movement, making it a critical component of an efficient commuter experience.

**Lower Satisfaction Aspects**

1. Ticket Machines (79.8%) – Some passengers report difficulties in ticket availability and machine reliability, leading to delays and inconvenience. Issues such as machine malfunctions, long queues, and limited availability at peak hours contribute to lower satisfaction in this area. Enhancing the reliability, user-friendliness, and accessibility of ticket vending machines can significantly improve passenger convenience.
2. Website (75.6%) – PT KCI’s official website receives a relatively low satisfaction score, indicating the need for improvements in navigation, page loading speed, and the completeness of travel-related information. Many passengers rely on digital platforms to check schedules, service disruptions, and fare details; therefore, optimizing the website for better accessibility and user experience is crucial.

3. Social media (83.3%) – While social media is recognized as a valuable communication tool, survey results indicate that responsiveness and engagement need improvement. Passengers expect prompt replies to inquiries, real-time updates on service disruptions, and interactive engagement with customer concerns. Strengthening PT KCI's social media presence by providing faster response times and more proactive communication can enhance overall customer satisfaction.

These findings provide valuable insights for PT KCI to strategically enhance service quality based on customer needs and expectations. By addressing lower satisfaction areas while maintaining strengths in cleanliness, signage, and ticketing systems, PT KCI can create a more efficient, user-friendly, and customer-focused commuter experience

## CONCLUSION

An in-depth evaluation of PT KCI services in the Yogyakarta Area has provided valuable insights into passenger perceptions and overall service quality. Through the analysis of key customer satisfaction metrics, several important findings have emerged that highlight both strengths and areas for improvement. Based on the customer satisfaction analysis of PT KCI services in Yogyakarta Area in 2024, the following conclusions can be drawn:

1. The overall customer satisfaction level is high, with a Customer Satisfaction Index (CSI) of 86.5%, indicating that the majority of users are very satisfied with PT KCI's services. This reflects positive perceptions of cleanliness, comfort, and overall service quality, which play a crucial role in retaining passengers and encouraging continued use of commuter rail services.
2. Customer loyalty is strong, as reflected in the Customer Satisfaction Index (CSI) of 92.3%, showing that most users intend to continue using the service in the future. High repurchase intent suggests that passengers find PT KCI services reliable and convenient for their daily commutes, reinforcing the importance of maintaining service consistency and reliability.
3. Many customers are willing to recommend PT KCI services, with a Net Promoter Score (NPS) of 55%, which falls into the "good" category. A strong NPS indicates that a significant portion of passengers are satisfied enough to promote the service, although there remains a need to address the concerns of detractors to further improve customer perception and advocacy.
4. Some key challenges remain, including passenger overcrowding (79.7%) and train delays (19.6%), which negatively impact the customer experience. Overcrowding during peak hours reduces comfort and accessibility, while delays affect reliability and punctuality, leading to dissatisfaction among passengers who depend on timely service for their daily commutes.
5. Several service aspects require improvement, particularly ticket counter services, ticket vending machines, electronic payment systems, facilities for disabled passengers, and schedule accuracy. Addressing these issues is critical to ensuring a more seamless travel experience and enhancing the efficiency of PT KCI's service operations.
6. Customer expectations for PT KCI services include increased train frequency, better station and train facilities, expanded train capacity, and improved access to real-time travel schedules and service disruption information. Meeting these expectations will help maintain high customer satisfaction and improve the overall commuter experience.

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