



Organizational Factors and Performance Measurement System Implementation: The Moderating Role of Human Resource Capability

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Abstract

Background: Despite extensive performance measurement reforms in Indonesia, the Government Agency Performance Accountability System (SAKIP) has not achieved its intended outcomes. By 2024, few local governments achieved an A or higher rating, while most remained at BB or B levels, indicating procedural compliance rather than substantive performance use. Weaknesses include integration between planning and budgeting, poorly defined performance indicators, and limited use of performance information in decision-making.

Objective: This study examines the influence of organizational factors management commitment, decision-making authority, incentives, training, and responsiveness to change on Performance Measurement System (PMS) implementation in local government and tests the moderating role of Human Resource (HR) capability.

Methods: A survey involved 139 officials (echelon III and IV) of Regional Government Work Units (SKPD) in the Special Region of Yogyakarta (DIY) using purposive sampling. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM).

Results: Management commitment, training, and responsiveness to change positively and significantly influence PMS implementation, whereas decision-making authority and incentives do not. HR capability significantly moderates the relationship between responsiveness to change and PMS implementation.

Conclusion: The study extends Institutional Theory and the Resource-Based View (RBV) by positioning HR capability as a context-dependent moderator of PMS adoption. Practically, responsiveness to change, supported by strong HR capability, emerges as a key pathway for strengthening local government performance reform. As the study is limited to the Special Region of Yogyakarta (DIY), future research should conduct cross-regional studies to validate and broaden the generalizability of the findings.

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INTRODUCTION

Public management reforms inspired by New Public Management (NPM) since the late 1980s have encouraged governments worldwide to adopt results-oriented approaches to public service management (Hood, 1991). NPM promotes explicit performance standards, measurable outputs, and results-based accountability to improve bureaucratic efficiency and effectiveness (Gaebler, 1993). In Indonesia, these principles were institutionalized through Presidential Instruction No. 7 of 1999, which required government agencies to prepare Performance Accountability Reports (LAKIP). This initiative later developed into the Government Agency 2707 | INKUBIS: Jurnal Ekonomi dan Bisnis

Performance Accountability System (SAKIP) under Presidential Regulation No. 29 of 2014.

Despite more than two decades of implementation, SAKIP has not achieved its intended outcomes. Using nationwide local government data from 2016 to 2019, improvements in performance accountability were gradual and largely characterized by procedural compliance at the provincial and district or municipal levels. Although the proportion of local governments receiving at least a B rating increased, performance information remained underutilized in decision-making (Sofyani et al., 2018). This gap highlights an implementation paradox. Indonesia has established a comprehensive regulatory framework, yet substantive compliance remains limited because of weak reward and sanction mechanisms and insufficient human resource capacity (Akbar et al., 2012).

According to the Ministry of State Apparatus and Bureaucratic Reform (KemenPANRB) Evaluation Report 2023, only 8 out of 542 local governments (1.5%) achieved an AA rating, while 89 local governments (16.4%) received an A rating. The majority, 230 local governments (42.4%), remained at BB level, indicating compliance-based reporting without substantive performance use. Nationally, performance information was utilized in actual budgetary decision-making in fewer than 30% of local governments (KemenPANRB, 2023). These figures underscore the persistent gap between formal adoption and substantive implementation of PMS across Indonesia.

The implementation of performance measurement systems (PMS) also continues to face significant challenges. By 2024, all regencies and municipalities in the Special Region of Yogyakarta had achieved A or AA ratings in the SAKIP evaluation, including Yogyakarta City (AA), Kulon Progo Regency (A), Sleman Regency (A), and Bantul Regency (A). However, these results are exceptions rather than the national standard. National evidence indicates that, even after two decades of PMS implementation, most local governments continue to face persistent challenges, including weak integration between planning and budgeting, poorly defined performance indicators, and limited use of performance information in decision-making (Sofyani et al., 2018). These findings suggest that organizational factors and human resource capabilities remain critical determinants of successful PMS implementation.

From the perspective of New Public Management, which serves as the theoretical foundation of this study, a performance measurement system is more than an administrative instrument. It is a strategic mechanism that shifts public organizations from procedural compliance toward results-based accountability (Hood, 1991). NPM requires government agencies to establish clear performance targets, measure outcomes objectively, and use performance information to support continuous improvement. Effective implementation depends on leadership commitment, adequate decision-making authority, well-designed incentive systems, strong human resource capabilities, and organizational readiness for change.

A performance measurement system (PMS) is a key instrument for evaluating organizational effectiveness, efficiency, and goal achievement (Cavalluzzo & Ittner, 2004; Tung et al., 2011). In public administration, particularly in local governments, PMS integrates tools, methods, and procedures to strengthen accountability, improve efficiency, and align organizational objectives with public service delivery (Wulaningrum et al., 2020). It supports transparent and effective resource management through systematic performance planning, measurement, reporting, and evaluation (Sri Lestari & Roy Valiant Salomo, 2022). Technically, PMS manages organizational performance by linking inputs, outputs, and outcomes (Johnsen, 2005).

Despite its importance, PMS implementation remains suboptimal. Sofyani & Akbar (2013) found that successful implementation depends on institutional factors, including employee training and organizational responsiveness to change, as well as individual attributes such as self-efficacy and conscientiousness. Leadership, institutional pressure, and technical capacity also significantly influence PMS development and implementation (Syachbrani & Akbar, 2020). Leadership commitment, organizational culture, monitoring mechanisms, and the quality of performance planning further determine implementation success (Primaningtyas & Luayyi, 2025). Moreover, participatory, bottom-up leadership is more effective than compliance-oriented, top-down approaches in promoting organizational learning and sustained PMS implementation (Kuhlmann, 2010). Participatory leadership, supported by effective communication and

organizational learning, also strengthens a shared vision and reduces reliance on formal compliance alone (Agasisti et al., 2020).

From the resource-based view (RBV), human resources are strategic assets that generate sustainable organizational advantage (Barney, 1991). Human resource capabilities, including competence, skills, and self-efficacy, are essential for improving regional accounting systems and financial performance (Muhammad Rais et al., 2022). Wulaningrum et al. (2020) identified employee competence, training, and engagement as critical determinants of effective PMS implementation. Similarly, transformational and ethical leadership fosters transparency and voluntary commitment, resulting in more effective and sustainable use of PMS (Akbar et al., 2012).

New Public Management (NPM) provides the theoretical foundation for this study. Since the 1980s, NPM has reshaped public administration by replacing rule-based bureaucracy with a results-oriented model emphasizing efficiency and public accountability (Hood, 1991). Hood (1991) identified seven core principles of NPM: professional management, explicit performance standards, output-oriented control, organizational decentralization, competition in public service delivery, adoption of private-sector management practices, and disciplined, efficient resource use.

In Indonesian local governments, the principles of New Public Management (NPM) are reflected in bureaucratic reform policies that require implementation of the Government Agency Performance Accountability System (SAKIP) as a results-based performance measurement framework. NPM views PMS as more than an administrative requirement. It is a mechanism for transforming organizational culture and strengthening results-oriented governance. Accordingly, this study adopts NPM as the overarching theoretical framework to explain the rationale for PMS implementation and the conditions required for its success.

Institutional Theory, developed by DiMaggio & Powell (1983), explains how organizations adapt to the norms, values, and rules of their institutional environment, leading to isomorphic behavior. The theory identifies three forms of institutional pressure: coercive isomorphism, driven by formal regulations and legal requirements such as Presidential Regulation No. 29 of 2014; mimetic isomorphism, in which organizations imitate successful peers under conditions of uncertainty; and normative isomorphism, which arises through professionalization, education, and training.

In this study, Institutional Theory explains that local governments adopt PMS not only because of its perceived benefits but also because of institutional pressures from central government regulations, peer organizations, and professional norms. The key challenge is converting formal compliance into substantive implementation by strengthening organizational commitment and human resource capabilities.

The Resource-Based View (RBV) complements this perspective by emphasizing that sustainable organizational advantage depends on resources that are valuable, rare, inimitable, and non-substitutable (Barney, 1991). Human resource capabilities satisfy these VRIN criteria because the technical competence, experience, commitment, and adaptive capacity of civil servants cannot be easily replicated by other organizations.

Within the context of PMS implementation, RBV explains why structural factors, including management commitment, decision-making authority, and incentive systems, are insufficient on their own to ensure effective implementation. Human resource capabilities enable these organizational factors to translate into improved performance. Combining Institutional Theory and RBV provides a comprehensive framework for this study. Institutional pressures explain why local governments adopt PMS, whereas human resource capabilities determine the effectiveness of its implementation.

The primary novelty of this study lies in the integration of three complementary theoretical frameworks — New Public Management Hood (1991), Institutional Theory DiMaggio & Powell (1983), and the Resource-Based View Barney (1991) — to examine the conditional role of Human Resource Capability (HRC) as a moderating variable in PMS implementation within Indonesian local government. Unlike prior studies that treat HRC solely as a direct predictor of organizational performance Muhammad Rais et al. (2022), this study repositions HRC as a context-dependent amplifier whose value varies according to the nature of the organizational factor it interacts with. This nuanced, conditional conceptualization of HRC represents a novel theoretical contribution to the public sector performance management literature.

Although performance measurement systems (PMS) have been widely studied, the

moderating role of human resource capability (HRC) in local government remains underexplored, particularly in developing countries such as Indonesia (Wulaningrum et al., 2020). Previous studies have primarily examined technical and organizational determinants of PMS implementation, with limited attention to the interaction between institutional pressures and HR capabilities (Syachbrani & Akbar, 2020). Specifically, none of the key studies —, Wulaningrum et al. (2020), Syachbrani & Akbar (2020) — have empirically tested HRC as a moderating variable in the relationship between individual organizational factors and PMS implementation. Moreover, existing findings on the direct effect of organizational factors on PMS implementation are inconsistent: Sofyani & Akbar (2013) found significant effects for training and responsiveness to change, whereas Wulaningrum et al. (2020) found that isomorphic pressures, not individual factors, were the primary drivers. This inconsistency in prior results further justifies the need for a moderating variable approach.

This study addresses this gap by integrating three complementary theoretical perspectives. New Public Management Hood (1991) provides the overarching framework for understanding the role of PMS in bureaucratic reform. Institutional Theory DiMaggio & Powell (1983) explains how coercive, mimetic, and normative pressures shape organizational adoption of PMS. The Resource-Based View Barney (1991) highlights human resource capabilities as strategic assets that enhance organizational performance. This study examines how organizational factors influence PMS implementation in local governments and whether human resource capabilities strengthen these relationships based on the following hypotheses.

Based on the foregoing theoretical framework and identified research gap, this study has two primary objectives: (1) to examine the influence of five organizational factors — management commitment, decision-making authority, incentives, training, and responsiveness to change — on PMS implementation in local government units of the Special Region of Yogyakarta; and (2) to test whether Human Resource Capability (HRC) moderates the relationship between each of these organizational factors and PMS implementation. Additionally, from a practical standpoint, the findings of this study are expected to provide actionable recommendations for local governments in Indonesia to improve the effectiveness of their performance measurement systems, thereby advancing the transition from procedural compliance to substantive, results-based governance. The theoretical benefits include extending the application of Institutional Theory and the Resource-Based View to the context of PMS implementation in developing countries' public sector.

H1: Management commitment positively affects PMS implementation.

H2: Decision-making authority positively affects PMS implementation.

H3: Incentives positively affect PMS implementation.

H4: Training positively affects PMS implementation.

H5: Response to change positively affects PMS implementation.

H6: Human resource capabilities strengthen the positive effect of management commitment on PMS implementation.

H7: Human resource capabilities strengthen the positive effect of decision-making authority on PMS implementation.

H8: Human resource capabilities strengthen the positive effect of training on PMS implementation.

H9: Human resource capabilities strengthen the positive effect of response to change on PMS implementation.

H10: Human resource capabilities strengthen the positive effect of incentives on PMS implementation.

METHOD

This study employed a quantitative survey design to examine the relationships among the proposed variables (Sekaran & Bougie, 2018). The study population comprised senior officials from Regional Work Units (SKPDs) in the Special Region of Yogyakarta (DIY), including Bantul Regency, Kulon Progo Regency, Sleman Regency, and Yogyakarta City. DIY was selected because all regencies and the municipality received an A or AA rating in the 2024 SAKIP evaluation.

The sample consisted of echelon III and IV officials selected through purposive sampling.

These officials were directly involved in developing performance indicators, collecting performance data, preparing reports, and conducting internal evaluations. Echelon I and II officials were excluded because their responsibilities are primarily strategic and policy-oriented rather than operational.

Primary data were collected using a structured questionnaire with a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The measurement instrument was adapted from (Wulaningrum et al., 2020). Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS. The analysis consisted of three stages: (1) assessment of the measurement model to evaluate validity and reliability, (2) assessment of the structural model using R^2 and Q^2 values, and (3) hypothesis testing through bootstrapping with 5,000 subsamples to estimate robust t-statistics and p-values (Hartono, 2009). The sample size of 139 respondents satisfies the minimum requirement for PLS-SEM analysis, which recommends at least 10 times the maximum number of structural paths pointing at a construct (Hair et al., 2017). With a maximum of 11 paths, the minimum required sample is 110 respondents; the achieved sample of 139 exceeds this threshold.

The measurement instrument adapted from Wulaningrum et al. (2020) comprised 37 items across seven constructs: Management Commitment (MC, 3 items), Decision-Making Authority (DA, 4 items), Incentives (IN, 2 items), Training (TR, 4 items), Responsiveness to Change (AT, 4 items), PMS Implementation (PMS, 10 items), and Human Resource Capability (HRC, 7 items). All items employed a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). Content validity was confirmed through expert review and pilot testing with 15 respondents prior to the main data collection.

This study adhered to established research ethics standards. Participation was voluntary, and respondents were informed of the study's academic purpose and confidentiality of their responses. No personally identifiable information was collected. Informed consent was obtained from all respondents prior to questionnaire distribution. The study did not involve vulnerable populations, experimental interventions, or sensitive data beyond routine organizational performance perceptions.

RESULTS AND DISCUSSION

Results

This study was conducted in Regional Work Units (SKPDs) across the Special Region of Yogyakarta (DIY), including Bantul Regency, Kulon Progo Regency, Sleman Regency, and Yogyakarta City since all of them achieved A or AA ratings in the 2024 SAKIP evaluation: Yogyakarta City (AA), Kulon Progo Regency (A), Sleman Regency (A), and Bantul Regency (A).

Table 1

Questionnaire Distribution

City	Number of Distributed Questionnaire	Number of Returned Questionnaire	Percentage
Sleman	42	42	100%
Yogyakarta	30	19	63%
Bantul	46	40	86,9%
Kulonprogo	40	38	95%
Total	158	139	88%

The questionnaire was distributed across three regencies and one municipality. A total of 42 valid responses were obtained from Sleman Regency (100% response rate), 19 from Yogyakarta City (63%; 19 of 30 questionnaires), 40 from Bantul Regency (86.9%; 40 of 46 questionnaires), and 38 from Kulon Progo Regency (95%; 38 of 40 questionnaires).

Table 2

Respondents' Profile

Demographic Characteristics	Number	Percentage
Sex		
Male	67	48%
Female	72	52%
Age Group		
< 30	15	11%
31–40	22	16%
41–50	56	40%
> 50	46	33%
Latest Education		
Senior High School	2	1%
Associate's Degree	17	12%
Bachelor's Degree	74	53%
Master's Degree	46	33%
Doctoral Degree	0	0%
Position		
Echelon III	32	23%
Echelon IV	107	77%
Years of Service		
< 2	14	10%
2–5	10	7%
6–10	4	3%
11–15	18	13%
> 15	93	67%
Years of Service for the Current Position		
< 2	45	32%
2–5	35	25%
6–10	23	17%
11–15	5	4%
> 15	31	22%

The respondents were predominantly female (52%), aged 41 to 50 years (40%), held a bachelor's degree (53%), occupied echelon IV positions (77%), and had more than 15 years of work experience (67%).

Table 3

Descriptive Statistics

Var.	Mean	Median	Min	Max	SD	AVG	Category
MC1	4.194	4	3	5	0.413	4.1	High
MC2	4.072	4	2	5	0.426		
MC3	4.036	4	2	5	0.501		
DA1	3.691	4	2	5	0.888	3.91	High
DA2	3.705	4	2	5	0.893		
DA3	4.137	4	3	5	0.383		
DA4	4.101	4	3	5	0.324		
IN1	3.741	4	2	5	0.817	3.73	High
IN2	3.727	4	2	5	0.785		
TR1	3.799	4	2	5	0.806	3.9	High
TR2	3.942	4	2	5	0.687		
TR3	3.964	4	2	5	0.704		
TR4	3.906	4	2	5	0.677		
AT1	4.129	4	3	5	0.492	4.14	High
AT2	4.180	4	2	5	0.553		
AT3	4.094	4	2	5	0.561		

Var.	Mean	Median	Min	Max	SD	AVG	Category
AT4	4.158	4	3	5	0.484		
PMS1	4.187	4	3	5	0.473	4.14	High
PMS2	4.180	4	2	5	0.484		
PMS3	4.180	4	2	5	0.468		
PMS4	4.115	4	2	5	0.466		
PMS5	4.129	4	3	5	0.376		
PMS6	4.151	4	3	5	0.447		
PMS7	4.165	4	3	5	0.474		
PMS8	4.079	4	2	5	0.466		
PMS9	4.086	4	3	5	0.424		
PMS10	4.115	4	3	5	0.450		
HRC1	4.029	4	2	5	0.611	4.14	High
HRC2	4.122	4	2	5	0.501		
HRC3	4.165	4	3	5	0.474		
HRC4	4.058	4	3	5	0.533		
HRC5	4.245	4	3	5	0.534		
HRC6	4.165	4	3	5	0.503		
HRC7	4.180	4	3	5	0.453		

The descriptive statistics indicate that all variables have high mean scores (mean > 3.5). Decision-making authority (DA), the performance measurement system (PMS), and human resource capabilities (HRC) recorded the highest mean score (4.14), followed by management commitment (MC) (3.91), training (TR) (3.90), and incentives (IN) (3.73).

Table 4

Loading Factor

Indicator	Variable	Value
AT1	AT	0.868
AT2	AT	0.842
AT3	AT	0.874
AT4	AT	0.851
DA1	DA	0.722
DA2	DA	0.725
DA3	DA	0.789
DA4	DA	0.817
IN1	IN	0.944
IN2	IN	0.941
HRC1	HRC	0.728
HRC2	HRC	0.849
HRC3	HRC	0.873
HRC4	HRC	0.809
HRC5	HRC	0.818
HRC6	HRC	0.873
HRC7	HRC	0.858
MC1	MC	0.854
MC2	MC	0.760
MC3	MC	0.701
PMS1	PMS	0.814
PMS2	PMS	0.816
PMS3	PMS	0.728
PMS4	PMS	0.785
PMS5	PMS	0.764
PMS6	PMS	0.811
PMS7	PMS	0.819
PMS8	PMS	0.806

Indicator	Variable	Value
PMS9	PMS	0.709
PMS10	PMS	0.748
TR1	TR	0.872
TR2	TR	0.955
TR3	TR	0.939
TR4	TR	0.918

The loading factor results indicate that all indicators exceed the 0.70 threshold. Therefore, all indicators are considered valid for this study (Hair et al., 2017).

Table 5

AVE Values

Construct	Average Variance Extracted (AVE)
AT	0.738
DA	0.585
IN	0.888
HRC	0.691
MC	0.599
PMS	0.610
TR	0.849

As shown in the Table 5, all constructs satisfy the convergent validity criterion, with AVE values exceeding 0.50.

Table 6

Results of Fornell-Larcker Test

	AT	DA	IN	HRC	MC	PMS	TR
AT	0.859						
DA	0.590	0.765					
IN	0.409	0.378	0.942				
HRC	0.689	0.415	0.336	0.831			
MC	0.498	0.690	0.357	0.448	0.774		
PMS	0.710	0.656	0.367	0.621	0.641	0.781	
TR	0.392	0.340	0.463	0.321	0.322	0.501	0.922

The Fornell-Larcker results indicate that the square root of the AVE for each construct exceeds its correlations with other constructs. Therefore, the discriminant validity criterion is satisfied.

Table 7

HTMT Value

	AT	DA	IN	HRC	MC	PMS	TR	HRCxDA	HRCxIN	HRCxTR	HRCxAT
AT											
DA	0.685										
IN	0.465	0.468									
HRC	0.761	0.444	0.372								
MC	0.541	0.822	0.472	0.428							
PMS	0.784	0.725	0.405	0.664	0.667						
TR	0.430	0.420	0.513	0.345	0.361	0.536					
HRC x DA	0.386	0.643	0.177	0.364	0.653	0.498	0.075				
HRC x IN	0.136	0.220	0.094	0.129	0.213	0.119	0.064	0.312			
HRC x TR	0.181	0.092	0.069	0.103	0.244	0.131	0.056	0.205	0.605		
TR											

	AT	DA	IN	HRC	MC	PMS	TR	HRCxDA	HRCxIN	HRCxTR	HRCxAT
HRC x AT	0.204	0.345	0.114	0.195	0.350	0.405	0.141	0.519	0.385	0.368	
HRC x MC	0.391	0.552	0.200	0.462	0.655	0.534	0.223	0.799	0.132	0.155	0.591

The HTMT results show that all construct values are below the 0.90 threshold. Therefore, the discriminant validity criterion is satisfied.

Table 8

Composite Reliability and Cronbach's Alpha Values

Construct	Cronbach's Alpha	Composite Reliability
AT	0.881	0.882
DA	0.776	0.799
IN	0.874	0.875
HRC	0.925	0.927
MC	0.718	0.850
PMS	0.929	0.930
TR	0.940	0.943

All constructs meet the reliability requirements with Composite Reliability and Cronbach's Alpha values above 0.70.

Table 9

Coefficient of Determination (R^2) and Predictive Relevance (Q^2)

Variable	R-Square	Q-Square
PMS	0.721	0.614

PMS implementation has an R^2 value of 0.721, indicating that 72.1% of its variance is explained by the variables included in the model. A Q^2 value of 0.614 (> 0) confirms the model's strong predictive relevance.

Table 10

Hypothesis Result

Hypothesis	O	T-Statistics	P-Value	Remarks
MC → PMS	0.238	1.913	0.056	Supported (10%)
DA → PMS	0.138	1.178	0.239	Not supported
IN → PMS	-0.073	1.278	0.201	Not supported
TR → PMS	0.202	3.357	0.001	Supported
AT → PMS	0.328	3.308	0.001	Supported
HRC x MC → PMS	-0.081	0.626	0.532	Not supported
HRC x DA → PMS	0.066	0.604	0.546	Not supported
HRC x IN → PMS	-0.073	1.229	0.219	Not supported
HRC x TR → PMS	-0.071	1.056	0.291	Not supported
HRC x AT → PMS	0.164	3.089	0.002	Supported

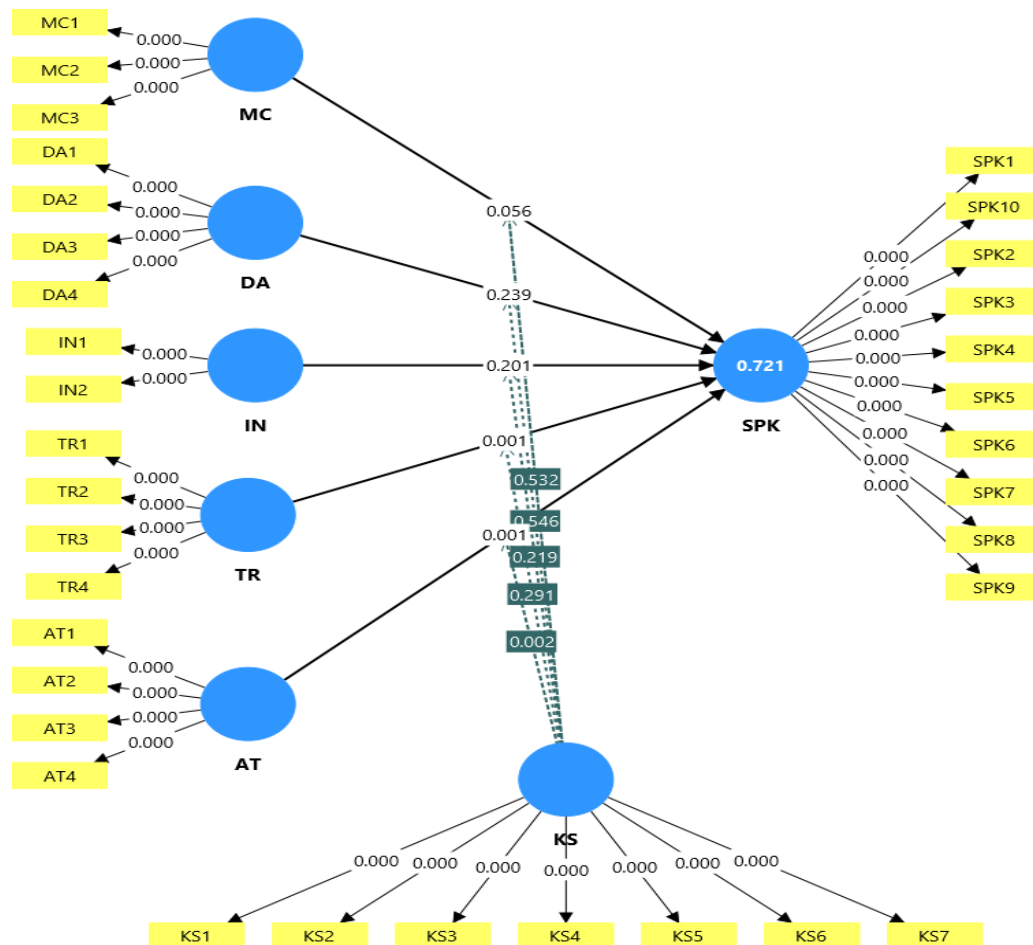


Figure 1. SEM-PLS Model Hypothesis Test Results
Source: Smart PLS Analysis, 2026

H1: Management Commitment Positively Influences PMS Implementation

Management commitment has a positive effect on PMS implementation ($\beta = 0.238$, $T = 1.913$, $p = 0.056$). A 10% significance level is acceptable for exploratory eHRC research in the social sciences (Gujarati, 2012; Hair Jr et al., 2021). Management commitment reflects leadership support through resource allocation, policy reinforcement, and the promotion of accountability. From the New Public Management (NPM) perspective, leadership commitment is essential for shifting organizational culture from procedural compliance to results orientation (Hood, 1991). Transformational and ethical leadership also strengthen transparency and enhance the effectiveness of PMS implementation (Garengo & Betto, 2024). These findings are consistent with (M. M et al., 2024).

H2: Decision-Making Authority Has No Significant Effect on PMS Implementation

Decision-making authority has no significant effect on PMS implementation ($\beta = 0.138$, $T = 1.178$, $p = 0.239$). Although structural officials possess formal authority, their discretion is often constrained by regulatory requirements and rigid organizational structures (Sofyani & Akbar, 2013). Institutional Theory suggests that coercive regulatory pressures outweigh individual discretion, limiting the contribution of formal authority to PMS implementation (DiMaggio & Powell, 1983). This finding is consistent with Wulaningrum et al. (2020), who reported that bureaucratic constraints impede effective PMS implementation.

H3: Incentives Have No Significant Effect on PMS Implementation

Incentives do not significantly influence PMS implementation ($\beta = -0.073$, $T = 1.278$, $p = 0.201$). In the public sector, PMS implementation is driven primarily by regulatory obligations associated with coercive isomorphism rather than financial rewards. From the Resource-Based View (RBV), reward systems that are not linked to performance fail to fully leverage human

resource capabilities (Sofyani & Akbar, 2013). In addition, Public Service Motivation (PSM) often exerts a stronger influence on employee performance than financial incentives (Jung & Moon, 2024). This result supports the findings of Jung & Moon (2024), who concluded that financial incentives do not consistently strengthen employee commitment in the public sector.

H4: Training Positively Influences PMS Implementation

Training has a positive and significant effect on PMS implementation ($\beta = 0.202$, $T = 3.357$, $p = 0.001$). Training enhances employees' understanding of performance indicators, evaluation procedures, and reporting mechanisms. From the RBV perspective, training represents a strategic investment that develops valuable organizational capabilities by strengthening employees' knowledge and skills (Barney, 1991). Institutional Theory further suggests that training promotes normative isomorphism through professionalization, leading to a shared understanding of performance management standards (DiMaggio & Powell, 1983). These findings are consistent with (Broom & Jackson, 1997).

H5: Responsiveness to Change Positively Influences PMS Implementation

Responsiveness to change is the second strongest predictor of PMS implementation ($\beta = 0.328$, $T = 3.308$, $p = 0.001$). Adaptive organizations are better positioned to adopt innovations and respond to regulatory changes and increasing demands for public accountability. From the Institutional Theory perspective, responsiveness to internal and external pressures promotes the substantive internalization of accountability rather than ceremonial compliance (DiMaggio & Powell, 1983). Similarly, New Public Management (NPM) emphasizes organizational adaptability as a prerequisite for effective responses to changes in the policy environment (Hood, 1991). These findings are consistent with (Wulaningrum et al., 2020).

H6: Human Resource Capability Does Not Moderate the Effect of Management Commitment on PMS Implementation

Human resource capability does not moderate the relationship between management commitment and PMS implementation ($\beta = -0.081$, $T = 0.626$, $p = 0.532$). Institutional Theory suggests that PMS implementation is driven primarily by regulatory compliance, making leadership commitment sufficient to support implementation regardless of employee capability. When leadership exerts a dominant direct influence, the moderating role of human resource capability becomes negligible (Wulaningrum et al., 2020).

H7: Human Resource Capability Does Not Moderate the Effect of Decision-Making Authority on PMS Implementation

Human resource capability does not moderate the relationship between decision-making authority and PMS implementation ($\beta = 0.066$, $T = 0.604$, $p = 0.546$). Consistent with H2, bureaucratic constraints continue to limit the effectiveness of formal authority, even when employees possess strong capabilities. These findings suggest that improving PMS implementation requires structural reforms rather than enhanced human resource capability alone (Agasisti et al., 2020).

H8: Human Resource Capability Does Not Moderate the Effect of Training on PMS Implementation

Human resource capability does not moderate the relationship between training and PMS implementation ($\beta = -0.071$, $T = 1.056$, $p = 0.291$). This result likely reflects the conceptual overlap between the two constructs, as training is itself a mechanism for developing human resource capability. Training directly improves PMS implementation, leaving no detectable additional moderating effect of human resource capability (Manhas et al., 2025).

H9: Human Resource Capability Moderates the Effect of Responsiveness to Change on PMS Implementation

Human resource capability significantly moderates the relationship between responsiveness to change and PMS implementation ($\beta = 0.164$, $T = 3.089$, $p = 0.002$). This finding represents the study's primary theoretical contribution. Organizational adaptability produces

stronger implementation outcomes when supported by capable and adaptive human resources. From the Resource-Based View (RBV), high-quality human resources strengthen an organization's ability to transform institutional pressures into sustainable managerial innovation (Erwin et al., 2022). The results indicate that the interaction between organizational adaptability and human resource capability creates greater benefits than either factor alone.

H10: Human Resource Capability Does Not Moderate the Effect of Incentives on PMS Implementation

Human resource capability does not moderate the relationship between incentives and PMS implementation ($\beta = -0.073$, $T = 1.229$, $p = 0.219$). Because incentives do not significantly affect PMS implementation, no moderating effect of human resource capability is observed. As long as incentive systems remain disconnected from measurable performance outcomes, employee capability alone cannot overcome these systemic limitations (Akbar et al., 2012).

Table 11

Results of the Combined Hypothesis Test of Organizational Factors

	O	M	STDEV	T-Statistics	P-Value
FO → PMS	0.621	0.620	0.086	7.251	0.000
HRC x FO → PMS	0.108	0.116	0.067	1.623	0.105

The combined construct Organizational Factors (FO) in Table 11 was operationalized as a higher-order composite variable using the repeated indicators approach (Hair et al., 2017). Specifically, all indicators of the five organizational factor constructs (Management Commitment (MC), Decision-Making Authority (DA), Incentives (IN), Training (TR), and Responsiveness to Change (AT)) were re-assigned to a single higher-order reflective construct (FO) in SmartPLS. This approach allows for the simultaneous examination of the overall explanatory power of organizational factors on PMS implementation, serving as a robustness check complementary to the individual hypothesis tests reported in Table 10. The moderating variable HRC×FO was created as the product of the HRC composite score and the FO composite score following the two-stage approach recommended by Henseler and Fassott (2010).

Simultaneous testing indicates that organizational factors have a positive and significant effect on PMS implementation ($\beta = 0.621$, $T = 7.251$, $p < 0.001$). In contrast, human resource capability, assessed as a combined moderating variable, is not significant ($\beta = 0.108$, $T = 1.623$, $p = 0.105$). This finding confirms that its moderating effect is limited to the relationship between responsiveness to change and PMS implementation (H9).

Discussion

At the international level, the challenges of PMS implementation documented in this study echo broader global patterns. The OECD (2020) Government at a Glance report indicates that while 85% of OECD member countries have formal performance management frameworks in place, fewer than 45% systematically use performance data in budget allocation decisions. Similarly, the World Bank's 2022 World Development Report on Finance for an Equitable Recovery highlights that performance information systems in developing countries frequently function as compliance instruments rather than genuine management tools, a pattern attributable to weak institutional capacity and insufficient human resource competence (World Bank, 2022). The United Nations (2021) Public Service Innovation Report further underscores that organizational adaptability and human resource capability are among the strongest enablers of effective public sector performance systems. These international findings provide a broader empirical foundation for the results of the present study.

Taken together, the findings reveal a clear pattern: organizational factors that operate through direct managerial and behavioral channels – management commitment, training, and responsiveness to change – translate into effective PMS implementation, whereas the more structural and transactional factors, decision-making authority and incentives, do not. This pattern is consistent with the integrated theoretical framework adopted in this study. From the

New Public Management perspective Hood (1991), PMS implementation is fundamentally a behavioral and cultural transformation rather than a purely structural one, so factors that shape day-to-day managerial behavior and organizational adaptability exert a stronger influence than factors tied to formal position or monetary reward.

The limited influence of decision-making authority and incentives is best explained through Institutional Theory (DiMaggio & Powell, 1983). Because all four regional governments examined in this study had already attained an A or AA rating in the 2024 SAKIP evaluation, PMS implementation in this setting is largely driven by coercive isomorphism, that is, statutory compliance with Presidential Regulation No. 29 of 2014, rather than by internal discretionary mechanisms such as authority delegation or incentive design. Under strong regulatory pressure, echelon III and IV officials are compelled to carry out PMS-related activities regardless of how much formal authority they hold or how they are rewarded, which compresses the explanatory power of these two structural factors. This interpretation is consistent with Salomo & Rahmayanti (2023), who found that regulatory compliance in Indonesian local governments has generally outpaced the development of internal enabling mechanisms, producing a persistent gap between formal adoption and substantive use of performance information.

The moderation results add a further layer of nuance. Human resource capability strengthened only the relationship between responsiveness to change and PMS implementation, while its moderating effect on management commitment, decision-making authority, training, and incentives was not significant. Viewed through the Resource-Based View Barney (1991), this selective pattern suggests that human resource capability functions as a complement rather than a universal amplifier. Where an organizational factor is already institutionally embedded and largely compliance-driven, such as management commitment and training in a high-performing region like DIY, the marginal contribution of employee capability appears limited because implementation is already close to its ceiling. Responsiveness to change, by contrast, is a more discretionary and behavior-dependent capacity: it requires employees to interpret ambiguous situations, adapt routines, and exercise judgement, activities in which competence, experience, and adaptive capacity are decisive. The interaction between organizational adaptability and human resource capability therefore satisfies the VRIN criteria more distinctly than its interaction with the other, more procedural organizational factors, making this particular combination harder for other organizations to replicate and, consequently, a genuine source of sustained implementation advantage.

These findings extend prior research that has generally treated human resource capability as a direct antecedent of PMS implementation Muhammad Rais et al. (2022) rather than as a conditional, moderating resource. By showing that the value of human resource capability depends on the nature of the organizational factor it interacts with, this study nuances the assumption, implicit in much of the RBV literature, that stronger human resources uniformly reinforce every organizational mechanism. Instead, the results point to a more selective, context-dependent role for human resource capability, one that is most consequential when the underlying factor already demands adaptive, non-routine behavior.

From a practical standpoint, these findings offer a more precise roadmap for regional governments seeking to move beyond ceremonial compliance toward substantive PMS use, a distinction previously identified as a persistent weakness in Indonesian local governance (Sofyani et al., 2018). Rather than allocating resources evenly across every organizational lever, local governments would benefit from prioritizing leadership development, sustained technical training, and the cultivation of a change-ready organizational culture, while directing human resource capability-building efforts specifically toward adaptability and responsiveness to change, since this is the pathway through which capability yields the greatest additional benefit. The non-significant effect of incentives should not be read as evidence that reward systems are unimportant; rather, it suggests that, in a bureaucratic context where civil servant compensation is largely fixed by national regulation, performance-based incentives need to be more directly and visibly linked to PMS outcomes before they can meaningfully influence implementation behavior (Jung & Moon, 2024).

It is also important to interpret these results in light of the sample's characteristics. Because all four SKPDs studied were drawn from a jurisdiction in which every regency and municipality had already achieved an A or AA SAKIP rating, the sample represents a group of

relatively high-performing organizations, with descriptive mean scores above 3.5 across all constructs. This restricted range of variation may partly explain why decision-making authority, incentives, and most of the moderation paths did not reach significance; in a more heterogeneous sample spanning both high- and low-performing regions, these relationships could plausibly emerge more strongly. Future studies that include local governments with lower SAKIP ratings would help clarify whether the pattern observed here reflects a genuine theoretical mechanism or a ceiling effect specific to already high-performing bureaucracies.

CONCLUSION

This study demonstrates that organizational factors influence PMS implementation in the regional government of the Special Region of Yogyakarta to varying degrees. Management commitment, training, and responsiveness to change positively and significantly affect PMS implementation. In contrast, decision-making authority and incentives have no significant effect, indicating that formal authority and reward systems not linked to performance are insufficient to improve PMS implementation within the local government bureaucracy.

Human resource capability significantly moderates only the relationship between responsiveness to change and PMS implementation. This finding suggests that the strategic value of human resource capability depends on the organizational context in which it operates.

Theoretically, this study extends the application of Institutional Theory and the Resource-Based View to PMS implementation in the Indonesian public sector. Practically, the findings suggest that local governments should strengthen leadership commitment through leadership development, implement performance-based incentive systems, provide continuous technical training, and foster an organizational culture that supports adaptability. Specifically, the scientific contribution of this study rests on demonstrating that HRC does not uniformly amplify all organizational factors, but instead operates selectively, functioning as a decisive complement only where organizational factors require adaptive, non-routine behavior. This finding challenges the implicit assumption in much of the RBV literature that stronger human resources uniformly enhance every organizational mechanism, and instead offers a more nuanced, context-sensitive model of HRC's strategic role in public sector PMS implementation.

This study has several limitations. Its focus on the Special Region of Yogyakarta limits the generalizability of the findings, and the use of perception-based survey data may introduce subjective bias. Future research should examine broader geographic settings, incorporate additional variables such as organizational culture and transformational leadership, and adopt mixed-methods or longitudinal research designs.

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AUTHOR CONTRIBUTION STATEMENT

Author 1: Conceptualization, Methodology, Data Collection, Data Analysis, Writing—Original Draft, Writing—Review & Editing. Author 2: Conceptualization, Theoretical Framework Development, Writing—Review & Editing, Supervision. All authors have read and agreed to the final version of the manuscript.

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