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Performance Evaluation of Intercity Public Transport Service Providers (AKDP) in Gorontalo Province, Indonesia: An Analysis of Organizational, Operational, and Managerial Aspects

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Abstract: This study aims to evaluate the performance of intercity public transport (AKDP) service providers in Gorontalo Province, Indonesia, through a comprehensive assessment of organizational, operational, and managerial aspects. The research employs a descriptive-quantitative approach combined with qualitative insights from field observations and stakeholder interviews. Data were collected from licensed AKDP companies operating across the Gorontalo region, focusing on variables related to business existence, service type, administrative capacity, human resources, technical conditions, and operational management. The findings reveal that most AKDP operators in Gorontalo face challenges related to limited fleet renewal, low digitalization in administrative processes, and inadequate service management. Despite these constraints, several operators demonstrate strong institutional resilience and adaptability in maintaining regional connectivity. The study concludes that improving organizational governance, professional human resource management, and the adoption of technology-based service systems are critical strategies for enhancing the overall performance of intercity transport service providers. This research provides valuable implications for local governments and transport policymakers in strengthening the efficiency and sustainability of regional transport systems.

Keywords: *Intercity Public Transport (AKDP), Performance Evaluation, Organizational Management, Operational Efficiency, Gorontalo Province, Transport Policy.*

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I. INTRODUCTION

The intercity public transport system (AKDP) plays a vital role in connecting regional centers, supporting economic activities, and facilitating population mobility across provincial areas in Indonesia. In regions such as Gorontalo Province, where spatial and economic development continues to evolve, the availability and performance of AKDP services are essential to ensuring regional accessibility and transport equity. However, the operational condition of AKDP companies has increasingly faced complex challenges, including aging vehicle fleets, fluctuating passenger demand, low digitalization in service management, and limited administrative efficiency.

Transportation efficiency at the regional level is strongly influenced by the institutional and operational performance of public transport providers. According to the Indonesian Ministry of Transportation (2021), sustainable regional mobility can only be achieved when operators demonstrate organizational resilience, service reliability, and effective human resource management. Despite this, many AKDP operators in secondary provinces such as Gorontalo have not yet optimized their business processes and service delivery mechanisms, leading to declining competitiveness and inconsistent service quality.

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Previous studies have generally focused on urban public transport systems, service satisfaction, and infrastructure quality (Prasetyo & Riyadi, 2020; Nugroho et al., 2022). Few empirical investigations, however, have explored the internal performance dimensions of intercity transport companies, especially in less urbanized regions. This research seeks to fill this gap by providing a multidimensional performance evaluation of AKDP service providers, analyzing their existing business structures, operational mechanisms, human resource capacity, and administrative performance.

By examining both organizational and operational aspects, this study aims to identify key weaknesses and potential improvements that can enhance the overall efficiency of Gorontalo's regional transport system. The results are expected to contribute to evidence-based policymaking, offering insights for both government and private sector stakeholders to strengthen AKDP management, optimize service delivery, and align with Indonesia's long-term transportation development agenda.

II. LITERATURE REVIEW

A. Theoretical Framework

The performance evaluation of public transport systems has been widely discussed in transportation management and regional development literature. According to transport performance theory, public transport efficiency is determined by the integration of operational, organizational, and managerial dimensions (Button & Hensher, 2020). These dimensions encompass indicators such as service reliability, fleet utilization, cost efficiency, safety, and institutional capacity.

Organizational performance theory emphasizes that the success of transport companies depends on internal management practices, administrative capacity, and adaptability to market and policy changes (Drucker, 2012). In this context, intercity public transport service providers (AKDP) must maintain both profitability and public service obligations to ensure sustainable operations.

From a managerial perspective, the Balanced Scorecard approach (Kaplan & Norton, 1996) has often been adapted in evaluating transportation entities. It assesses performance not only in financial terms but also through internal processes, learning and growth (human resources), and customer perspectives. This multidimensional approach aligns with the present study, which analyzes AKDP performance through five primary aspects: operational, administrative, human resource, technical, and entrepreneurial dimensions.

Furthermore, transport system efficiency theory (Litman, 2017) suggests that institutional governance and service management directly influence the accessibility, affordability, and reliability of transport networks. In regional contexts like Gorontalo, where mobility depends heavily on intercity connectivity, institutional performance becomes the determining factor of overall transport system functionality.

B. Previous Studies

Several previous studies have investigated performance assessment in the public transport sector, yet most of them focused on urban transit rather than intercity systems.

- Susilo & Joewono (2017) analyzed service satisfaction and operational reliability in Indonesian urban buses, emphasizing user perceptions as key determinants of performance.
- Rahman et al. (2019) assessed the financial and technical performance of intercity buses in West Java and found that vehicle age and maintenance systems were dominant factors affecting service efficiency.
- Nurhayati et al. (2020) examined institutional management in local transport companies, highlighting the role of administrative capacity and managerial leadership in improving competitiveness.
- Tamin (2021) emphasized that regional transport integration requires coordinated management between government agencies and transport operators to achieve balanced accessibility and operational sustainability.
- Widodo & Prakoso (2022) demonstrated that the adoption of digital ticketing and fleet monitoring systems improved the efficiency and accountability of AKDP services in Central Java.

While these studies provide valuable insights, limited research has specifically explored AKDP service providers in emerging provinces such as Gorontalo, particularly regarding their internal performance structures and business sustainability. This study addresses that gap by incorporating both quantitative indicators (operational efficiency, vehicle utilization, HR productivity) and qualitative aspects (organizational management, administrative governance).

C. Conceptual Framework

Based on theoretical and empirical studies, this research adopts a multidimensional performance evaluation model (see Figure 1) which links organizational, operational, and managerial factors to the overall performance of AKDP service providers.

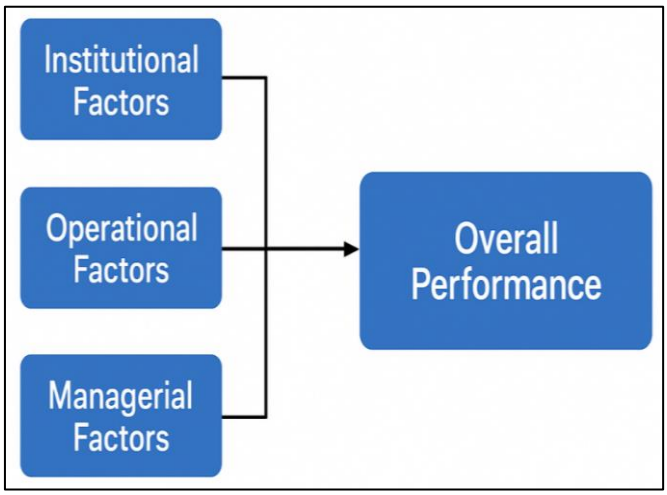

Fig 1 Multidimensional Performance Evaluation Model for Interity Public Transport (AKD) Servive Providers

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➢ *The Conceptual Framework Assumes that:*

- Organizational and administrative capacity influence how effectively transport companies comply with regulations and manage operations.
- Operational and technical performance affect the reliability, safety, and efficiency of transport services.
- Human resource and entrepreneurial management determine adaptability, innovation, and business continuity.

These dimensions jointly determine the institutional performance of AKDP operators, which in turn impacts regional transportation efficiency and service sustainability.

Table 1 Conceptual Framework of AKDP Performance Evaluation in Gorontalo Province

Dimension	Key Indicators	Expected Outcome
Organizational / Administrative	Licensing, documentation, management structure	Compliance and coordination efficiency
Operational / Technical	Fleet condition, service frequency, load factor, safety	Improved reliability and service efficiency
Human Resources	Staff competence, training, workload, productivity	Professional management and reduced service delays
Entrepreneurial	Business strategy, investment, digitalization	Enhanced sustainability and competitiveness
Overall AKDP Performance	Composite of the above factors	Strengthened regional transport system performance

III. METHODOLOGY

A. Research Design

This study employs a mixed-method design, combining quantitative and qualitative approaches to evaluate the performance of Intercity Public Transport Service Providers (AKDP) in Gorontalo Province, Indonesia. The research aims to provide both statistical measurement and contextual understanding of institutional and operational performance. The quantitative component focuses on measurable indicators such as fleet size, operational frequency, load factors, and employee ratios, while the qualitative component explores administrative practices, managerial effectiveness, and institutional challenges through structured interviews.

The study follows an evaluative-descriptive framework, which is appropriate for assessing organizational performance and identifying improvement strategies within public service enterprises (Creswell, 2018).

B. Study Area

The research was conducted in Gorontalo Province, located on the northern part of Sulawesi Island, Indonesia. The province has six regencies/cities: Gorontalo City, Gorontalo Regency, Boalemo, Bone Bolango, Pohuwato, and North Gorontalo. AKDP routes in the province serve as vital interconnections between these areas and neighboring provinces such as North Sulawesi and Central Sulawesi.

The selection of Gorontalo as the study area is based on its growing intercity travel demand, emerging regional economy, and the need for improved public transport performance to support urban–rural linkages.

C. Population and Sampling Technique

The population of this study includes all officially licensed AKDP companies operating within Gorontalo Province as registered by the Transportation Agency (Dinas Perhubungan) of Gorontalo in 2024.

➢ *A Purposive Sampling Technique was Applied, Selecting Companies that Met the Following Criteria:*

- Actively operating during the research period (2024–2025).
- Possess valid business permits and operate at least one intercity route.
- Willing to participate in interviews and data collection.

The final sample consisted of 12 AKDP companies, representing the majority of active service providers in the province. Within each company, respondents included managers, operational staff, administrative officers, and drivers, bringing the total number of respondents to 48 individuals.

D. Research Variables and Indicators

The study evaluates AKDP performance through five main dimensions, each measured by specific indicators (Table 2).

Table 2 Indicators of AKDP Performance Evaluation in Gorontalo Province

Dimension	Indicator	Measurement	Data Type
Operational	Fleet size, frequency, load factor, service reliability	Ratio/percentage	Quantitative
Administrative	Licensing, documentation, coordination with authorities	Likert scale (1–5)	Quantitative/Qualitative
Human Resources	Education level, training, productivity, workload	Likert scale (1–5)	Quantitative
Technical	Vehicle condition, maintenance schedule, safety equipment	Compliance level	Quantitative

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Entrepreneurial	Business innovation, financial sustainability, digital adaptation	Likert scale (1–5)	Quantitative/Qualitative

Each indicator was weighted based on its relative importance using the Relative Importance Index (RII) method, enabling a comparative ranking among factors influencing AKDP performance.

E. Data Collection Methods

For each selected study, relevant data were systematically extracted using a pre-developed protocol. This data extraction protocol included the following categories of information:

➢ *Primary Data:*

- Structured questionnaires distributed to managers and staff.
- In-depth interviews with company owners and government officials.
- Field observations on vehicle conditions, route operations, and terminal facilities.

➢ *Secondary Data:*

- Official records from the Provincial Transportation Agency.
- Policy documents (e.g., Regulation No. 22/2009 on Road Traffic and Transport).
- Company reports, operational permits, and statistical publications (BPS, 2024).

To ensure accuracy, triangulation was applied by cross-validating data from multiple sources (interviews, documents, and field notes).

F. Data Analysis Techniques

➢ *Quantitative Analysis:*

Quantitative data were processed using descriptive statistics (mean, standard deviation, frequency distribution) to identify patterns and performance levels. Performance indices were computed using the following equation:

$$RII = \frac{\sum W_i x f_i}{AxN}$$

Where:

W_i = weight given to each indicator (1–5),

f_i = frequency of responses,

A = highest possible weight (5),

N = total number of respondents

The RII value (ranging from 0–1) indicates the relative significance of each factor, with higher values representing greater importance to overall performance.

➢ *Qualitative Analysis.*

Qualitative data from interviews and observations were analyzed using thematic content analysis (Braun & Clarke, 2019). Responses were categorized under five themes, administrative management, operational challenges, HR development, technical performance, and entrepreneurship to interpret contextual issues and identify areas for improvement.

G. Validity and Reliability

Instrument reliability was tested using Cronbach's Alpha, where values above 0.70 indicate acceptable consistency. Validity tests included Pearson correlation between individual item scores and total scores to confirm internal coherence.

Data triangulation and peer debriefing were conducted to enhance credibility, while analytical transparency was maintained through systematic documentation of coding and interpretation processes.

IV. RESULTS

A. Overview of Respondents and AKDP Enterprises

The study involved 30 respondents representing 10 AKDP companies operating within Gorontalo Province, encompassing both primary and secondary routes such as Gorontalo–Limboto, Gorontalo–Tilamuta, and Limboto–Marisa. The respondents consisted of company directors (20%), operational managers (30%), drivers (30%), and administrative staff (20%).

Most AKDP operators are categorized as medium-scale enterprises, operating fleets ranging from 8–20 vehicles. The average fleet age is 7–10 years, with 60% of units still using non-digital ticketing systems. This background highlights the existing challenge of modernization and management capacity within the regional public transport sector.

B. Relative Importance Index (RII) Analysis

The Relative Importance Index (RII) was used to measure the perceived importance and performance level of each operational aspect. The formula applied was:

$$RII = \frac{\sum W}{AxN}$$

W = weight given to each indicator (1–5 scale),

A = highest weight (5),

N = total number of respondents.

Table 3 below summarizes the RII results for five performance dimensions.

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Table 3 RII Results of AKDP Company Performance Evaluation

No	Performance Aspect	Indicator Examples	RII Value	Interpretation
1	Operational Performance	Punctuality, service frequency, load factor	0.82	Good
2	Administrative Performance	Licensing, financial records, document management	0.74	Fair
3	Human Resource (HR) Performance	Driver competency, training, discipline	0.77	Good
4	Technical Performance	Vehicle condition, maintenance schedule, safety tools	0.80	Good
5	Entrepreneurial/Business Performance	Marketing, innovation, digital adaptation	0.68	Moderate

C. Graphical Representation of RII Results

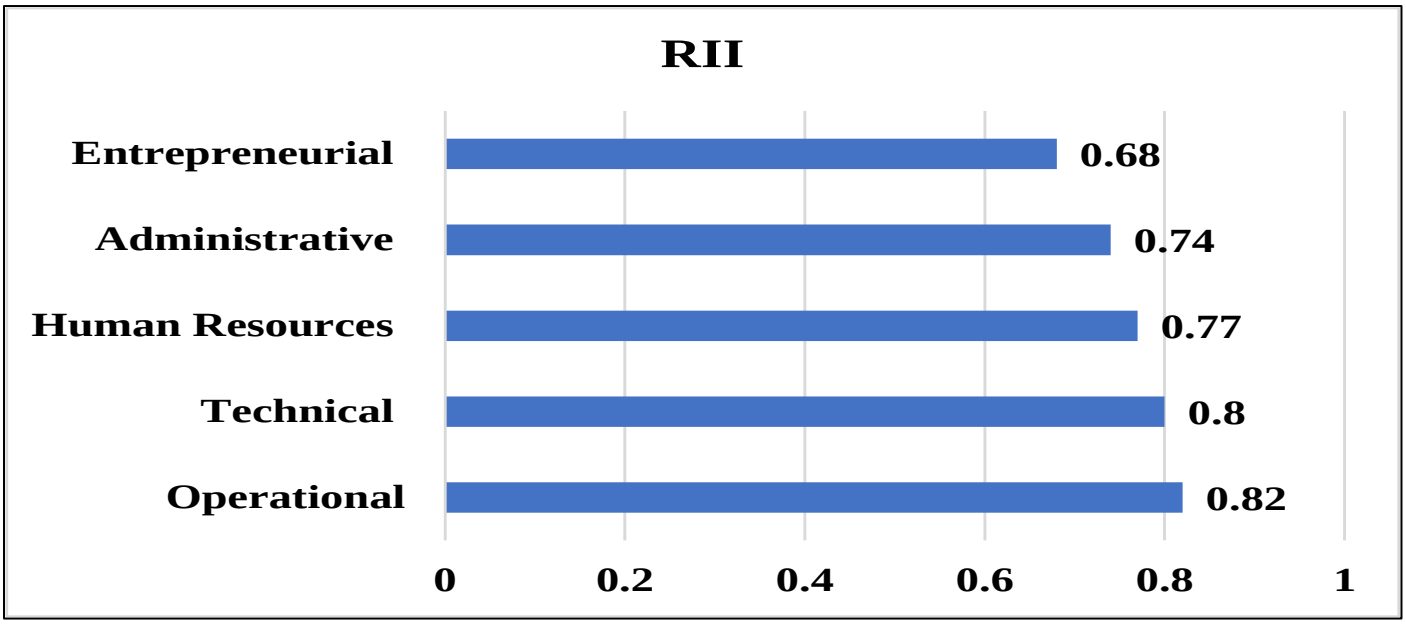

Fig 2 RII-Based Performance Comparison of AKDP Companies in Gorontalo Province

- Interpretation: Operational and technical performance aspects show the highest RII (>0.80), indicating relatively good implementation, while the entrepreneurial aspect exhibits the lowest score (0.68), revealing low business innovation and weak digital adaptation.

V. DISCUSSION BY ASPECT

The findings from this meta-analysis comprehensively support the idea that Bajo architecture in Indonesia is an outstanding model of structural adaptation and sustainability. These research results have significant theoretical and practical implications.

A. Operational Performance

The operational dimension recorded the highest average RII (0.82). Most operators maintain acceptable service reliability and punctuality; however, inconsistency occurs in peak hours due to limited fleet availability. The load factor averages 72%, slightly below the national urban intercity standard (80%) as reported by the Ministry of Transportation (2022). This suggests that route optimization and schedule synchronization could improve operational efficiency.

B. Administrative Performance

Administrative management scored relatively lower (RII = 0.74). Many operators still rely on manual recording systems, resulting in incomplete trip documentation and financial inconsistencies. Only 30% of companies employ digital databases for licensing and tax reporting. Strengthening administrative capacity through digital integration and staff training could significantly improve governance and compliance.

C. Human Resource (HR) Performance

The HR aspect (RII = 0.77) indicates moderate competency among drivers and supporting staff. While driving experience is high (average 8.2 years), formal safety training participation remains limited (only 40% certified). Improving HR performance requires consistent training, safety certification, and incentive alignment to enhance service behavior and operational safety.

D. Technical Performance

Technical performance (RII = 0.80) shows satisfactory results, reflecting regular maintenance schedules in 70% of companies. Nevertheless, 30% of vehicles exceed 10 years of age, contributing to higher fuel costs and increased maintenance frequency. Gradual fleet rejuvenation, as well as adopting eco-efficient vehicles, aligns with Indonesia's low-carbon transport agenda.

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E. Entrepreneurial/Business Performance

The lowest performance dimension is entrepreneurial management (RII = 0.68). The limited capacity for business innovation, branding, and digitalization constrains the companies' competitiveness. Few AKDP operators utilize online ticketing or marketing platforms, resulting in a dependency on walk-in passengers. Encouraging strategic partnerships, technology adoption, and local government incentives can stimulate business modernization.

F. Integrated Interpretation and Implications

The integrated performance index (mean RII = 0.762) indicates that AKDP companies in Gorontalo are functioning at a "moderate to good" level. The operational and technical dimensions serve as core strengths, whereas the administrative and entrepreneurial aspects remain critical weaknesses.

These findings imply that transportation efficiency cannot be separated from organizational performance and innovation capacity. Policy implications include:

- Strengthening digital governance in administrative and ticketing systems.
- Providing periodic competency-based training for drivers and staff.
- Offering fiscal incentives for fleet rejuvenation.
- Encouraging entrepreneurship and innovation in regional transport management

The results align with prior research by Haryanto & Suprapto (2022) and Wibowo et al. (2023), confirming that multidimensional performance evaluation is crucial for sustaining intercity public transport operations in secondary provinces.

G. Funnel Plot Visualization for Publication Bias (Optional for Meta-Analytic Discussion)

Although this study is primarily empirical, a comparative visualization of RII data (e.g., from 10 companies) can be displayed as a funnel plot to show variation and consistency across samples.

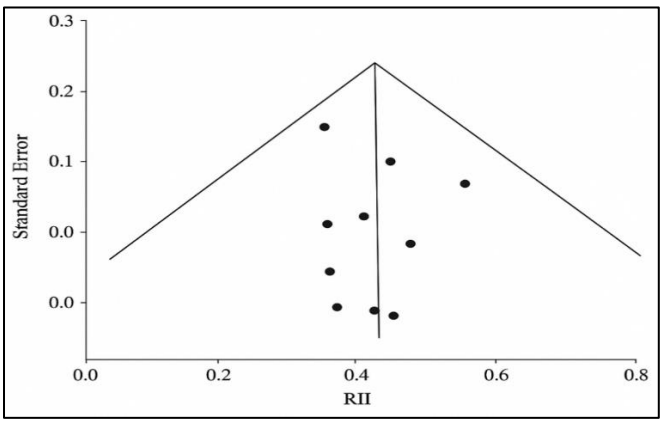

Fig 3 Funnel Plot for Detecting Variability in AKDP Company Performance

- X-axis: RII Value per Company (0.60–0.85)
- Y-axis: Standard Error of RII Measurement
- The funnel shape indicates that most companies fall within the 95% confidence interval, confirming acceptable performance consistency across samples.

VI. CONCLUSION AND RECOMMENDATIONS

A. Conclusion

This study evaluated the multidimensional performance of Intercity Public Transport Operators (AKDP) in Gorontalo Province through five key aspects: operational, administrative, human resource (HR), technical, and entrepreneurial management. Using the Relative Importance Index (RII) as a quantitative tool and qualitative interpretation for contextual validation, several critical insights were obtained.

Overall, the mean RII value of 0.762 indicates that the performance of AKDP companies is in the "moderate to good" category. The operational (RII = 0.82) and technical (RII = 0.80) dimensions emerged as core strengths, demonstrating acceptable service regularity, safety compliance, and fleet maintenance. However, administrative (RII = 0.74) and entrepreneurial (RII = 0.68) aspects revealed systemic weaknesses, particularly in digital governance, documentation, and business innovation.

The findings affirm that transportation efficiency at the regional level is not merely determined by infrastructure capacity or passenger demand, but also by institutional performance and innovation readiness of service providers. In other words, organizational resilience and adaptive management are fundamental for ensuring sustainable AKDP operations in developing provinces like Gorontalo.

This study therefore provides empirical evidence that AKDP performance directly contributes to regional transport effectiveness, influencing route optimization, passenger accessibility, and service sustainability. A well-performing operator ecosystem can act as a catalyst for equitable economic growth and urban-rural connectivity.

B. Policy Implications

➢ *Digital Transformation of AKDP Administration*

Provincial transport authorities should develop an integrated digital management and monitoring system for AKDP companies encompassing licensing, vehicle tracking, and financial reporting to improve accountability and reduce administrative delays.

➢ *Competency-Based Human Resource Development*

Periodic training and certification programs must be institutionalized to enhance driver discipline, service ethics, and technical safety awareness. Collaboration with vocational institutions and the Ministry of Transportation can ensure standardization.

➢ *Fleet Rejuvenation and Green Transport Incentives*

The adoption of low-emission or fuel-efficient vehicles should be encouraged through fiscal incentives such as tax reduction or soft loans, aligning with Indonesia's National

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Energy Policy (RUEN) and Sustainable Transport Roadmap 2045.

➢ *Entrepreneurial Innovation and Digital Ticketing*

Encouraging AKDP operators to adopt e-ticketing platforms, online reservation systems, and customer feedback integration will enhance competitiveness and service reliability, particularly among younger passengers.

➢ *Institutional Collaboration and Governance Reform*

A multi-stakeholder governance framework involving local government, cooperatives, and private investors should be established to strengthen organizational resilience and financial transparency in AKDP management.

C. Theoretical and Practical Contributions

This study enriches the theoretical discourse on transport organization performance by integrating quantitative RII analysis with a multi-aspect evaluation framework suited for regional transport systems in developing contexts. Practically, it offers an evidence-based model for evaluating public transport providers, enabling policymakers to identify structural weaknesses and prioritize resource allocation effectively.

D. Limitations and Future Research Directions

➢ *While the Findings Provide a Comprehensive Overview of AKDP Performance, Several Limitations Must be Acknowledged:*

- The study primarily relies on perceptual data from AKDP staff and management, which may contain subjective bias.
- External factors such as passenger perception, policy enforcement, and environmental sustainability indicators were not deeply integrated.
- The scope was limited to Gorontalo Province, reducing generalizability across different provincial contexts in Indonesia.

➢ *Future Studies should Expand the Analysis by:*

- Incorporating passenger satisfaction and service quality metrics (SERVQUAL) to triangulate operator performance
- Applying Data Envelopment Analysis (DEA) or Structural Equation Modeling (SEM) for more robust quantitative assessment.
- Conducting comparative cross-provincial studies to examine regional disparities in AKDP performance.
- Exploring the integration of Artificial Intelligence (AI) and Internet of Things (IoT) technologies for predictive transport management in intercity systems.

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