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Article

The Effect of Performance Measurement Systems on Individual Behavior: An Empirical Study at the Operational Employee Level

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Abstract

This paper investigates whether trust acts as a behavioural channel through which a Performance Measurement System (PMS) shapes the work output of front-line banking staff. We collected 105 valid responses from operational employees of Indonesian commercial banks via an online Google Forms questionnaire and ran the analysis in SmartPLS using a Partial Least Squares Structural Equation Modelling (PLS-SEM)l. To justify the sample size, an a priori power analysis (G*Power 3.1) confirmed that n = 105 exceeds the minimum required (n = 92) for detecting medium effect sizes at 80% power. The results indicate that PMS has a meaningful direct effect on individual performance, and that an indirect path also operates through peer (horizontal) trust (β_indirect = 0.261, 95% CI [0.130, 0.405]; Variance Accounted For (VAF) = 44.8%, indicating partial mediation). The parallel pathway running through trust in managers (vertical trust) is not statistically supported. We interpret this pattern as evidence that, at the operating tier of a bank, lateral trust among co-workers is the relational asset that converts measurement signals into discretionary effort, while vertical trust does not show the same conversion role, a finding consistent with the high-power-distance cultural context of Indonesia and the intensive monitoring regimes of post-crisis Indonesian banking. The study contributes to the management accounting literature by refining social exchange theory, showing that the reciprocation of PMS fairness signals is referent-specific and by separating two trust referents within a single model, with Job Demands-Resources (JD-R) theory and psychological safety invoked as complementary explanatory lenses in a developing-country banking context. Common Method Bias (CMB) was assessed via Harman's single-factor test (32.7% variance explained; below the 50% threshold) and full collinearity Variance Inflation Factors (VIFs) (all < 3.3), providing initial evidence that CMB is unlikely to be a major confound. Generalisability is limited by the single-industry sample, and replication in other sectors and longitudinal data is suggested for future work.

Keywords

Performance measurement system, Trust in managers, Trust in peers, Employee performance, Banking industry, Social exchange theory, Job demands-resources theory

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1. Introduction

Modern banks rely on Performance Measurement Systems (PMS) to coordinate work and to direct attention toward strategic priorities, particularly as the institution grows larger and more complex [1]. Beyond a bookkeeping role, contemporary measurement architectures combine financial and non-financial indicators into integrated, process-oriented designs that translate strategy into day-to-day routines [2,3]. For service industries such as banking, where output is co-produced with customers and the regulator scrutinises everything from underwriting to service quality, the design of measurement is not a peripheral matter but a determinant of competitive standing.

The behavioural payoffs of PMS, however, depend on more than the indicator set. A growing body of work argues that measurement systems shape culture and the relational fabric of the workplace, principally through their effect on trust. When evaluation procedures are seen as fair, transparent, and stable, employees develop stronger confidence in their leaders [4,5] and in their colleagues [6,7]. This relational pathway matters because trust has been linked to discretionary effort, knowledge sharing, and citizenship behaviours that ultimately raise output [8-10].

Trust therefore operates as more than a soft consequence of PMS. It can be an active mediator, and recent meta-analytic evidence on vertical and horizontal trust shows different downstream profiles for the two referents, with horizontal trust often more strongly associated with in-role performance than vertical trust [11]. At the same time, social-exchange-based reviews argue that perceived organisational support and procedural fairness, both transmitted through PMS practices, channel into financial and human resource outcomes via trust-based reciprocity [12]. Complementing this perspective, Job Demands-Resources (JD-R) theory [13] frames PMS as an organisational resource that reduces role ambiguity while horizontal trust constitutes a social resource that amplifies the conversion of measurement signals into performance outcomes.

A well-functioning PMS gives employees a transparent template against which to plan their professional growth. Clear indicators and structured feedback help workers identify gaps, prioritise development, and align day-to-day actions with strategic goals, with motivational consequences when the system is perceived as equitable [14,15]. Recent Indonesian evidence reinforces the point, showing that PMS, when paired with employee engagement and commitment, is positively associated with performance in banking and adjacent service contexts [16,17].

Several gaps remain in this literature. First, PMS effectiveness is uneven in practice; top-down designs often misread the operational realities of the people they evaluate, leading to dissatisfaction and frequent system replacement without genuine diagnosis of root causes. Second, the dominant work has examined PMS effects at the managerial layer, while operational employees who actually deliver the service to customers are comparatively under-studied [18]. Third, although strategy is formulated at the top, its execution depends on the lower tier understanding and embracing the indicators that govern them; without that alignment the system delivers little behavioural traction.

This paper addresses the gaps in three ways. We draw on social exchange theory by treating PMS as an organisational signal that triggers reciprocal behaviour [19] and refine it by showing that this reciprocity is referent-specific [20,21]; we focus on operational banking staff in a developing-country setting, where multidimensional PMS continue to face implementation challenges [22]; and we model trust in managers and trust in peers as parallel mediators, allowing a within-model comparison of the vertical and horizontal pathways. We additionally draw on JD-R theory to theorise the resource-conversion role of peer trust, and we propose psychological safety as a boundary condition under which peer trust is most likely to convert into performance. The result clarifies whose trust matters most for converting measurement information into operational performance.

2. Literature Review and Hypothesis Development

2.1 Conceptual Framework

PMS can be defined as the formal, repeatable processes that organisations use to evaluate employee output and to align individual behaviour with strategic goals [23-25]. Its reach extends well beyond accounting routines: prior work shows that the design and use of PMS shape how staff interpret organisational fairness and how they form judgments about leaders, with downstream consequences for trust [26-28].

From a strategic perspective, organisations deploy PMS to assess whether long-term capabilities are translating into measurable outcomes [29]. The contemporary research agenda has therefore broadened from purely technical and financial concerns into the behavioural and psychological territory that surrounds measurement use, with trust occupying a central position in that conversation [8,30].

Trust itself is conceptualised here as a willingness to accept vulnerability based on positive expectations about another party's intentions and competence. In organisational contexts, this willingness facilitates cooperation, lowers monitoring costs, and supports psychological safety, allowing employees to surface ideas and contribute beyond minimum role requirements [5,31]. Where the measurement architecture is felt to be fair, the perception of justice strengthens trust in superiors, which in turn opens a wider channel for innovative and discretionary work.

Figure 1 summarises the conceptual model that guides this study. PMS is positioned as the antecedent construct, with trust in managers and trust in peers operating as parallel mediators, and individual performance as the dependent outcome. The two trust referents are modelled separately so that vertical and horizontal pathways can be compared within a single structural model, in line with recent calls to disaggregate trust by referent [11]. Consistent with JD-R theory, PMS is theorised as an organisational resource (reducing role ambiguity), peer trust as a social resource (enabling smooth workflow coordination), and psychological safety as a boundary condition on this pathway, which is the shared belief that a team is safe for interpersonal risk-taking [32]. We theorise that peer trust converts into in-role performance to the extent that team members feel safe to surface errors and discuss measurement feedback openly: where psychological safety is high, peer trust is enacted as task-relevant coordination, whereas where it is low, peer trust may remain socially supportive without translating into measured output. Because psychological safety was not measured in the present design, we advance it not as a tested moderator but as a scope condition to be examined in future research.

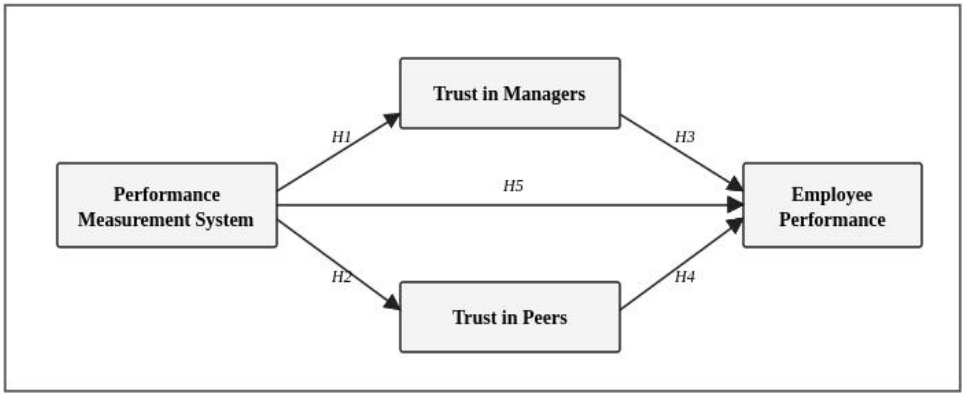

Figure 1. Research framework.

2.2 Hypothesis Development

2.2.1 PMS and Trust in Managers

PMS function as core managerial tools that evaluate behaviour and direct effort toward shared objectives [23,24]. Trust in supervisors enters this nexus because it shapes the legitimacy of management decisions and conditions employees' willingness to comply with rules, accept feedback, and back managerial initiatives [33]. When measurement is conducted with clarity and procedural transparency, the act of measuring itself communicates respect for the evaluated party, which strengthens vertical trust [4].

Empirical work has documented this link in several settings. Sholihin and Pike [6] reported that PMS use was positively associated with trust in leadership inside the Indonesian police service, and Hartmann and Slapničar [26] also found a positive PMS–trust association among managers. Recent banking and public-sector evidence has reinforced these findings, suggesting that performance evaluation practices remain a reliable antecedent of supervisor trust [9]. The first hypothesis follows.

H1: Performance measurement system use is positively associated with trust in managers.

2.2.2 PMS and Trust in Peers

PMS are equally critical for coordination among peers [34,35]. By making expectations visible across team members, measurement practices reduce ambiguity about who is doing what, lower the scope for free-riding, and discipline the informal evaluations that colleagues make of each other. In the banking sector specifically, PMS have become bundled with broader performance management infrastructure as competitive pressure tightens [36].

Yang and Holzer [37] argue that thoughtfully designed PMS strengthen lateral trust by embedding transparency and accountability into team routines. Fulmer and Gelfand [30] extend the view, suggesting that measurement clarity reduces uncertainty between peers and limits the unproductive conflict that would otherwise erode horizontal cooperation. More recent evidence shows that trust among co-workers is shaped not only by formal evaluation but also by the everyday signals of fairness embedded in measurement-driven workflows [7]. Accordingly, we propose:

H2: Performance measurement system use is positively associated with trust in peers.

2.2.3 Trust in Managers and Employee Performance

Trust in supervisors has been linked to higher motivation, satisfaction, and ultimately to improved performance, particularly in service settings where employees rely on managerial discretion in handling customers and resolving exceptions [38-40]. Where employees believe their manager is competent and acts in good faith, they are more willing

to accept role expectations, request feedback, and absorb corrective signals, all of which are associated with higher performance [5].

Recent reviews qualify this picture, however. Vertical trust is consistently associated with attitudinal outcomes such as commitment, but its direct association with in-role performance is sometimes weaker than the relationship documented for horizontal trust [11]. In high-power-distance cultures such as Indonesia, compliance with managerial directives may be perceived as obligatory rather than trust-contingent, further attenuating the vertical trust-to-performance pathway [41]. The expectation here remains positive but not overwhelming. We therefore propose:

H3: Trust in managers is positively associated with employee performance.

2.2.4 Trust in Peers and Employee Performance

Among co-workers, trust functions as a coordinating resource. Following Zand [42], trust is a willingness to depend on another party's actions in the expectation that those actions will serve mutual interests. In day-to-day banking operations, this translates into smoother handovers, faster information exchange, and a willingness to substitute for colleagues when workloads spike [43].

The mechanisms linking peer trust to performance are well documented. Trust establishes a sense of safety, encouraging open dialogue and collaborative problem solving [44]; it lowers communication costs by reducing the need to verify each other's contributions repeatedly [38]; and it builds a shared mental model that enables efficient task division. Recent multilevel work in healthcare confirms that horizontal trust at the team level is positively associated with individual job performance even after controlling for engagement and leadership style [7]. From a JD-R perspective, peer trust constitutes a social resource that buffers interpersonal demands and amplifies the motivational potential of PMS-based performance feedback [13]. We therefore hypothesise:

H4: Trust in peers is positively associated with employee performance.

2.2.5 PMS and Employee Performance

Beyond its indirect effects through trust, PMS may directly be associated with performance by clarifying roles, defining success criteria, and tying compensation and recognition to observed contribution [35,45]. Employees who perceive that their efforts are accurately captured tend to put more discretionary energy into their work, persist on difficult tasks, and identify more strongly with organisational goals [46]. Indonesian evidence in financial and service sectors echoes the same pattern [16,17].

H5: Performance measurement system use is positively associated with employee performance.

3. Research Method

3.1 Sample

The study uses operational-level employees of commercial banks operating in Indonesia. Three considerations motivate the choice of context. First, much of the published PMS evidence in banking has been generated in North America and Western Europe [22], so non-Western banking sectors remain comparatively under-represented. Second, the cultural and institutional dynamics of Asian economies have produced ongoing implementation challenges for multidimensional measurement architectures [47]. Third, the Asian financial crisis of 1997-1998, which closed sixteen banks in Indonesia, generated a sustained policy push to rebuild trust in the financial system and to upgrade governance practices, making the country a useful site for studying the trust consequences of measurement systems [22].

Data were collected through an online questionnaire distributed via Google Forms to operational staff in branches across Indonesia. The questionnaire was distributed to approximately 180 operational employees through professional networks and direct contact with branch managers; 112 responses were received and 105 were retained after removing incomplete or inconsistent entries (response rate ≈ 58%). Participation was voluntary and anonymous; no financial incentive was offered. After data cleaning, 105 complete responses were retained for analysis.

To justify the sample size, an a priori power analysis was conducted using G*Power 3.1 [48]. For the most complex path in the model (Employee Performance as the dependent variable with five predictors: PMS direct path, Trust in Managers, Trust in Peers, and two control variables), with a medium effect size ($f^2 = 0.15$), significance level $\alpha = 0.05$, and statistical power = 0.80, the minimum required sample size is 92 observations. Our sample of 105 exceeds this threshold, confirming adequate power for the primary structural paths. For the indirect (mediated) effects, we rely on bootstrapping with 5,000 resamples, which provides reliable confidence intervals regardless of distributional assumptions [49].

The sample composition is summarised in Table 1.

Table 1. Respondents' demographic information.

Category	Characteristic	n	Cumulative	%	Cum. (%)
Gender	Men	61	61	58.1	58.1
	Women	44	105	41.9	100.0
Age	< 35 years	40	40	38.1	38.1
	36-45 years	53	93	50.5	88.6
	> 46 years	12	105	11.4	100.0
Education	Senior High School	20	20	19.0	19.0
	Diploma / Bachelor	68	88	64.8	83.8
	Master / Doctoral	17	105	16.2	100.0
Function	Accounting & Finance	26	26	24.8	24.8
	General	23	49	21.9	46.7
	Human Resources	22	71	21.0	67.7
	Marketing	21	92	20.0	87.7
	Others	13	105	12.3	100.0

3.2 Variable Measurement

3.2.1 Performance Measurement System

PMS use was captured with an 11-item instrument adapted from Milani [50], a scale that has been carried forward in management accounting research and that has shown sound psychometric properties in subsequent studies. Items were rated on a five-point Likert scale anchored at 1 (strongly disagree) and 5 (strongly agree). The scale captures how often respondents work with budgets and indicators, the degree to which they participate in target-setting, and how strongly they perceive the measurement system as guiding their daily work. Full item wording is provided in Appendix A.

3.2.2 Trust

Trust was measured with the six-item instrument developed by Cook and Wall [51]. Three items target trust in colleagues (peer trust) and three items target trust in supervisors (manager trust). Responses again use a five-point Likert format. The instrument has been widely deployed in the trust literature and discriminates cleanly between vertical and horizontal trust referents [30]. Full item wording is provided in Appendix A.

3.2.3 Employee Performance

Individual performance was operationalised with the in-role performance items developed by Williams and Anderson [52]. Respondents reported the extent to which they had completed assigned tasks, met formal expectations, and improved on their own results from the prior period. Responses were collected on a five-point Likert scale. We acknowledge that self-rated performance is subject to social desirability bias; future studies should supplement self-report with supervisor ratings or objective Key Performance Indicators (KPIs) [53]. Full item wording is provided in Appendix A.

4. Results

Hypotheses were tested with PLS-SEM in SmartPLS 4.0. SmartPLS settings: consistent PLS algorithm, maximum 300 iterations, stop criterion 10^{-7}. Significance of path coefficients and indirect effects was assessed via percentile bootstrap with 5,000 subsamples [49]). Two-tailed significance tests are used throughout. PLS path modelling was selected because it accommodates relatively modest sample sizes, places no normality assumption on the indicators, and is oriented toward prediction rather than strict covariance fitting [54]. Following standard practice, the analysis proceeded in two stages: measurement model first, then structural model.

4.1 Measurement Model

Descriptive statistics are reported in Table 2. Internal consistency was checked using Cronbach's alpha and Composite Reliability (CR). As reported in Table 3, every construct passed the conventional 0.70 threshold on CR. We note that the Cronbach's alpha for Trust in Managers ($\alpha = 0.604$) falls below 0.70; this is attributable to the small number of items ($k = 3$) and moderate inter-item correlations. The preferred reliability index in PLS-SEM is CR, which weights items by their loadings and yields CR = 0.807 for Trust in Managers, above the conventional threshold [55]. We therefore retain the construct and note the borderline alpha in Table 3.

Indicator loadings ranged from 0.620 to 0.853, and the AVE for each construct exceeded 0.50, satisfying convergent validity requirements [56]. Discriminant validity was assessed using the Fornell-Larcker criterion; as reported in Table 4, the square root of each construct's AVE exceeded its inter-construct correlations, confirming discriminant validity.

Items TTM1 (loading = 0.620) and EP6 (loading = 0.648) are borderline but retained because (a) removing them improves CR only marginally (TTM1 removal: CR from 0.807 to 0.828; EP6 removal: CR from 0.877 to 0.871) and (b) removal would reduce construct coverage, TTM1 captures 'faith in management's intentions' (a distinct facet from competence-based trust) and EP6 captures longitudinal performance improvement. Hair et al. [55] recommend retaining items with loadings above 0.60 when construct breadth is a theoretical concern.

Common method bias (CMB) was assessed using two statistical procedures. First, Harman's single-factor test was conducted: an exploratory factor analysis constraining all 23 items to a single factor explained 32.7% of total variance, well below the 50% threshold, providing initial evidence against a dominant common method factor. Second, full collinearity VIFs were computed for all indicator blocks following Kock's [57] procedure: all VIFs were below 3.3 (range: 1.12-2.87), the threshold recommended for PLS-SEM, confirming that multicollinearity-induced CMB is unlikely to be a major confound. Nevertheless, CMB cannot be entirely ruled out in cross-sectional self-report data, and future research should use multi-source measurement designs.

Table 2. Descriptive statistics of constructs (n = 105).

Construct	Mean	SD	Min	Max	Items
Performance Measurement System	3.94	0.61	2.18	5.00	11
Trust in Managers	4.05	0.68	2.33	5.00	3
Trust in Peers	4.13	0.64	2.67	5.00	3
Employee Performance	4.21	0.55	2.83	5.00	6

Note: Values are construct means averaged across items measured on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

Table 3. Outer loadings, CR, Cronbach's alpha, and AVE.

Construct	Item	Loading	CR	α	AVE	HTMT*
Performance Measurement System	PMS1	0.737	0.929	0.916	0.544	—
	PMS2	0.625				
	PMS3–PMS11	0.683–0.804				
Trust in Managers	TTM1	0.620	0.807	0.604†	0.586	0.781
	TTM2	0.853				
	TTM3	0.804				
Trust in Peers	TTP1	0.843	0.863	0.763	0.768	0.812
	TTP2	0.798				
	TTP3	0.828				
Employee Performance	EP1	0.715	0.877	0.846	0.507	0.734
	EP2–EP5	0.724–0.802				
	EP6	0.648				

† Cronbach's alpha for Trust in Managers is below 0.70 due to the small item count (k = 3); CR = 0.807 > 0.70 is the preferred reliability index in PLS-SEM. * Heterotrait-Monotrait (HTMT) ratio values below 0.85 confirm discriminant validity. All HTMT < 0.85.

Table 4. Discriminant validity (Fornell-Larcker criterion).

Construct	PMS	Trust Mgr	Trust Peers	Emp. Perf.
Performance Measurement System	0.738			
Trust in Managers	0.675	0.766		
Trust in Peers	0.628	0.777	0.812	
Employee Performance	0.619	0.595	0.660	0.712

Note: Diagonal values are the square roots of AVE; off-diagonal values are inter-construct correlations.

4.2 Structural Model and Hypothesis Tests

With the measurement model judged adequate, the structural model was estimated by examining R^2 values for each endogenous construct and by testing path coefficients via bootstrapping with 5,000 resamples (two-tailed tests) [55]. An R^2 value above 0.10 is considered acceptable, a path coefficient above 0.10 is regarded as substantively meaningful, and a path coefficient with $p < 0.05$ is treated as significant [58]. Effect sizes (f^2) and predictive relevance (Q^2) are also

reported [56]. Standardised Root Mean Square Residual (SRMR) = 0.071, indicating acceptable model fit. The structural results are presented in Table 5, and the overall outcomes of the hypothesis tests are summarised in Table 6.

Table 5. Structural model: Path coefficients, t-statistics, p-values, R^2, f^2, and Q^2.

Construct	Trust in Managers (R^2 = 0.456; Q^2 = 0.243)	Trust in Peers (R^2 = 0.394; Q^2 = 0.272)	Employee Performance (R^2 = 0.506; Q^2 = 0.231)
PMS	0.675 (t=10.623, p<0.001); f^2=0.837	0.628 (t=10.289, p<0.001); f^2=0.651	0.321 (t=2.113, p=0.035); f^2=0.103
Trust in Managers	n.a.	n.a.	0.055 (t=0.384, p=0.701) ns; f^2=0.003
Trust in Peers	n.a.	n.a.	0.416 (t=3.897, p<0.001); f^2=0.173

Notes: Two-tailed tests throughout. Bootstrap resamples = 5,000 (SmartPLS 4.0). ns = not significant. f^2 = effect size (0.02 small; 0.15 medium; 0.35 large). Q^2 assessed via blindfolding (omission distance = 7); values > 0 indicate predictive relevance. SRMR = 0.071 (< 0.08 = acceptable fit).

Table 6. Summary of hypothesis testing.

H#	Description	Result
H1	PMS use is positively associated with trust in managers	Supported
H2	PMS use is positively associated with trust in peers	Supported
H3	Trust in managers is positively associated with employee performance	Not Supported
H4	Trust in peers is positively associated with employee performance	Supported
H5	PMS use is positively associated with employee performance	Supported

4.3 Mediation Analysis

To formally test the mediating roles of trust in managers and trust in peers, indirect effect estimates were computed using the product of coefficients method with 5,000 bootstrap resamples and percentile confidence intervals (Table 7). Bootstrapping is the recommended approach for indirect effects in PLS-SEM as it avoids distributional assumptions [59].

Table 7. Indirect effects and mediation results.

Indirect Path	β_indirect	SE	95% CI	p	VAF
PMS → Trust in Peers → Emp. Perf.	0.261	0.071	[0.130, 0.405]	<0.001	44.8%
PMS → Trust in Mgrs → Emp. Perf.	0.037	0.099	[−0.156, 0.231]	0.701	—

Note: VAF (Variance Accounted For) = indirect / (indirect + direct). VAF of 44.8% via peer trust indicates partial mediation (direct effect remains significant at β = 0.321, p = 0.035). Bootstrap resamples = 5,000.

The indirect path through trust in peers is statistically significant (β = 0.261, 95% CI [0.130, 0.405], p < 0.001), whereas the indirect path through trust in managers is not (β = 0.037, 95% CI [−0.156, 0.231]). The VAF of 44.8% for the peer trust pathway indicates partial mediation: trust in peers accounts for approximately 45% of the total association between PMS and employee performance, while the remaining 55% operates through the direct path. These results are consistent with H4 (supported) and with the non-significant H3.

5. Discussion and Conclusion

This study set out to examine how a performance measurement system is associated with operational-employee performance in the Indonesian banking sector, and in particular whether trust in managers and trust in peers operate as parallel mediating mechanisms. The findings present a nuanced picture. PMS use is directly and positively associated with individual performance and with both vertical and horizontal trust, but only horizontal trust translates into measurable performance gains for front-line staff, a pattern that holds as partial mediation with a VAF of 44.8%.

Several implications follow. First, the dual finding that PMS is associated with both trust referents but only one of those referents is associated with performance adds resolution to the broader trust-to-performance discussion. The pattern is consistent with recent meta-analytic evidence that horizontal trust outperforms vertical trust in predicting in-role performance [11] and with multilevel work showing that team-level trust shapes individual-level outcomes [7]. From a JD-R perspective [13], PMS functions as an organisational resource that reduces role ambiguity; peer trust then serves as the social resource that amplifies the conversion of reduced ambiguity into discretionary performance effort. In contrast, vertical trust may represent a resource more relevant to longer-horizon attitudinal outcomes (commitment,

retention, voice) than to immediate in-role task completion. At the operational tier of a bank, where work is delivered through tight peer hand-offs such as loan processing, customer service handovers, compliance checks, lateral trust appears to be the binding resource.

Second, the absence of a significant trust-in-manager association with performance does not mean that vertical trust is irrelevant. We propose two complementary explanations. Mechanistically, vertical trust at the operational tier of an Indonesian bank may shape longer-horizon outcomes such as turnover intention, organisational commitment, voice behaviour, rather than immediate in-role task completion; the present dependent variable does not capture these.

Contextually, Indonesia's high power-distance culture [60] means that subordinate compliance with supervisory directives is perceived as obligatory rather than as an expression of trust; the performance-relevant marginal contribution of vertical trust is therefore attenuated in this institutional setting. Additionally, the post-1997 regulatory restructuring of Indonesian banking created intensive performance monitoring regimes that formalise the supervisor–subordinate relationship, further limiting the discretionary relational space in which vertical trust would generate differential performance outcomes.

Third, the findings refine social exchange theory by demonstrating that the reciprocation of PMS fairness signals is referent-specific: organisations sending fairness signals through their PMS receive different forms of reciprocation depending on the relational target. Reciprocity directed at peers manifests as concrete role performance (partial mediation VAF = 44.8%), while reciprocity directed at supervisors may take other forms such as citizenship behaviour, reduced absenteeism, commitment, not visible in the dependent variable used here. This referent-specificity of exchange relationships is consistent with the social exchange framework [19] and with emerging evidence that trust referents have distinct downstream profiles [11].

Regarding limitations and future research: first, the cross-sectional design means that alternative causal directions cannot be ruled out. For instance, higher-performing teams may perceive PMS as more legitimate (reverse causation on PMS → performance), or pre-existing trust may make employees more receptive to measurement feedback (bidirectionality). Future research should pursue longitudinal panel designs and, where feasible, vignette experiments that manipulate PMS design features to establish causal order. Second, self-rated performance is subject to social desirability bias; future studies should use supervisor ratings or objective KPIs as dependent variables. Third, the sample is restricted to operational employees in Indonesian commercial banks; replication is needed in non-banking sectors, other developing economies, and cross-cultural comparative designs to test whether the horizontal-trust dominance is general or context-specific.

On a practical level, the message for banking managers is twofold. The technical specification of the measurement system what is measured, how often, and how transparently is positively associated with performance, both directly and through trust formation. To convert measurement into performance at the operational level, however, organisations should pay particular attention to the team environment in which PMS feedback is consumed. Four concrete interventions are suggested: (1) structured peer-coaching and mentoring programmes pairing experienced with newer operational staff, fostering familiarity and relational trust; (2) cross-functional task forces with rotating membership across branches, building shared mental models; (3) team-based PMS dashboards reviewed collectively rather than only in manager–subordinate meetings, making peer accountability visible and normalising horizontal feedback exchange; and (4) formal peer recognition mechanisms embedded in the existing performance evaluation cycle, reinforcing the social value of colleague support. Each of these interventions targets the horizontal trust mechanism identified by our model and is expected to yield disproportionate performance returns relative to investments aimed solely at the manager–subordinate dyad.

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Ethics Statement

This study was conducted in accordance with the ethical principles of the Declaration of Helsinki. Participation was entirely voluntary and anonymous, no financial incentive was offered, and informed consent was obtained from all respondents prior to data collection. No personally identifiable information was collected.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Author Contributions

MM: conceptualisation, methodology, investigation, formal analysis, and writing of the original draft. RRG:

supervision, validation, and writing (review and editing). FGD: methodology, interpretation of results, and writing (review and editing). All authors have read and approved the final version of the manuscript.

Conflict of Interest

The authors declare that they have no conflict of interest.

Generative AI Statement

The authors declare that no Gen AI was used in the creation of this manuscript.

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Appendix A

All items measured on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

Performance Measurement System (Milani, 1975; 11 items)

PMS1: I am regularly evaluated using clearly defined performance indicators.

PMS2: My performance targets are set through a participatory budget process.

PMS3: I participate in setting the budget targets that apply to my work.

PMS4: The performance measures used in my department are fair.

PMS5: My daily work is guided by the performance indicators in the system.

PMS6: Performance measurement results are communicated to me regularly.

PMS7: The measurement system covers both financial and non-financial indicators.

PMS8: I understand how the indicators in my performance system are calculated.

PMS9: My performance appraisal is conducted using transparent procedures.

PMS10: The PMS helps me align my tasks with the bank's strategic goals.

PMS11: I receive timely feedback based on my performance measurement results.

Trust in Managers (Cook & Wall, 1980; 3 items)

TTM1: I feel that management can be trusted to make sensible decisions for the future of this organisation. [Faith in management's intentions]

TTM2: Management at this organisation is sincere in its attempts to meet workers' point of view.

TTM3: Our management would be quite prepared to gain advantage by deceiving the workers. (reverse-scored)

Trust in Peers (Cook & Wall, 1980; 3 items)

TTP1: I can trust the people I work with to lend me a hand if I needed it.

TTP2: Most of my colleagues can be relied upon to do as they say they will.

TTP3: I have full confidence in the skills of my workmates.

Employee Performance (Williams & Anderson, 1991; 6 items)

EP1: I fulfil the responsibilities specified in my job description.

EP2: I perform the tasks that are expected of me.

EP3: I meet the formal performance requirements of my job.

EP4: I engage in activities that will directly affect my performance evaluation.

EP5: I neglect aspects of the job that I am obligated to perform. (reverse-scored)

EP6: My performance results have improved compared to the previous period.