

THE MODERATING ROLE OF LOYALTY ON FINANCIAL PERFORMANCE OF LOGISTICS SOES

PERAN MODERASI LOYALITAS TERHADAP KINERJA KEUANGAN BUMN LOGISTIK

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ABSTRACT

This study aims to examine the effects of accountability, service quality, and asset management on the organizational performance of logistics SOEs, with employee loyalty serving as a moderating variable. The population of this study comprises all employees of logistics sector SOEs in Indonesia. A purposive sampling technique was employed, resulting in 133 valid responses collected from various logistics SOEs, which met the minimum requirements for statistical analysis. Partial Least Squares Structural Equation Modeling (PLS-SEM) was utilized to analyze both direct relationships and moderating effects within the proposed research model. The results indicate that accountability has a positive and significant effect on organizational performance, while asset management and service quality do not have a direct effect on organizational performance. However, employee loyalty significantly moderates the relationships between asset management and organizational performance as well as between service quality and organizational performance. Employee loyalty functions as a pure moderator, indicating that asset management and service quality contribute to organizational performance only when supported by high levels of employee loyalty.

Keywords: *Accountability, Service Quality, Asset Management, Loyalty, Organizational Performance*

ABSTRAK

Studi ini bertujuan untuk meneliti pengaruh akuntabilitas, kualitas layanan, dan manajemen aset terhadap kinerja organisasi BUMN logistik, dengan loyalitas karyawan sebagai variabel moderasi. Populasi penelitian ini terdiri dari seluruh karyawan BUMN sektor logistik di Indonesia. Teknik pengambilan sampel purposif digunakan, menghasilkan 133 respons valid yang dikumpulkan dari berbagai BUMN logistik, yang memenuhi persyaratan minimum untuk analisis statistik. Pemodelan Persamaan Struktural Kuadrat Terkecil Parsial (PLS-SEM) digunakan untuk menganalisis hubungan langsung dan efek moderasi dalam model penelitian yang diusulkan. Hasil menunjukkan bahwa akuntabilitas memiliki pengaruh positif dan signifikan terhadap kinerja organisasi, sedangkan manajemen aset dan kualitas layanan tidak memiliki pengaruh langsung terhadap kinerja organisasi. Namun, loyalitas karyawan secara signifikan memoderasi hubungan antara manajemen aset dan kinerja organisasi serta antara kualitas layanan dan kinerja organisasi. Loyalitas karyawan berfungsi sebagai moderator murni, menunjukkan bahwa manajemen aset dan kualitas layanan berkontribusi pada kinerja organisasi hanya jika didukung oleh tingkat loyalitas karyawan yang tinggi.

Kata Kunci: Akuntabilitas, Kualitas Layanan, Manajemen Aset, Loyalitas, Kinerja Organisasi

INTRODUCTION

State-Owned Enterprises (SOEs) in the logistics sector occupy a strategic position within Indonesia's economic architecture by carrying a complex dual mandate. On the one hand, logistics SOEs are required to achieve business efficiency and profitability comparable to private corporations. On the other hand, as state-owned entities, they are obligated to support national development agendas, such as reducing

logistics costs, strengthening distribution infrastructure, and providing affordable services to the public (Fadjrih et al., 2010). This dual mandate creates unique managerial complexities, particularly following large-scale structural transformations initiated by the Ministry of SOEs, including consolidation programs such as the merger of four major port operators into the integrated entity PT Pelindo (Carvalho, 2023).

Despite these extensive transformation initiatives, data from the Ministry of SOEs for the 2022–2023 period indicate that the organizational performance of several logistics SOEs remains highly volatile. PT Pelindo recorded a 15.3% decline in net profit in 2022, even though cargo handling volume increased by 8.2%, suggesting inefficiencies in converting operational activities into profitability. A similar phenomenon occurred at PT Pos Indonesia, which experienced operating losses despite implementing various service quality improvement and digitalization programs. These conditions indicate a disconnect between managerial inputs and organizational performance outputs, warranting deeper empirical investigation (Suzan & Ramadhani, 2023).

This phenomenon can also be examined through the lens of accountability which plays a crucial role in SOE governance. Tantarū (2025) emphasizes the importance of accountability in the management of maintenance budgets, highlighting budget transparency as a prerequisite for effective governance and organizational legitimacy in the eyes of stakeholders. High levels of accountability not only enhance stakeholder trust in management but also create incentives for managers to make more rational, long-term-oriented decisions (Kamil & Hidayah, 2023; Para'pean et al., 2025).

In addition to accountability service quality represents a critical factor influencing the performance of logistics SOEs. Service quality in the logistics industry encompasses fundamental operational aspects such as delivery timeliness and cargo security, as well as broader dimensions including responsiveness to customer needs, ease of access to information, and the ability to provide value-added services.

Parasuraman et al. (1988), through the SERVQUAL model, identify five dimensions of service quality reliability, responsiveness, assurance, empathy, and tangibles which are highly relevant to service-based industries, including logistics.

Asset management also constitutes a key issue, given that the logistics industry is capital-intensive and highly dependent on the reliability of physical infrastructure. Supriyanto et al. (2023) distinguish asset maintenance into two categories: preventive maintenance, conducted regularly to prevent asset deterioration, and corrective maintenance, which is reactive and performed after failures occur. Without structured budget allocations for preventive maintenance, assets are at risk of losing their optimal functionality and generating significantly higher costs in the long run (Purba & Bimantara, 2020; Molęda et al., 2023). For logistics SOEs managing assets valued at trillions of rupiah, effective asset management is therefore essential for operational efficiency and business sustainability.

The perspective of Stewardship Theory (Donaldson & Davis, 1991) is relevant for understanding budgeting dynamics and asset management practices in logistics SOEs. This theory views SOE employees as stewards who possess intrinsic motivation to act in the best interests of the organization and its shareholders. Meanwhile, the Resource-Based View (RBV) (Barney, 1991; Wernerfelt, 1984) provides an analytical framework for understanding how accountability, service quality, and asset management can serve as sources of sustainable competitive advantage through resources that meet the VRIN criteria (valuable, rare, inimitable, and non-substitutable).

This study argues that the effectiveness of accountability, service

quality, and asset management in enhancing organizational performance is moderated by employee loyalty. The moderating role of loyalty can be explained through Social Exchange Theory (Blau, 1964), which posits that relationships between organizations and stakeholders are built on reciprocal exchanges. High employee loyalty ensures that maintenance and control procedures are implemented more consistently, driven by intrinsic motivation to safeguard organizational assets. Loyal employees are also more likely to exhibit extra-role behaviors that enhance customer satisfaction and reduce turnover rates, thereby minimizing the loss of institutional knowledge (Porajow, 2023).

Accordingly this study aims to examine how accountability, service quality, and asset management affect the organizational performance of logistics SOEs while considering the moderating role of employee loyalty. This study addresses a gap in the literature, as prior research has largely examined these variables separately or within different industrial contexts (Firmansyah, 2024; Molęda et al., 2023), whereas the moderating role of employee loyalty in the context of logistics SOEs remains underexplored.

Theoretical Background

Organizational

Performance: Organizational performance refers to the extent to which an organization achieves its strategic objectives and operational goals through the effective and efficient use of its resources. Richard et al. (2009) organizational performance encompasses multiple dimensions, including financial outcomes, market performance, and shareholder value, reflecting both short-term results and long-term sustainability. From a

managerial perspective, performance is not only measured by quantitative indicators such as profitability and productivity, but also by qualitative aspects such as service effectiveness, innovation, and stakeholder satisfaction.

Accountability: Accountability is defined as the obligation of individuals or organizations to explain, justify, and take responsibility for their actions, decisions, and the use of resources to stakeholders. Bovens (2007) conceptualizes accountability as a relationship in which an actor is held to account by a forum that can pose questions, pass judgment, and impose consequences.

Service Quality: Service quality refers to customers' overall evaluation of the excellence or superiority of a service based on their perceptions of performance relative to expectations. Parasuraman, et al. (1988) define service quality as the gap between customers' expectations of a service and their perceptions of the actual service received. This concept is commonly operationalized through the SERVQUAL dimensions, which include reliability, responsiveness, assurance, empathy, and tangibles.

Asset Management: Asset management is a systematic process of developing, operating, maintaining, upgrading, and disposing of assets in the most cost-effective manner while achieving organizational objectives. According to Amadi-Echendu et al. (2010), asset management integrates engineering, financial, and managerial practices to ensure that physical and intangible assets deliver value throughout their life cycle. This approach emphasizes the alignment of asset-related decisions with strategic goals, risk management, and performance optimization.

Loyalty: Loyalty refers to a psychological attachment and a sustained commitment of individuals toward an organization, characterized by a willingness to remain, contribute, and act in its best interests. Meyer and Allen (1991) describe employee loyalty as a component of organizational

commitment, reflecting an emotional bond that motivates individuals to identify with organizational values and goals. Loyal employees tend to demonstrate higher levels of discretionary effort, including extra-role behaviors that go beyond formal job requirements.

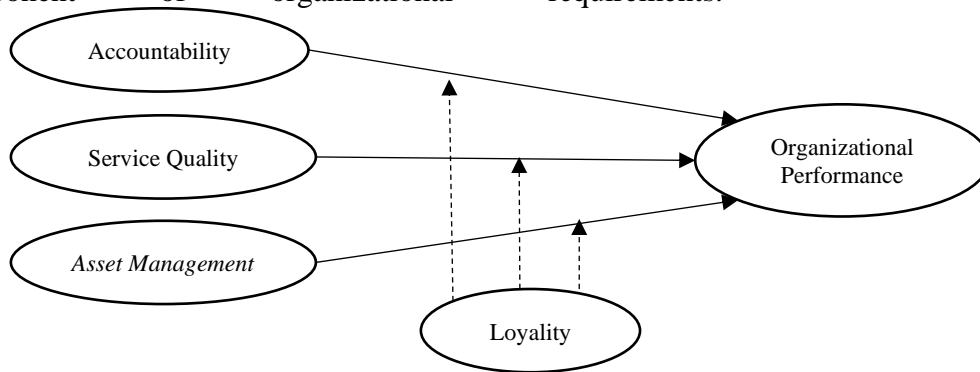


Figure 1. Research Model

METHODOLOGY

This model proposes that the effectiveness of the three independent variables in enhancing organizational performance is either strengthened or weakened by the level of employee loyalty. In other words, employee loyalty functions as a contextual condition that influences the strength of the relationship between management practices and the organizational performance of logistics SOEs. The proposed research model is illustrated as follows.

The population of this study comprises all employees of State-Owned Enterprises (SOEs) operating in the logistics sector in Indonesia. According to data from the Ministry of SOEs, this sector includes companies engaged in transportation and warehousing, port services, railways, postal and courier services, as well as various other logistics support services. The selection of this population is based on the unique characteristics of logistics SOEs, which manage high-value infrastructure assets, simultaneously face demands for

operational efficiency and public accountability, and operate under significant structural transformation pressures following consolidation initiatives. These characteristics make logistics SOEs highly relevant to the objectives of this study.

The sampling technique employed in this study is purposive sampling, with the following criteria (1) employees of logistics SOEs at the operational, supervisory, or managerial levels who are directly involved in the company's operations; (2) a minimum tenure of two years; (3) involvement in or adequate understanding of organizational accountability, service quality, or asset management aspects; and (4) voluntary participation through the completion of the questionnaire in full. Referring to the recommendations of Hair and Hult (2021) regarding the minimum sample size for Partial Least Squares Structural Equation Modeling (PLS-SEM), this study obtained 133 valid respondents, which satisfies the minimum requirements for the statistical analysis employed.

This study involves five main variables, consisting of three independent variables accountability, service quality, and asset management one moderating variable (employee loyalty), and one dependent variable

(organizational performance). Table 1 presents the conceptual definitions, operational definitions, dimensions/indicators, and the number of measurement items for each variable

Table 1. Research Instrument

Variabel	Indikator	Total Indikator
Accountability (X ₁)	(1) Transparency of financial reporting (2) Clarity of division of duties and authority (3) Effectiveness of the internal control system (4) Conformity of realization with the budget (5) Follow-up on audit finding.	10 item
Service Quality (X ₂)	(1) <i>Reliability</i> (2) <i>Responsiveness</i> (3) <i>Assurance</i> (4) <i>Empathy</i> (5) <i>Tangibles</i>	15 item
Asset Management (X ₃)	(1) Quality of asset planning (2) Regularity of preventive maintenance (3) Asset condition monitoring system (4) Utilization and minimization of downtime	12 item
Loyalty (Z)	(1) <i>Affective commitment</i> (2) <i>Continuance commitment</i> (3) <i>Normative commitment</i> (4) <i>Organizational identification</i>	14 item
Organizational Performance (Y)	(1) Achieving organizational performance targets (2) Operational cost efficiency (3) Revenue growth (4) Effectiveness of goal achievement (5) Overall organizational performance	12 item

Data analysis in this study was conducted using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach with the assistance of SmartPLS software version 4.0 (Hair & Hult, 2021). The initial stage of analysis involved descriptive statistics to describe respondent characteristics and the distribution of responses across the research variables, including frequencies, percentages, means, and

standard deviations. Prior to further analysis, data quality was assessed through the identification of missing values and outliers.

The evaluation of the measurement model (outer model) was performed by assessing convergent validity using the Average Variance Extracted (AVE) criterion of ≥ 0.50 , discriminant validity based on the Fornell–Larcker criterion, and construct reliability through

Composite Reliability values of ≥ 0.70 to ensure the internal consistency of the research instruments.

Subsequently, the structural model (inner model) was evaluated by examining the coefficient of determination (R^2) to assess the model's predictive power, as well as predictive relevance (Q^2) using the blindfolding procedure, where Q^2 values greater than zero indicate adequate predictive relevance. Hypothesis testing for direct effects was conducted using the bootstrapping procedure, with statistical significance determined by t-statistics ≥ 1.96 or p-values < 0.05 .

The moderating effects were tested using the product indicator approach by constructing interaction terms between the independent variables and the moderator variable, followed by an

evaluation of the significance of the corresponding path coefficients. The potential presence of Common Method Bias (CMB) was assessed using Harman's Single Factor Test and Full Collinearity Variance Inflation Factor (VIF), with criteria of single-factor variance below 50% and VIF values below 5 (ideally below 3). These results indicate that the proposed model is free from significant common method bias and multicollinearity issues

1. Empirical Findings/Result Responden Characteristic

A total of 133 employees participated in this study. The demographic characteristics of the respondents are presented in Table 2 below

Table 2. Responden Characteristic

	Characteristic	Frequency	Percentage
Gender	Male	121	91
	Female	12	9
	Total	133	100
Length of Work	1-3 years	22	16.5
	4-6 years	93	69.9
	>6 years	18	13.5
	Total	133	100
Work Role	Planning Executive	75	56.4
	Maintenance Manager	38	28.6
	Senior Facilities	9	6.8
	Manager	11	8.3
	Total	133	100

Based on Table 2 the respondents were predominantly male, reflecting the characteristics of the logistics and port equipment maintenance industry, which involves extensive technical and operational activities in the field. The predominance of respondents with 4-6 years of service indicates that the majority of respondents have a fairly in-depth understanding of accountability practices, service quality, and asset

management within the company. Regarding position, the majority of respondents held Maintenance Administration Support (56.4%) and Equipment Planning and Analysis Executive (28.6%), which are operational levels and have a direct perspective on how asset management practices and service quality are implemented on the front line. Meanwhile, respondents at the

managerial level consisted of Equipment Maintenance Managers (6.8%) and Senior Facility Managers (8.3%), who have a strategic perspective on accountability and overall organizational performance

One of the stages of outer model testing is through convergent validity and discriminant validity testing to evaluate the validity of the research instrument. According to Hair & Hult (2021), the AVE value must be greater than 0.50 to meet the criteria.

Instrument Test

Table 3. Validity Test

Variabel	AVE	Variabel	AVE
Accountability	0.847	Accountability	0.985
Service Quality	0.867	Service Quality	0.990
Asset Management	0.851	Asset Management	0.986
Loyalty	0.820	Loyalty	0.985
Organizational Performance	0.785	Organizational Performance	0.978
X1*Z	1.000	X1*Z	1.000
X2*Z	1.000	X2*Z	1.000
X3*Z	1.000	X3*Z	1.000

Based on the results in table 3 the five research variables and their moderating effects demonstrated excellent AVE values and met the minimum criteria for convergent validity. Overall, the AVE values obtained in this study ranged from 0.785 to 1.000, far exceeding the minimum required threshold of 0.50. This provides strong confidence that each construct in the research model has excellent discriminant validity.

Based on the results in Table 4, all variables in this study had very high Composite Reliability values, all above 0.97, indicating excellent research instrument quality and very strong internal consistency. The next evaluation, the inner model, was conducted using several criteria, including the coefficient of determination (R^2) and predictive relevance (Q^2).

Table 4. Goodness of Fit Inner Model

Variable	R Square	Q Square
Organizational Performance	0.509	0.053

Based on the results in Table 5, the R^2 value of 0.509 is included in the moderate category, which indicates that the model has a fairly good predictive ability in explaining the performance of the BUMN logistics organization. A Q-

square value of $0.053 > 0$ indicates that the independent variable has predictive relevance for the dependent variable, while a Q-square value of $0.053 < 0.15$ means that the predictive relevance is low.

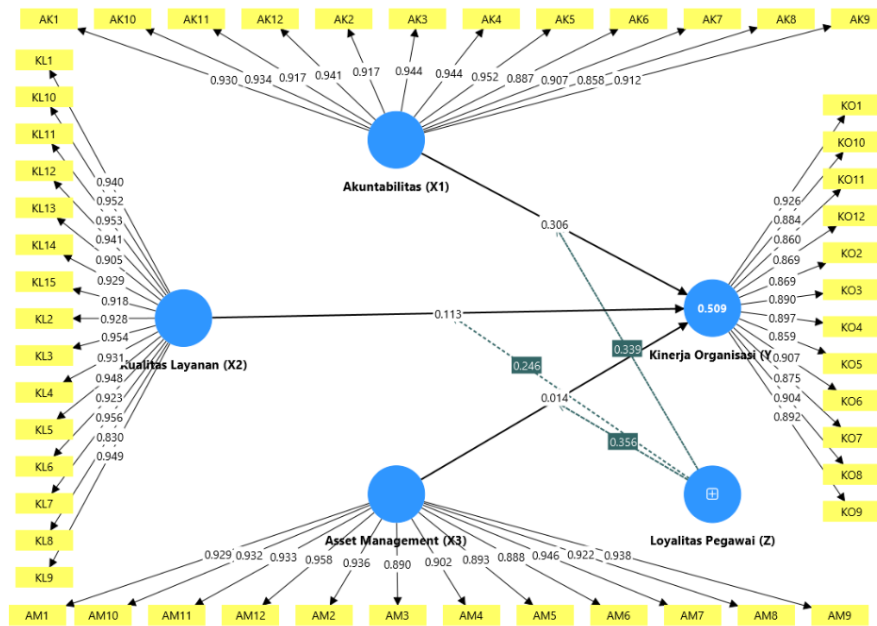


Figure 2. Outer Model

To test the presence or absence of common method bias, this study uses Harman's Single Factor Test, which is

one of the most commonly used methods in social research.

Table 5. CMB Harman's Single Factor Test

Factor	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	27.741	42.678	42.678

Based on the results in Table 6, the first single factor emerging from the analysis has an eigenvalue of 27.741 and explains 42.678% of the total variance. This value

is below the 50% threshold. This study also conducted additional testing using the Variance Inflation Factor (VIF).

Table 6. Full Collinearity Test

Factor	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	27.741	42.678	42.678

Based on Table 7, almost all VIF values are well below the threshold of 3.3, considered ideal for detecting common method bias. The highest value (4.039) is also considered good because it is still less than 5. This provides very strong evidence that this research data is free from common method bias and multicollinearity. Hypothesis testing in

this study was conducted using a bootstrapping procedure. According to Hair et al. (2021), the estimated path coefficient between constructs is considered significant if the t-statistic is greater than or equal to 1.96 (at a 5% significance level) or the p-value is less than 0.05

Table 7. Bootstrapping Research Model Test

Variabel	P Values
Accountability -> Organizational Performance	0.029
Asset Management -> Organizational Performance	0.919

Variabel	P Values
Service Quality -> Organizational Performance	0.303
Loyalty -> Organizational Performance	0.567
Loyalty x Accountability -> Organizational Performance	0.002
Loyalty x Asset Management -> Organizational Performance	0.007
Loyalty x Service Quality -> Organizational Performance	0.021

Discussion Accountability on Organizational Performance

The results of the hypothesis testing indicate that accountability has a positive and significant effect on organizational performance; therefore, the proposed hypothesis is accepted. The positive and significant path coefficient suggests that improvements in organizational accountability reflected in transparent reporting, clear lines of responsibility, and effective internal control mechanisms contribute directly to enhanced performance in logistics SOEs. This finding highlights that within logistics SOEs facing public scrutiny and efficiency demands following structural transformation, accountability serves as a key mechanism linking resource utilization to performance outcomes. Empirical evidence shows that public organizations with low levels of accountability tend to experience inefficiency, budgetary waste, and declining stakeholder trust (Nurhidayanti et al., 2023). Conversely the implementation of robust accountability systems enables organizations to control costs, enhance transparency, and improve the quality of managerial decision-making (Tran, 2021; Porajow, 2023).

From the perspective of Stewardship Theory managers and employees are viewed as intrinsically motivated to act in the best interests of the organization, with accountability functioning as a mechanism to formalize and reinforce such responsibility

(Donaldson & Davis, 1991; Davis et al., 1997). Meanwhile the Resource-Based View (RBV) conceptualizes accountability as a valuable and difficult-to-imitate organizational capability as it establishes efficient and sustainable resource management systems that ultimately enhance organizational performance (Barney, 1991; Grant, 1991).

The findings of this study are consistent with those of Tran (2021), who demonstrated that the effective implementation of responsibility accounting improves organizational performance through enhanced cost control and operational efficiency. Similarly Abang'a et al. (2022) found that governance and accountability have a significant impact on the financial performance of SOEs. Deloitte (2022) further emphasizes that accountability constitutes a fundamental foundation for building stakeholder trust and improving the performance of public sector organizations.

Service Quality on Organizational Performance

The results of the hypothesis testing indicate that asset management does not have a significant effect on organizational performance; therefore, the proposed hypothesis is rejected. This finding suggests that, although asset management is operationally important, it has not been able to generate a direct impact on the performance of logistics SOEs in the absence of supporting factors. The results imply that, in the

context of logistics SOEs the mere existence of well-designed asset management systems does not necessarily translate into improved organizational performance. Empirical evidence indicates that many organizations have established asset maintenance planning and budgeting systems; however, their implementation is often administrative in nature and remains suboptimal (Wahyuni & Khoiruzin, 2020). Without the involvement of committed human resources, asset management tends to become a formality that fails to produce efficiency gains or improvements in asset productivity (Purba & Bimantara, 2020; Deloitte, 2022).

From the perspective of the Resource-Based View (RBV) physical assets can only generate competitive advantage when they are supported by effective managerial capabilities (Barney, 1991; Wernerfelt, 1984). Stewardship Theory further explains that without a strong sense of responsibility and employee commitment, asset management practices tend to be reactive and poorly optimized, thereby limiting their direct impact on organizational performance (Donaldson & Davis, 1991). These findings are consistent with Purba and Bimantara (2020), who reported that asset management does not always have a direct effect on financial performance when effective implementation is lacking. Deloitte (2022) likewise highlights that many organizations fail to realize the full benefits of asset management due to weak integration among systems, human resources, and governance structures. Collectively these findings reinforce the argument that asset management requires specific contextual factors in order to exert a meaningful impact on organizational performance.

Asset Management on Organizational Performance

The results of the hypothesis testing indicate that service quality does not have a significant effect on organizational performance; therefore, the proposed hypothesis is rejected. This finding suggests that improvements in service quality have not been directly translated into enhanced organizational performance in logistics SOEs. The results indicate that, within logistics SOEs service quality has not yet become a primary determinant of overall organizational performance. Empirical observations show that although operational service delivery may improve, organizational performance remains strongly influenced by structural factors such as bureaucracy, regulatory constraints, and internal efficiency (Putra, 2024). In this context service quality tends to function as a supporting factor, the impact of which is more likely to materialize in the long term or under specific conditions (Lin et al., 2023).

From the perspective of Stewardship Theory, service quality is highly dependent on human interaction and the consistency of employee behavior (Parasuraman et al., 1988). Meanwhile the Resource-Based View (RBV) posits that service quality, as an intangible capability, requires strong support from human resources and organizational culture in order to be effectively converted into measurable organizational performance (Grant, 1991). The findings of this study are consistent with those of Lin et al. (2023), who reported that logistics service quality has a stronger impact on customer satisfaction than on organizational performance directly. Similarly, Singh et al. (2022) found that service quality requires supporting factors, such as moderating variables, to exert a significant influence on the

financial and operational performance of logistics firms.

The Moderating Role of Employee Loyalty in Relationship between Accountability on Organizational Performance

The results of the moderation hypothesis testing indicate that the interaction between employee loyalty and accountability has a positive and significant effect on organizational performance; therefore, the moderating hypothesis is accepted. While accountability is found to have a significant direct effect on organizational performance, employee loyalty does not exhibit a significant direct effect. However when employee loyalty interacts with accountability, the effect of accountability on organizational performance becomes stronger. This finding indicates that employee loyalty enhances the effectiveness of accountability in improving organizational performance (Batmunkh, 2025).

These results suggest that accountability as a governance mechanism does not rely solely on formal systems and procedures but is strongly influenced by employee behavioral conditions. Employee loyalty creates a psychological and organizational context that enables accountability practices to be implemented more consistently honestly, and with a stronger orientation toward achieving organizational objectives (Gustara & Adiwati, 2021). In this relationship employee loyalty functions as a strengthening moderator, amplifying the relationship between accountability and organizational performance. This finding aligns with the view that the effectiveness of public governance and SOE management is largely determined by the internal

commitment of human resources (Porajow, 2023; Deloitte, 2022).

Based on the criteria proposed by Hair et al. (2021) employee loyalty in this relationship is categorized as a quasi-moderator. This classification is justified by the condition in which the independent variable (accountability) has a significant effect on the dependent variable (organizational performance), the moderator variable (employee loyalty) does not have a significant direct effect on organizational performance, yet the interaction between accountability and employee loyalty is statistically significant. Thus employee loyalty does not function as an independent predictor but rather strengthens the existing relationship between accountability and organizational performance.

From the perspective of Stewardship Theory employees are viewed as intrinsically motivated to act in the best interests of the organization (Donaldson & Davis, 1991; Davis et al., 1997). employee loyalty transforms accountability from a mere control mechanism into a moral responsibility that is voluntarily embraced. Meanwhile, Social Exchange Theory explains that loyalty emerges from long-term reciprocal relationships between organizations and employees, which in turn encourage extra-role behaviors and voluntary compliance with accountability systems (Blau, 1964).

Although the relationship between employee loyalty and organizational performance in this model shows a positive direction, it is not statistically significant in a direct sense. This finding indicates that employee loyalty does not automatically enhance organizational performance when considered in isolation; rather it functions as a catalyst that strengthens the effectiveness of managerial practices. Employee loyalty

becomes a source of value when combined with robust accountability systems resulting in higher organizational performance compared to the implementation of accountability mechanisms without the support of employee loyalty.

The findings of this study are consistent with those of Boateng et al. (2022), who demonstrated that employee stewardship behavior strengthens the effectiveness of control systems and contributes to improved organizational performance. Tran (2021) likewise emphasized that accountability systems become more effective when supported by strong internal organizational commitment. Deloitte (2022) highlights that employee trust and loyalty are key factors in strengthening governance implementation and enhancing organizational performance in public sector organizations and SOEs.

The Moderating Role of Employee Loyalty in Relationship between Service Quality on Organizational Performance

The results indicate that service quality does not have a direct effect on organizational performance; however, the interaction between service quality and employee loyalty has a positive and significant effect. Accordingly, the moderating hypothesis is accepted while the direct effect of service quality on organizational performance is rejected. This finding suggests that service quality contributes to organizational performance only when supported by high levels of employee loyalty. It provides evidence that service quality in the logistics industry is highly dependent on the behavior and commitment of employees who are directly involved in service delivery processes (Dami et al., 2022).

Employee loyalty strengthens the relationship between service quality and organizational performance by encouraging service consistency, the emergence of extra-role behavior, and a long-term orientation toward customer satisfaction (Sinollah & Masruro, 2019). In this relationship employee loyalty functions as a strengthening moderator that amplifies the effect of service quality on organizational performance (Lin et al., 2023).

Based on the criteria proposed by Hair et al. (2021) employee loyalty in this relationship is classified as a pure moderator. This classification is justified by the non-significant direct effect of service quality on organizational performance, the non-significant direct effect of employee loyalty on organizational performance, and the significant interaction effect between service quality and employee loyalty. These conditions indicate that employee loyalty is an essential prerequisite for translating service quality into improved organizational performance.

Social Exchange Theory explains that employee loyalty fosters discretionary effort in service delivery, defined as voluntary extra effort beyond formal job requirements (Blau, 1964). Meanwhile the Resource-Based View (RBV) asserts that service quality represents an organizational capability that can only become a source of competitive advantage when supported by consistent employee commitment and behavior (Barney, 1991). Although the relationship between employee loyalty and organizational performance in this model exhibits a positive direction it remains indirect. Employee loyalty does not automatically enhance organizational performance; rather it acts as a reinforcing mechanism that ensures service quality is implemented consistently and sustainably ultimately

leading to improved organizational performance (Baskara & Bangun, 2024).

These findings are consistent with those of Lin et al. (2023), who found that logistics service quality influences organizational performance through the mediating role of employee behavior. Mittal et al. (2023) demonstrated that employee loyalty and service-related behaviors play a crucial role in linking service quality to firm performance. Abd-El-Salam (2023) also confirmed that employee loyalty strengthens the impact of service quality on organizational performance.

The Moderating Role of Employee Loyalty in Relationship between Asset Management on Organizational Performance

The results indicate that asset management does not have a direct effect on organizational performance; however the interaction between asset management and employee loyalty has a positive and significant effect. The moderating hypothesis is accepted, while the direct effect of asset management on organizational performance is rejected. This finding suggests that asset management contributes to organizational performance only when supported by high levels of employee loyalty. It provides evidence that the effectiveness of asset management is highly dependent on the behavior of employees at the operational level.

Employee loyalty strengthens the relationship between asset management and organizational performance by ensuring that asset maintenance procedures, asset utilization and monitoring activities are carried out consistently and with a strong sense of responsibility. In this relationship employee loyalty functions not only as a strengthening moderator but also as an activating mechanism that enables asset

management to exert an impact on organizational performance (Molęda et al., 2023).

Based on the criteria proposed by Hair et al. (2021) employee loyalty in this relationship is classified as a pure moderator. This classification is justified by the non-significant direct effect of asset management on organizational performance, the non-significant direct effect of employee loyalty on organizational performance and the significant interaction effect between asset management and employee loyalty. These conditions indicate that without the support of employee loyalty, asset management does not make a meaningful contribution to improving organizational performance.

From the perspective of the Resource-Based View (RBV), organizational assets can only become sources of competitive advantage when they are managed effectively through strong internal capabilities (Barney, 1991; Grant, 1991). Meanwhile Stewardship Theory explains that employee loyalty fosters a sense of responsibility toward organizational assets, encouraging employees to maintain and utilize assets optimally for the long-term interests of the organization rather than merely complying with procedural requirements (Donaldson & Davis, 1991). Although the relationship between employee loyalty and organizational performance in this model shows a positive direction it remains indirect. Employee loyalty does not automatically enhance organizational performance but serves as a crucial factor that determines whether asset management systems can function effectively. Employees with high levels of loyalty tend to be more cautious, disciplined and proactive in asset management practices, ultimately

leading to improved efficiency and overall organizational performance.

These findings are consistent with those of Molęda et al. (2023), who argued that the effectiveness of preventive and predictive maintenance is highly dependent on consistent employee behavior in implementing maintenance procedures. Deloitte (2022) also emphasizes that employee trust and internal commitment are essential prerequisites for successful asset management and organizational governance. In addition, IoT Analytics (2023) reports that the success of asset performance management is determined not only by technological adoption but also by the level of commitment of human resources responsible for operating these systems.

CONCLUSIONS

This study provides empirical contributions by demonstrating that accountability is the only variable that has a direct effect on the organizational performance of logistics SOEs, while asset management and service quality do not exert direct effects but become significant when moderated by employee loyalty. These findings underscore that organizational performance is not determined solely by the existence of systems and procedures; rather it is highly dependent on behavioral factors and the commitment of human resources as the primary implementers of managerial policies and practices. From a practical perspective the results imply that logistics SOEs should prioritize strengthening accountability and fostering employee loyalty as key strategies for enhancing organizational performance. Employee loyalty is shown to play a strategic role in activating and amplifying the effectiveness of asset management and service quality. Human resource

development policies, organizational culture, and incentive systems become critical elements in ensuring the success of transformation initiatives and the sustainability of performance in Indonesian logistics SOEs.

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