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Knowledge Management Success Factors for Indonesian Local Government: Case Study Pontianak City Government

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ABSTRACT

In Indonesia's e-Government framework, knowledge management (KM) serves as a mandatory indicator that must be implemented at both central and local government levels. However, KM adoption in Indonesian local governments remains substantially underdeveloped. This inadequacy is evidenced by the 2024 national e-government management index score at the city level, which reached only 2.03—classified as "sufficient." Despite this, KM constitutes a critical foundation for advancing public services and fostering innovation in local governments. This study aims to identify the Critical Success Factors (Faktor Kritis Keberhasilan, CSF) for KM implementation in Pontianak City Government through a mixed-methods approach combining surveys (n=153 civil servants) and in-depth interviews with key informants. Data analysis employs Structural Equation Modeling-Partial Least Squares (SEM-PLS), with KM implementation strategy as the latent dependent variable. Results reveal that innovation, measurement, regulation, and technology adoption exert significant positive impacts on KM implementation strategies in local governments. These success factors serve as guidelines for developing KM strategies in Pontianak City Government and local governments more broadly. Notably, this study represents one of the first empirical applications of SEM-PLS to identify knowledge management success factors for Indonesian local government using a comprehensive civil servant dataset, thereby contributing novel insights to the public sector KM literature.

KEYWORDS *knowledge management; critical success factors; local government; structural equality modeling;*

INTRODUCTION

The government in Indonesia, both central and local government, must be able to implement effective governance that is convenient for the public, clean, transparent, and accountable. Concurrently, the government is mandated to deliver high-quality and reliable public services. Electronic systems provide a viable pathway to achieve these objectives. Therefore, the government has developed an

Electronic-Based Government System (SPBE or e-Government) (Peraturan Presiden 2018).

Knowledge Management (KM) is one of the management domains in Indonesia's e-government. The objective of KM in the implementation of e-government is to improve service quality and support decision making processes by leaders within organizations, including local government. KM is carried out through a series of process of collecting, processing, storing, using, and transferring knowledge and technology produced in e-government (Peraturan Presiden 2018). Existing literature has established the crucial role of effective KM in the government sector (Arongo Ndiege and Backhouse 2023). However, government agencies have not explored in more depth the benefits of implementation KM in the practice of these agency activities (Mitrović, Obradovic, and Suknovic 2018).

Local governments are required to improve service delivery to the community. Enhanced services can be achieved through increased innovation informed by lessons learned from past governmental failures and successes (Ncoyini, Cilliers, and Ncoyini 2020).

The principal challenges facing innovation in local government include the absence of structured data management, formalized learning processes, and systematic innovation management frameworks. Additionally, supporting facilities in the form of Knowledge Management Systems (KMS) remain underdeveloped (Yohanitas et al. 2023). Comparative research indicates greater difficulties in cultivating a KM culture at the local government level relative to the private sector (Arongo Ndiege and Backhouse 2023; Ncoyini, Cilliers, and Ncoyini 2020). A study in Portugal states that successful digital governance is closely related to the quality of KM in public organizations in that country. This research established that KM and digital transformation mutually reinforce one another, resulting in more efficient and responsive public services (Alvarenga et al. 2020).

Pontianak City Government's KM assessment in the 2024 e-government evaluation received a score of 2 (sufficient) (Kemenpan RB 2025). This rating indicates that while KM has been implemented, formal guidelines remain absent within the local government structure (Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi RI 2020). This is a challenge for Pontianak City Government which is targeting the results of the e-government evaluation with index of 4.5 with a satisfactory predicate (Diskominfo Kota Pontianak 2020). As Pontianak City Government earned the "very innovative city" designation in 2024, effective KM becomes essential to preserve institutional knowledge and prevent innovation loss when employees who developed these innovations retire or transfer.

This research focuses on the analysis of driving factors of KM to optimize public services in Pontianak City Government environment. The case study specifically examines Pontianak City Government as the research setting. This

research addresses the following questions: What factors influence the successful implementation of KM in Pontianak City Government? What strategies should be implemented to improve the KM index in Pontianak City Government?

This study contributes to the literature by providing one of the first empirical analyses applying SEM-PLS methodology to identify KM success factors in Indonesian local government using a comprehensive civil servant dataset (n=153). The research extends existing theoretical frameworks on public sector KM by integrating multiple organizational factors and testing their relationships within the specific context of Indonesian local governance.

RESEARCH METHOD

This study employed a sequential mixed-methods design to identify success factors for KM in Pontianak City Government. The methodological framework integrates both quantitative and qualitative approaches to provide comprehensive insights.

Based on the literature study, Table 1 synthesizes the components of effective KM in the government sector, drawing from established public sector KM theories and organizational learning frameworks.

Table 1. Knowledge Management Components in Government

Component	Indicators	Article
Leadership	Clarity of Policy	(Alolayyan et al. 2020; Amelia, Endrastaty, and Sensuse 2022; Ashok et al. 2021; Ferede, Endawoke, and Tessema 2024; Kumari, Khan, and Lakshmi 2023; Sardjono et al. 2021; Sensuse, Hidayat, and Setyaningrum 2023; Tabatabaei 2024)
	Application System Appreciation	
	Organization Knowledge Identification	
Rewards	Reward	(Amelia, Endrastaty, and Sensuse 2022; Sensuse, Hidayat, and Setyaningrum 2023; Tabatabaei 2024)
	Compensation	
Measurement	System and procedures	(Sensuse, Hidayat, and Setyaningrum 2023)
	Performance Measurement	
Role	Motivation	(Sensuse, Hidayat, and Setyaningrum 2023)
	Best practice	
	Commitment	
Organization Culture	Organization Culture	(Amelia, Endrastaty, and Sensuse 2022; Dybek and Głodziński 2023; Jashapara 2005; Kumari, Khan, and Lakshmi 2023; Mittelstädt 2025; Sensuse, Hidayat, and Setyaningrum 2023; Soroka-Potrzebna 2022; Tabatabaei 2024)
	Motivational Aids	
	Communication Group Working	
Trust	Trust	

Component	Indicators	Article
	Performance Expectation	(Kumari, Khan, and Lakshmi 2023; Sensuse, Hidayat, and Setyaningrum 2023)
Sharing	Knowledge Practice	(Ferede, Endawoke, and Tessema 2024; Fiarni, Maharani, and Kirsten 2024; Gardeazabal et al. 2023)
	Communication	
	Influence Organization	
Innovation	Innovation	(Alolayyan et al. 2020; Fanaja, Saputri, and Pradana 2023; Marinho and Couto 2022; Tabatabaei 2024; Tjakraatmadja et al. 2022a)
	Creativity	
	Taking Advantage of Opportunities	
	Risk-Taking	
IT Infrastructure	Knowledge Access	(Amelia, Endrastaty, and Sensuse 2022; Ashok et al. 2021; Ncoyini, Cilliers, and Ncoyini 2020; Sensuse, Hidayat, and Setyaningrum 2023; Soroka-Potrzebna 2022; Tabatabaei 2024)
	Improve and Efficient System	
	Network Capability	
Performance	High Performance Expectations	(Sensuse, Hidayat, and Setyaningrum 2023; Tabatabaei 2024)
	Result Orientation	
	Enthusiasm and Motivation	
Physical Environment	Room Meeting	(Sensuse, Hidayat, and Setyaningrum 2023)
	Collaborative Workspace	
Training	Positive Experience	(Amelia, Endrastaty, and Sensuse 2022; Sensuse, Hidayat, and Setyaningrum 2023)
	Education and Training	
Implementation Strategy	Support Vision and Mission	(Laihonen, Kork, and Sinervo 2024; Mittelstädt 2025; Sardjono et al. 2021; Sensuse, Hidayat, and Setyaningrum 2023)
	KM Evaluation	
	KM Strategy Document	
Technology Adoption	System Integration	(Sensuse, Hidayat, and Setyaningrum 2023; Tabatabaei 2024)
	Access of Information	
	Collaboration Link	
Regulation	Business Process Alignment	(Dybek and Głodziński 2023; Sensuse, Hidayat, and Setyaningrum 2023)
	KM Budget Available	
	Standard Operational Procedure (SOP)	
	Organizational Policy	

Figure 1 presents the research model illustrating factors hypothesized to influence successful KM implementation in local government. The model synthesizes essential components identified through systematic literature review and is grounded in organizational learning theory and public sector KM frameworks.

This research empirically investigates the impact of these factors, specifically testing leadership and organizational culture as potential mediating variables in the relationship between internal organizational elements and KM implementation

strategies in Pontianak City Government. Organizational culture and leadership may function as mediators because both factors directly influence how KM policies and practices are accepted and implemented by individuals and groups within organizations. A robust organizational culture fosters collaborative environments conducive to information and knowledge sharing. Concurrently, effective leadership provides motivation through concrete examples, ultimately strengthening comprehensive KM strategy implementation (Le and Lei 2019).

This research aims to identify factors that the implementation strategy of KM in local government environments. Hypotheses are constructed by referring to several components that have been widely discussed in previous literature.

The hypothesis proposed is as follows. Hypothesis 1 (H1): leadership positively and significantly influences in the implementation strategy of KM in local government. Hypothesis 2 (H2): reward positively and significantly influences on leadership in supporting the implementation of KM. Hypothesis 3 (H3): measurement positively and significantly influences on leadership in supporting the implementation of KM. Hypothesis 4 (H4): role has a positive and significant effect on leadership in the implementation of KM.

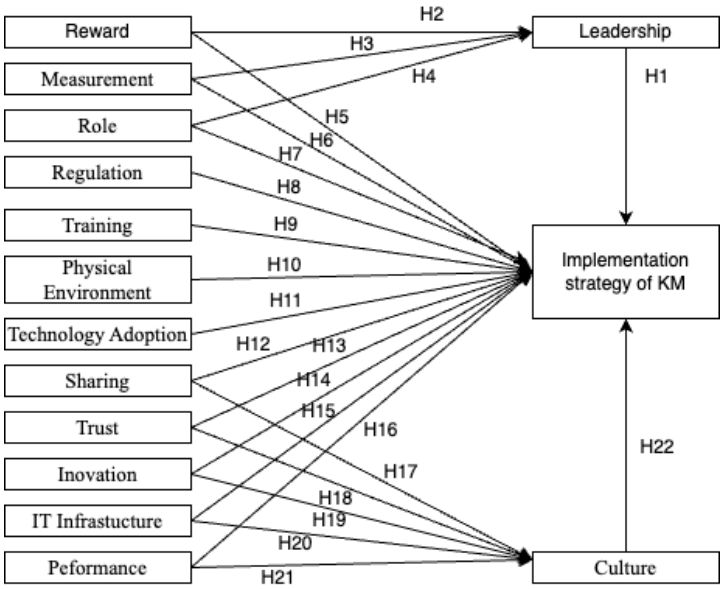

Figure 1. Research Model

Hypothesis 5 (H5): reward positive and significant effect on KM implementation strategies. Hypothesis 6 (H6): measurement has a positive and significant impact on KM implementation strategies. Hypothesis 7 (H7): role positively and significantly affects KM implementation strategies. Hypothesis 8 (H8): regulation has a positive and significant influence on KM implementation strategies. Hypothesis 9 (H9): training contribute positively and significantly to KM

implementation strategies. Hypothesis 10 (H10): physical environment positively and significantly influences KM implementation strategies. Hypothesis 11 (H11): technology adoption demonstrates a positive and significant effect on KM implementation strategies. Hypothesis 12 (H12): sharing KM positively and significantly influences on KM implementation strategies. Hypothesis 13 (H13): trust positively and significantly influences on KM implementation strategies. Hypothesis 14 (H14): innovation positively and significantly influences on organizational culture. Hypothesis 15 (H15): Information technology infrastructure (IT infrastructure) positively and significantly influences on KM implementation strategies. Hypothesis 16 (H16): Performance positively and significantly influences on KM implementation strategies.

Hypothesis 17 (H17): sharing positively and significantly influences organizational culture, which in turn supports KM. Hypothesis 18 (H18): trust positively and significantly influences organizational culture, which in turn supports KM. Hypothesis 19 (H19): innovation positively and significantly influences organizational culture, which in turn supports KM. Hypothesis 20 (H20): IT infrastructure positively and significantly influences organizational culture, which in turn supports KM. Hypothesis 21 (H21): performance positively and significantly influences organizational culture, which in turn supports KM. Hypothesis 22 (H22): culture positively and significantly influences on implementation strategy of KM.

This research employs a mixed-methods design that integrates both quantitative and qualitative approaches. The first stage of data collection involves administering a 5-point Likert scale questionnaire via an online survey. The questionnaire was distributed to civil servant technical staff of Pontianak City Government totaling 1,502 people. Based on the concept of Hair et. al. the minimum sample required is ten times the number of largest formative indicators for a construct (15 indicators) which gives a value of 150 (Hair et al. 2019). The number of valid respondents is 153. This study also conducted interviews with the person in charge of KM e-government in the Pontianak City Government, namely the Communication and Informatics Office Pontianak City (Diskominfo Pontianak).

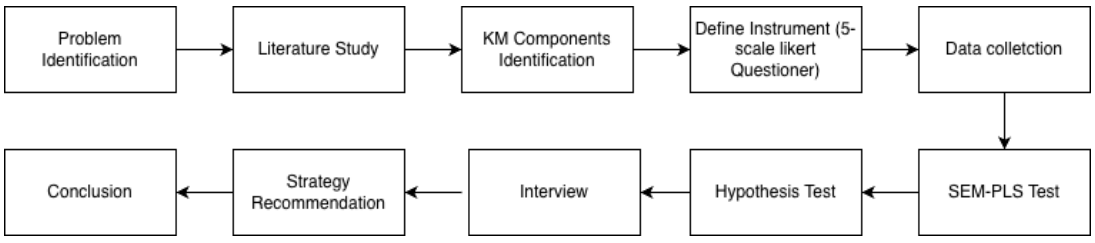

Figure 2. Research Methodology

Diskominfo Pontianak was chosen as the main informant in this study due to its strategic role in formulating policies and coordinating and managing information and technology systems within the local government. As the unit responsible for managing aspects of government digitalization, including the implementation of e-government and KM development, Diskominfo Pontianak is considered the most relevant source of in-depth information on KM strategies, challenges and implementation within the scope of the local government.

The results of the interview will be used as basis for compiling recommendations for KM implementation strategies for local government. The research flow can be seen in Figure 2. Ethical considerations included informed consent from all participants, confidentiality assurance, and voluntary participation. The study received approval from the Pontianak City Government Research Ethics Committee.

RESULT AND DISCUSSION

Respondent Characteristics

After obtaining the results of the questionnaire, the valid data was the analyzed. The number of respondents analyzed was 153 people. Of that number, the position that filled out the questionnaire the most was staff, with 69 people or 45.1%, followed by functional staff with 48 people or 31.4%. The position with the fewest respondents was the high leadership, with only 1 respondent, or 0.7%.

Based on work experience, the group with the most respondents was those with over 10 years of experience, totaling 88 respondents, or 57.5%, while the group with the fewest respondents was those with less than 1 year of experience, totaling 14 respondents, or 9.2%. The respondent data is presented in Table 2.

Table 2. Respondent Characteristics

Attribute	Value	Count	Percentage
Position	High Leadership	1	0.7%
	Administrator	11	7.2%
	Supervisor	24	15.7%
	Functional Staff	48	31.4%
	General Staff	69	45.1%
Working Experience	< 1	14	9.2%
	1 - 5 years	27	17.6%
	6 - 10 years	24	15.7%
	> 10	88	57.5%

Respondents in this study were dominated by general staff (45.1%) who are responsible for daily administrative activities, and functional staff (31.4%) who

have specialized expertise as the primary source and user of technical knowledge. Furthermore, there are supervisor positions (15.7%) who are tacked with overseeing daily operational technical activities. Administrator positions, which play a role in bridging strategic policies to the operational level, accounted for 7.2%, while representatives from high leadership, namely officials responsible for determining strategic policy directions, only amounted to 0.7%. In terms of tenure, most respondents (57.5%) have more than 10 years of work experience, suggesting that they possess substantial familiarity with the organization's culture and work practices.

Measurement Model Evaluation

The analysis for this research used Smart PLS 4 to test validity and reliability. There are fifteen latent indicators described by 41 questionnaire questions. The fifteen latent indicators are culture, IT infrastructure, innovation, leadership, measurement, performance, physical environment, regulation, reward, role, sharing, strategy, technology adoption, training, and trust. The findings from Tabel 3 show that Cronbach's alpha values for all constructs are above 0.7 (Amelia, Endrastaty, and Sensuse 2022), ranging from 0.776 to 0.962, indicating strong internal consistency. Similarly, Composite Reliability scores (rho_and rho_c) ranged between 0.784 and 0.976, exceeding the recommended threshold of 0.7 and strengthening evidence of strong construct reliability. Furthermore, the Average Variance Extracted (AVE) value, which was used to test convergent validity, was found to range between 0.748 and 0.930, far exceeding the minimum acceptable threshold of 0.5 (Amelia, Endrastaty, and Sensuse 2022), thus confirming excellent convergent validity.

Table 3. Measurement Model Assessment

Construct	Cronbach's Alpha	rho_a	rho_c	AVE
Culture	0.852	0.857	0.911	0.773
Infrastructure IT	0.883	0.884	0.928	0.812
Innovation	0.922	0.923	0.951	0.866
Leadership	0.854	0.857	0.911	0.774
Measurement	0.871	0.878	0.939	0.885
Performance	0.926	0.926	0.953	0.871
Physical Environment	0.776	0.784	0.899	0.817
Regulation	0.832	0.832	0.899	0.748
Reward	0.905	0.906	0.955	0.913
Role	0.926	0.933	0.953	0.871
Sharing	0.907	0.914	0.942	0.843
Strategy	0.862	0.864	0.935	0.878
Technology Adoption	0.962	0.962	0.976	0.93
Training	0.889	0.89	0.947	0.9
Trust	0.895	0.898	0.95	0.905

The ability of the structural model to account for endogenous variables is assessed through the coefficient of determination (R2). This coefficient indicates how much of the variation in the endogenous latent variables can be explained by the influence of exogenous latent variables included in the model (Hair et al. 2019).

The results of the analysis in Table 4 show an R-squared value of 0.846 for the strategy variable. This indicates that exogenous variables in the model can explain 84.6% of the variance of strategy construct. Meanwhile, the remaining 15.4% is influenced by factors outside the category, indicating that exogenous variables have a strong predictive influence on the implementation of KM strategies.

This variable also shows an R-squared value of 0.769. This means that 76.9% of the variability of leadership construct is explained by exogenous variables in the model. The magnitude of this R-squared value indicates good predictive power for leadership in the context of KM evaluation was also performed on the adjusted R-squared, to provide a more accurate representation of the number of predictors used. The adjusted R-squared value for the strategy variable is 0.830; leadership is 0.764; and culture is 0.726. These values are relatively not much different compared to the original R-squared value, indicating good model stability and high relevance of the selected exogenous variables.

Table 4. R Square

Construct	R-Square	R-Square Adjusted
Culture	0.735	0.726
Leadership	0.769	0.764
Strategy	0.846	0.83

The results of the final construct model in testing the factors that influence KM strategy in Pontianak City Government can be seen in Figure 3.

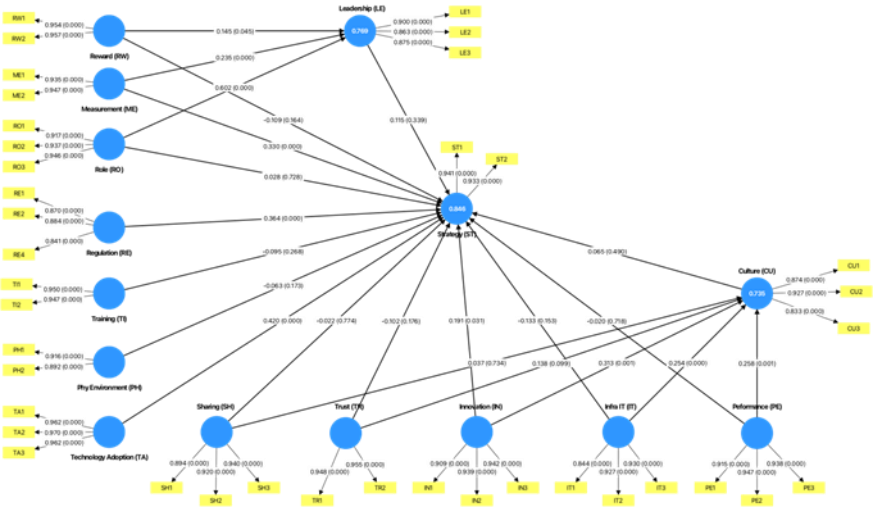

Figure 3. Construct Model

Structural Model Evaluation

To assess the structural model, the focus is placed on examining how strong and meaningful the connections are among the latent constructs. This assessment relies on the path coefficients along with the corresponding t-statistics and p-values for each relationship. In this study, most of the links between variables proved to be statistically significant, as indicated by t-statistic scores exceeding 1.96 and p-values falling below the 0.05 threshold.

Strategy is significantly positively influenced by four variables, as shown by the results of the structural model analysis. Technology adoption has a significant positive influence on strategy with a coefficient value of 0.420 (p = 0.000), which indicates that the higher level of technology implementation, the stronger implementation of KM strategies in the organization. Regulation factor also shows a significant positive influence on strategy with a coefficient of 0.364 (p = 0.000), which means that the clarity of internal policies and rules supports the formation of a more focused and structured KM strategy. Measurement contributes significantly to strategy with a coefficient of 0.330 (p = 0.000), indicating that the existence of a good performance measurement system can strengthen the foundation of planning and implementing KM strategies. Innovation also has a significant positive effect on strategy with a coefficient of 0.191 (p = 0.031), which indicates that innovation in the organization encourage the formation of dynamic and adaptive KM strategies to change. In the context of strengthening the KM implementation strategy in Pontianak City Government, these four paths are proven to have statistical significance and relevance.

Discussion and Implementation

This research examines the influence of several factors on the success of implementation KM strategies in Pontianak City Government environment. Innovation, measurement, regulation, and technology adoption are proven to have a positive and significant effect based on analysis using the PLS-SEM method.

Leadership and culture do not play a significant role as mediators in the relationship between variables on the implementation of KM strategies in Pontianak City Government. This is reflected in the p-value on all mediation paths involving leadership and culture, which is above the significance threshold of 0.05 which means they do not mediate the relationship between exogenous variables (such as technology, human resources, information systems) and KM implementation outcomes (see Tabel 5).

Here are why leadership and culture do not play a significant role: 1) In the public sector, especially in government, a hierarchical bureaucratic structure can hinder cultural flexibility and leadership in playing a mediating role. A study showed that bureaucratic structure, rigid organizational culture, and rigid processes

cause "organizational inertia" that hinder the adoption of KM practice (Ashok et al. 2021). This explains that even though there are leadership and organizational culture, their influence on KM implementation can be insignificant due to the dominance of structure and regulation. 2) In the context of governance, strategic leadership tens to play a direct role in change and innovation. Ferede et al.'s (2024) research shows that although leadership influences organizational change and KM, the influence is often direct, while the mediating role of culture and leadership structure is insignificant or only partial. 3) Tabatabaei's research (Tabatabaei 2024) emphasized that if the organizational culture still emphasizes "silo mentality" or excessive stability orientation, then the culture hinders KM. In cases like this, culture does not mediate positively but becomes an obstacle.

Table 5. Leadership and Culture Indicators

Variable	Indicator	Description of Insignificance	Supporting Reference
Leadership	Leadership does not act as a bridge between KM inputs and outputs	Leadership does not strengthen the relationship between technology/ infrastructure and KM implementation	(Ferede, Endawoke, and Tessema 2024)
Leadership	Leadership role is administrative in nature	Leaders focus more on formal supervision than initiating active knowledge sharing	(Mittelstädt 2025)
Leadership	No active KM strategy communicated by leaders	There is no explicit policy or directive from leaders promoting KM	(Ashok et al. 2021)
Culture	Silo culture between departments	Knowledge does not flow between departments; each works in isolation	(Tabatabaei 2024)
Culture	Culture does not support collaboration	No norms or work practices that encourage cooperation and exchange of ideas	(Tabatabaei 2024)
Culture	Organizational culture is stable and resistant to innovation	Work culture is oriented only towards procedural compliance, not learning or experimentation	(Ferede, Endawoke, and Tessema 2024)
Culture	No cultural reinforcement for knowledge sharing	No reward or recognition system for staff who actively share knowledge	(Amelia, Endrastaty, and Sensuse 2022)

Innovation has a significant positive effect in strategy with a coefficient value of 0.191 ($p = 0.031$). Significant innovation is consistent with previous research emphasizing that KM supports agencies in innovating and improving organizational performance (Alolayyan et al. 2020; Fanaja, Saputri, and Pradana 2023; Marinho and Couto 2022; Tabatabaei 2024; Tjakraatmadja et al. 2022b).

This research shows that the ability of agencies in Pontianak City Government to innovate, both in policies, public services, and work processes, really contributes to the success of the formulation and implementation of KM strategies. How knowledge repository to develop knowledge into an innovation that will support e-government.

The results also indicate that measurement has a significant positive effect on KM strategy (β = 0.330; p = 0.000). This aligns with previous research suggesting that incorporating KM indicators into employee performance indicators within an organization will improve KM implementation within that organization (Sensuse, Hidayat, and Setyaningrum 2023).

This suggest that incorporating KM into the performance measurement system is one of the key elements in supporting an effective KM strategy. Measurement allows agencies to evaluate achievements, identify knowledge gaps, and monitor the process of sharing and utilizing knowledge on an ongoing basis. Pontianak City Government can include KM as one of the indicators in the performance assessment for the secretariat in each Pontianak City Regional Apparatus.

Furthermore, the results showed that regulations had a significant positive effect on strategy (β = 0.364; p = 0.000). With written rules related to KM, employees of an organization will be more active in implementing KM in their daily work (Dybek and Głodziński 2023; Sensuse, Hidayat, and Setyaningrum 2023).

The ratification of regulation related to KM is an important foundation in directing the implementation of KM strategies in Pontianak City Government. The regulation in question can be in the form of local government guidelines, mayor regulations that regulate the process of creating, storing, distributing, and preserving knowledge that refers to BRIN regulation in KM (Badan Riset dan Inovasi Nasional 2024). KM regulation will support e-government of Pontianak City Government and strengthen the position of KM as part of agency governance. The regulations are also strengthened by socialization to all civil servant in Pontianak City Government.

The research results from the technology adoption indicator are a coefficient of 0.420 (p = 0.000). This value indicates that technology adoption in Pontianak City Government has a significant positive effect on strategy. This is in line with previous studies stating that the adoption of technology in the form of Knowledge Management System (KMS) can increase employee engagement in the implementation of KM (Sensuse, Hidayat, and Setyaningrum 2023; Tabatabaei 2024). The presence of a KMS can also accelerate knowledge sharing collaboration between departments in large organizations such as local governments.

Technology facilitates the documentation process, data integration between regional agencies, and the dissemination of knowledge through a centralized

information system. Pontianak City Government which has adopted various public and internal service applications, has a significant opportunity to develop a digital, collaborative, and easily accessible KMS for all stakeholders. The KMS can utilize the system prepared by the central government, SIMPAN BRIN, or develop an internal KMS for the Pontianak City Government.

Regarding the leadership component, previous theories suggest that leadership significantly influences KM implementation within an organization. Leaders can inspire and model knowledge sharing (Amelia, Endrastaty, and Sensuse 2022). However, the results obtained in Pontianak City Government, indirect relationships such as the Role ® Leadership ® Strategy ($p = 0.347$), Measurement ® Leadership ® Strategy ($p = 0.352$), and Reward ® Leadership ® Strategy ($p = 0.441$) shows that although the three initial variables have the potential to support KM, their effects through Leadership are not strong enough to significantly influence the strategy. This shows that the role of leadership has not been an effective link in transforming role initiatives, measurements, or rewards into KM strategies in Pontianak City Government.

Based on the research results, an interview was conducted with an employee who has worked for more than 10 years in the Pontianak City Government. The interview revealed that with the current top leadership, many of whom have entered their tenth year, most employees prefer to work independently and simply follow existing regulations, especially employees with more than 10 years of service. This is consistent with most respondents having more than 10 years of service (57.5%). These respondents have the potential to influence the low effectiveness of leadership in implementing KM strategies in the Pontianak City Government. Employees with long service tend to be accustomed to established bureaucratic work patterns and stable organizational routines. This situation makes it difficult for them to accept new leadership styles that emphasize cultural change and active collaboration in knowledge sharing. This aligns with the findings of Mitrović et al. who stated that bureaucratic organizational structures and long-established work cultures can pose significant barriers to the implementation of KM practices (Mitrović, Obradovic, and Suknovic 2018). Leadership in the Pontianak City Government tends more towards transactional leadership, which focuses more on maintaining routine, regulations, and compliance, compared to transformational leadership, which inspires change, collaboration, and knowledge sharing.

In addition, employees with more than 10 years of experience tend to have a more critical perception of strategic change and leadership innovation, especially if the change is considered risky in terms of disrupting existing work stability. This condition means that the leadership role, despite efforts to mediate the implementation of KM, is not strong enough to effectively change the mindset and behavior of senior employees in supporting the change. Thus, extensive work

experience within the bureaucratic structure can explain why leadership has not effectively functioned as a mediator in promoting the implementation of KM strategies within the Pontianak City Government.

Lastly is the culture component. Culture in terms of sharing to knowledge creation is very important for an organization (Amelia, Endrastaty, and Sensuse 2022). The findings of this study, culture as a mediator also does not show any significance when viewed from the mediation value of Sharing ® Culture ® Strategy. (p = 0.860), Trust ® Culture ® Strategy (p = 0.600), Infrastructure IT ® Culture ® Strategy (p = 0.526), Innovation ® Culture ® Strategy (p = 0.523), and Performance ® Culture ® Strategy (p = 0.515). This indicates that although these variables theoretically support the formation of a knowledge sharing culture, the institutional culture in the Pontianak City Government is not strong enough to continue its impact towards the formation of a KM strategy significantly.

To validate these findings, interviews were conducted with employees responsible for KM. Interview results indicate that, in general, a culture of knowledge sharing within the Pontianak City Government is still lacking. Knowledge gained is often kept to individuals rather than shared with other employees. Employee willingness to independently seek out new information and knowledge in Pontianak City is also very low.

The demographic characteristics of the respondents in this research were dominated by employees with non-structural positions, namely functional (31.4%) and staff (45.1%), and had more than 10 years of work experience (57.5%). Employees in this group generally focused more on technical and administrative tasks and had less access to strategic decision-making processes, which were the domain of senior management. Additionally, those who have worked for more than ten years in the bureaucratic system have been shaped by a static and normative organizational culture. As a result, despite efforts to encourage knowledge-sharing and collaboration, the existing work culture does not develop dynamically or respond to the strategic agendas brought by the KM system. Previous research has shown that bureaucratic organizational structures and outdated, stagnant work patterns significantly hinder knowledge sharing practices and, consequently, prevent the creation of a knowledge-sharing culture (Mitrović, Obradovic, and Suknovic 2018). A silo mentality within an organization reduces the culture's ability to support the implementation of KM strategies (Tabatabaei 2024).

This research provides a theoretical contribution to the literature on CSFs for KM implementation in the public sector, particularly in local governments. Specifically, this research strengthens previous theoretical findings that suggest that innovation, measurement, regulation, and technology adoption are key factors significantly influencing the success of KM implementation in local governments (Dybek and Głodziński 2023; Sensuse, Hidayat, and Setyaningrum 2023;

Tabatabaei 2024). Furthermore, the research findings also add to the related literature, suggesting that leadership and organizational culture do not always act as effective mediators in KM implementation due to the dominance of a strong bureaucratic structure in the local government context. Therefore, this study emphasizes the importance of considering bureaucratic structure in theoretical models of KM implementation in the public sector.

Practically, this research provides specific recommendations to local governments, particularly the Pontianak City Government, in developing strategic policies related to KM. First, this research emphasizes the importance of establishing formal regulations related to KM implementation so that KM strategies have a clear policy basis. Second, it emphasizes the importance of incorporating KM indicators into employee performance measurements so that the KM implementation process can be effectively monitored and measured. Third, this study recommends that local governments actively adopt technology in the form of Knowledge Management Systems (KMS) to accelerate and streamline documentation processes, data integration, and collaboration between work units. Finally, local governments are advised to continue developing existing knowledge-based innovations to ensure sustainable public service improvement.

CONCLUSION

Empirical results indicate that four out of fifteen hypotheses demonstrate significant positive effects on knowledge management (KM) strategies in Pontianak City Government—namely, innovation, measurement, regulation, and technology adoption—while the remaining factors (culture, IT infrastructure, leadership, performance, physical environment, reward, role, sharing, training, and trust) lack significant impact but still contribute meaningfully, as evidenced by Cronbach's Alpha values exceeding 0.7 (ranging from 0.776 to 0.962; see Table 3). For future research, scholars should comprehensively examine external influences such as national policies, local political dynamics, regulatory changes, and socioeconomic conditions on KM effectiveness in local governments, while developing an integrative model linking KM practices to digital innovation in technology-based public services to enhance efficiency, transparency, and service quality through effective implementation mechanisms.

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