

Improving Inventory Management in Indonesian Government: IT, HR Capacity, and the Role of Financial Reporting

Antonius¹, Ahmad Juliana¹, Anisa Putri¹, Nizhamuddin AB¹, Suddin Lada²

¹Universitas Borneo Tarakan

²Universiti Malaysia Sabah, Malaysia

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ABSTRACT: This study investigates how information technology and human resource capacity influence inventory management, moderated by financial statement quality. It contributes to the limited literature on the intersection of IT, HR, and financial transparency in enhancing public sector inventory performance in Indonesia. Using a quantitative approach, data were collected from 153 organizational units' head within a local government in Malinau, Indonesia, analyzed through Partial Least Squares (PLS). Findings reveal that both information technology and HR capacity significantly improve inventory management. However, the moderating effect of financial statement quality weakens this relationship, suggesting a disconnect between reporting practices and operational integration. Theoretically, the study broadens understanding of how financial reporting quality interacts with organizational capabilities in public governance. These findings call for managers to not only invest in systems and personnel but also to align financial transparency mechanisms to ensure coherent and effective inventory control.

Keywords: Inventory Management; Information Technology; Human Resource Capacity; Financial Statement Quality; Public Sector Governance.

*Corresponding Author: ahmadjuliana@borneo.ac.id

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INTRODUCTION

Effective inventory management remains a cornerstone of asset stewardship and public sector financial accountability. Within governmental institutions, it contributes not only to budget efficiency but also to fostering transparency and public trust (Jansen & McLeod, 2020; Prowle & Harradine, 2014). Yet, despite its critical role, many public sector organizations—particularly in emerging economies—struggle with inventory coordination, record accuracy, and real-time data integration (Schoute et al., 2018; Wanjiru & Njeru, 2021). The OECD (2021) emphasizes that while digital technologies can improve inventory data quality, their success is contingent upon leadership commitment, digital maturity, and adequate human resource capacity.

Recent studies support the premise that information technology (IT), especially cloud-based systems and integrated asset management platforms, can significantly reduce recording errors and improve transparency in financial reporting (Nazar et al., 2022; Al-Mousawi et al., 2021; Krah & Mertens, 2020). When aligned with accrual-based accounting standards, such systems also facilitate auditability and internal controls (Christiaens et al., 2015). However, within the Indonesian public sector, the adoption of such digital solutions remains uneven. The Supreme Audit Agency (BPK) continues to report discrepancies between inventory records and financial statements, contributing to recurring qualified audit opinions (WDP) in over 60% of local governments annually (BPK RI, 2023). Despite the existence of Government Regulation No. 71 of 2010 concerning Government Accounting Standards (SAP), compliance is inconsistent, reflecting systemic issues in institutional capacity and implementation fidelity (Hadiyanto & Siregar, 2020).

Scholars have long argued that IT systems alone cannot resolve these challenges without adequate human capital. Mardani et al. (2020) contend that digital monitoring tools only yield results when paired with competent personnel. Nasir et al. (2023) reinforce this by showing that real-time inventory accuracy correlates strongly with targeted staff training and procedural compliance. Siregar and Wahyuni (2022) further highlight the infrastructural and skill-based deficiencies in local government settings. Moreover, fragmented standard operating procedures (SOPs) and weak internal control environments (Priyono et al., 2021; Abane et al., 2022) continue to impair system effectiveness and data reliability.

The promise of IT in public governance is well-documented. Automated financial systems can accelerate reporting cycles, improve traceability, and enhance decision-making (Al-Emran et al., 2022; Ohemeng & Owusu, 2015). Yet, these benefits are only realized when systems are matched by user competence and institutional alignment (Alavi & Leidner, 2020; Chen et al., 2017). Financial management tools must integrate with regulatory frameworks, user workflows, and audit procedures to fulfill their transparency-enhancing potential. Within this context, financial statement quality—measured by dimensions such as reliability, timeliness, and verifiability—functions not only as an outcome but as a moderating force in how IT and HR capacities translate into operational effectiveness.

Empirical studies lend weight to this dual-pathway proposition. Mardani et al. (2020) report a 15% reduction in inventory discrepancies following cloud-based interventions, while Nasir et al. (2023) observe a twofold increase in SOP compliance after technical training. These findings affirm that technological and human factors must work in tandem; isolated investments in either domain are unlikely to yield systemic improvements in asset governance or financial reporting.

In Indonesia, persistent issues such as non-uniform inventory records, delayed mutation updates, and fragmented data systems continue to undermine accountability. These dysfunctions are not merely administrative—they impair decision-making and erode public trust. As outlined in SAP, the reliability and relevance of financial information are not optional—they are foundational for sound public management.

This study aims to empirically examine the interaction between information technology, human resource capacity, and inventory management, with a particular focus on how financial statement quality moderates these relationships in the context of Indonesian local governments. While prior studies have typically examined these variables in isolation, this paper offers an integrative framework, grounded in Information Usefulness Theory and empirical governance literature. By modeling these relationships simultaneously, the study contributes a novel perspective to the discourse on digital governance and capacity-building in emerging public sectors. For practitioners, the findings underscore the imperative of coupling technological

investment with human resource development and financial accountability frameworks to achieve transparent, responsive inventory systems.

THEORETICAL REVIEW AND HYPOTHESIS DEVELOPMENT

The Role of Information Technology on Inventory Management

The government can manage its stocks better with the help of information technology. It is extremely possible that the government can multiply the advantages of employing the correct IT, namely, more accurate data, cost-efficiency, and high levels of satisfaction among the population. It must be noted that the implementation of IT in the government sector has several challenges including the budgetary constraint, lack of human resource as well as data security. The study of Budi (2016) demonstrates that the efficiency of inventory management will be enhanced considerably due to the application of a web-based inventory information system. In the meantime, according to the findings of Yuniarti (2020), SIAP exerts its strong and positive effects on inventory management, for this hypothesis proposal.

H1: The role of information technology affects inventory management.

Human Resource Capacity and Inventory Management

The planning, implementation, and control of subordinate units are highly dependent on the capacity of human resources. Qualified human resources are described as someone who has the knowledge and skills of science and technology, is responsible for the survival of humans and other living things, and understands the cooperation and cohesiveness of legal functions between humans and social systems. Djaafar in Yanto 2013 Meanwhile, the stewardship theory says that the community, having taken the initiative, will give trust to the government to manage the organization for success. In fact, human resources with maximization of their abilities will carry out their duties and functions by meeting the objectives of some aspects of the organization.

Human resources play an important role in ensuring the quality of local government financial statements. Employees who have an accounting education background, always participate in training, are experienced in finance and those who are responsible for their work are needed. Arfianti (2011), stated in his research that the quality of human resources affects the accuracy and reliability of LPD, but does not affect other aspects. Likewise, the results of research by Surastiani and Handayani and Sudiarianti et al (2015) say that the quality of human resources greatly affects local government financial reports. Research by Surastiani and Handayani (2015) and Riandani (2017) shows that the HR competency dimension has a positive and significant effect on the quality of regional financial reports, for this hypothesis.

H2: HR capacity affects inventory management

Financial Statement Quality and Inventory Management

The conceptual definition of quality of financial statements in this research can be understood as the level of financial reports show reliability, relevancy and timeliness, (SAP) in line with Government Accounting Standards mentioned in Government Regulation No. 71 of 2010. Reliability covers faithfulness of representation and verifiability whereas timeliness concerns the promptness of the time of encountering information in order to make decisions.

An association between inventory management and quality of financial statements is intricate. In spite of the fact that the quality of financial statements has an effect on the enhancement of efficiency of the management of its inventory, external forces like market dynamics and internal forces like the HR competencies have a great role in the successful implementation of the inventories. A study conducted by Wang et al. (2020) asserted that correct financial reports assist companies in forecasting the demand on stocks and optimizing the cost of stock. This is also an advantage to the manufacturing industry since it minimises the overstock or understock problem that is always a hindering force in the supply chain. According to Smith and Brown (2021), total input in financial statements in high volatility setting would dampen their effectiveness. Fast-changing market dynamics commonly cannot be reflected by use of static financial information, which may result to mistake in inventory planning.

Inventory management has internationally relation to the quality of financial statements. According to Hidayat et al. (2023), quality of financial statements using safety stock and reorder point methods of inventory management systems increase particularly in the case of recording current accounting financial data of inventory. This is enhanced by application of information technology which also helps to integrate information among sections enabling a company to keep track of stock and demand of goods much more effectively, for the hypothesis formulation.
H3: The quality of financial statements affects inventory management

The Moderating Role of Financial Reporting Quality in the IT–Inventory Management Relationship

Information technology assists organizations in their operations and they also give proper financial reports. A good use of information technology assists in sustenance of an effective internal control system. Internal control was developed to make sure that organizations keep using technology to present the true information related to the activities of an organization (Indrayani & Widiastuti, 2020). The government is authorized to control system software inclusively the right of access regulation option, the use right and withholding options of software modification in the government regulation no. 60 of 2008. This regulation is also necessary so that the use of information technology was as good as it could be. Thus, appropriate information technology use and sound internal control is used to enhance quality of financial statements, as hypothesized.

H4: The quality of financial statements can moderate the effect of the role of information technology on inventory management.

The Moderating Role of Financial Statement Quality in the HR Capacity–Inventory Management Relationship

Grounded in Information Usefulness Theory, financial reporting should serve decision-making by offering timely, relevant, and credible data. The theory emphasizes that the utility of financial information depends not only on adherence to standards but also on the preparer's intent and capability. In the context of local governments, information technology is often viewed as a vehicle for improving the transparency and accuracy of financial statements. While studies by Nurillah (2014) and Anwar and Mukadarul (2016) support this premise, others, such as Surastiani and Handayani (2015), question the consistency of this effect, suggesting contextual factors may moderate the outcomes. One such factor is financial statement quality, which could condition how effectively IT or HR capacity improves inventory governance. These theoretical dynamics are visualized in Figure 1, which presents the proposed conceptual model and relationships.

H5: The quality of financial statements can moderate the effect of HR capacity on inventory management.

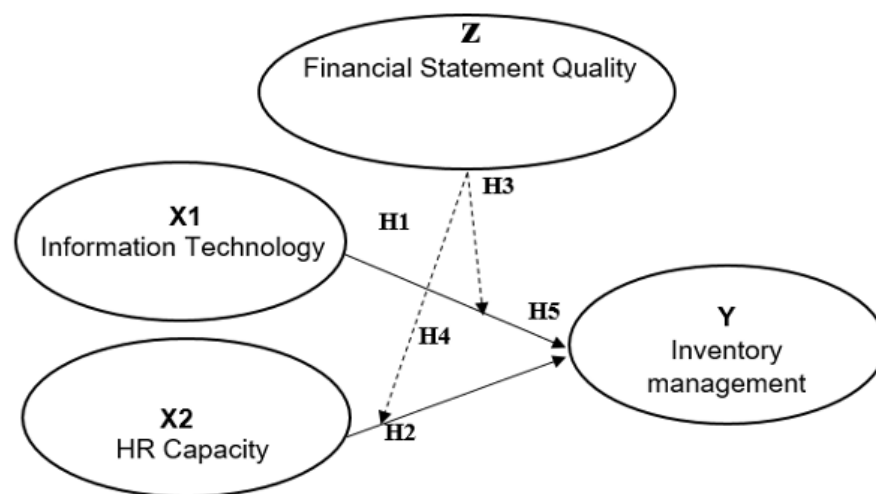


Figure 1. Framework of Thought

RESEARCH METHOD

The current research made use of the Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze data with SmartPLS 4. It was performed in a number of consecutive steps to achieve both model validity and reliability. First, estimation of the outer model has been performed to estimate reliability of indicators and construct validity, convergent validity and discriminant validity. Discussion of the inner model was then accompanied by an assessment of the relations among constructs. Thereafter, diagnostics of multicollinearity was undertaken by inspecting Variance Inflation Factor (VIF) which guarantees that there was no issue of collinearity. Lastly a manipulation of bootstrapping 5,000 subsamples was used in determining the significance of path coefficients and the stability of model estimates. This step-by-step process assures transparency and heat in interpretation of the simulation results bearing in mind that SmartPLS is a tool that needs good design and statistical confirmation-not a quick fix to make application.

This study employed a census sampling technique, involving all 153 heads of units responsible for goods inventory within the local government of Malinau, Indonesia. Given the manageable size and defined scope of this target group, full enumeration was both practical and methodologically sound. This approach ensures thorough data representation, eliminates sampling bias, and aligns with the purposive nature of the research—focusing exclusively on individuals directly engaged in inventory management processes. The demographic characteristics of the respondents are summarized in Table 1.

Table 1. Respondent Data

Category	N	%
<i>Gender</i>		
Male	72	47.1
Female	81	52.9
<i>Age</i>		
<25 Years	0	0
25–34 Years	43	28.1
35–44 Years	66	43.1
>44 Years	43	28.1
<i>Education</i>		
High School	26	17
Voc. Graduate (D3)	55	35.9
Bachelor (S1)	69	45.1
Master (S2)	3	2
Doctor (S3)	0	0
Others	0	0
<i>Have participated in technical guidance</i>		
Never	84	54.9
Very minima	58	37.9
Often	11	7.2

Source: Primary data (2024)

The information in table 1 reveals that of the total respondents, the majority are women, with a total of 28 people or 52.9%. This figure is greater than the male respondents who totaled 25 people or 47.1%. This proportion indicates that women were more involved in the research than men. This larger number of female respondents may reflect the significant role of women in the context of this research. Then, the distribution of respondents based on age shows that the majority of respondents are in the age range of 35–44 years, which amounts to 23 people or 43.4% and the age range of 25–34 years is recorded as 15 people, which is 28.3%. Furthermore, the age range above 44 years also has the same representation as the 25–34 age group, which is 15 people or 28.3%. This indicates that the productive age group plays an important role in the implementation of administrative tasks. Meanwhile, the presence of young and senior age groups creates a balance between the spirit of innovation and longer work experience, which can support efficiency in the management of goods.

As shown in Table 1, the educational profile of respondents reveals that the majority (45.2%) hold a DIV/S1 (undergraduate) qualification, followed by 35.8% with a DIII (diploma) degree, and 16.9% with a high school background. Only one respondent (1.9%) reported holding a master's degree, reflecting limited postgraduate representation among inventory management personnel. Notably, over half of the respondents (54.8%) had never participated in technical guidance or formal training programs, while 37.7% reported only minimal exposure. A mere 7.5% indicated regular participation in such programs. This distribution underscores a critical capacity gap: despite their central role in inventory oversight, most unit heads lack structured training. Hence, capacity-building through technical guidance must be prioritized to ensure procedural compliance and operational efficiency in public inventory management.

Data collection employed a structured questionnaire, designed to ensure validity and alignment with the study's constructs. To test the hypothesized relationships, the study utilized Partial Least Squares Structural Equation Modeling (PLS-SEM). This approach, an alternative to traditional OLS regression and covariance-based SEM, is particularly suited for exploratory models involving latent constructs. PLS-SEM proceeds in two stages: first, identifying latent variables that explain variance among predictors and outcomes; second, decomposing the independent variables to estimate the strength and direction of structural relationships. This method enables robust testing of both measurement and structural models, making it highly appropriate for theory development in complex governance contexts.

RESULTS

Measurement Model Analysis (Outer Model)

Evaluation of the outer model aims to assess the relationship between latent variables and indicators or manifest variables. Validity and reliability testing is carried out to evaluate the outer model. There are two types of validity tests in PLS, namely convergent validity and discriminative validity. The convergent validity test measures the extent of the correlation between the construct and the latent variable. The outer loading value is used to assess convergent validity. If the indicator's outer loading value is more than 0.7, then the indicator is considered valid, whereas if it is less than 0.7, the indicator is considered invalid. Convergent values must meet the convergent validity requirements established by Hair et al. (2021). The test results carried out show the information as in Appendix 1. After carrying out calculations using SmartPLS 4, table 1 above shows that all indicators for variables X1, X2, Z, and Y have an outer loading value of more than 0.7. This indicates that each indicator has good validity in explaining the latent variable.

Structural Model Testing (Inner Model)

The coefficient of determination (R Square) is used to evaluate the structural model in this research. The R² value is divided into three categories: 0.67 for the strong category, 0.33 for moderate, and 0.19 for weak, as explained by Chin in Feri (2021). The finding is in Table 2.

Table 2. Test Coefficient of Determination Results

Path to	R-square	R-square adjusted
Inventory Management	0.931	0.923

Source: Output of Smartpls 4, (2024)

Based on the results in Table 3, the R-square value = 0.931. This value shows that 93.1% of the variation in Inventory Management can be explained by the independent variables in the model, namely HR Capacity, Information Technology, and Financial Report Quality (as a moderator). This shows that the model has very good abilities in explaining the relationship between independent and dependent variables. However, another 7.9% of the variation is influenced by factors outside the model. Adjusted R-square value = 0.923 This value is an adjusted version of R-square, which takes into account the number of independent variables in the model. This adjustment is made to avoid overestimation which occurs when there are too many variables in the model. The value of 0.923 indicates that 92.3% of the variation in Inventory Management can still be explained after taking into account the complexity of the model. The

small difference between R-square and adjusted R-square shows that this research model is quite accurate without any significant bias due to the number of independent variables. This indicates that the data used in the analysis is quite representative. This study also provides the information of F^2 , as in Table 3.

Tabel 3. The F^2 Revelation

Path to	f-square
Quality of Financial Reports (Z) -> Inventory Management (Y)	3.829
HR Quality (X1) -> Inventory Management (Y)	0.662
Information Technology (X2) -> Inventory Management (Y)	0.945
Quality of Financial Reports (Z) x Quality of Human Resources (X1) -> Inventory Management (Y)	0.344
Quality of Financial Reports (Z) x Information Technology (X2) -> Inventory Management (Y)	0.556

Source: Adapted Smartpls 4 Data, (2024)

The results underscore that Financial Report Quality (Z) exerts the strongest influence on Inventory Management (Y), suggesting that transparent, reliable reporting is foundational to effective inventory control in the public sector. Both HR Quality (X1) and Information Technology (X2) demonstrate large individual effects, reinforcing their strategic importance in supporting operational efficiency. However, the impact of Information Technology slightly surpasses that of HR, emphasizing its pivotal role in modernizing inventory systems.

Notably, the interaction between Financial Report Quality and Information Technology yields a substantial moderating effect, though its directional influence may imply diminishing marginal returns when structural control overshadows system adaptability. Meanwhile, the interaction between Financial Report Quality and HR Quality approaches the threshold of a large effect, indicating that human capital can amplify the benefits of high-quality reporting—albeit to a lesser extent than IT. All Variance Inflation Factor (VIF) values fall within acceptable thresholds as in Table 4, confirming the absence of multicollinearity and ensuring the robustness of the model's explanatory components.

Table 4. The Variance Inflation Factors

Constructs	VIF
Quality of Financial Reports	1.264
HR Quality	1.624
Information Technology	1.569
Quality of Financial Reports	3.297
Quality of Financial Reports	3.307

Source: Adapted Smartpls 4 Output, 2024

The multicollinearity assessment confirms the structural soundness of the model. All Variance Inflation Factor (VIF) values fall well below the conservative threshold of 5, indicating that the independent and interaction terms are sufficiently distinct in their explanatory contributions to Inventory Management. Specifically, even the highest VIF values observed in the interaction terms—Financial Report Quality × HR Quality and Financial Report Quality × Information Technology—remain within acceptable limits, supporting the validity of the moderating constructs. These results affirm that collinearity does not compromise the interpretability or reliability of the estimated path coefficients within the model.

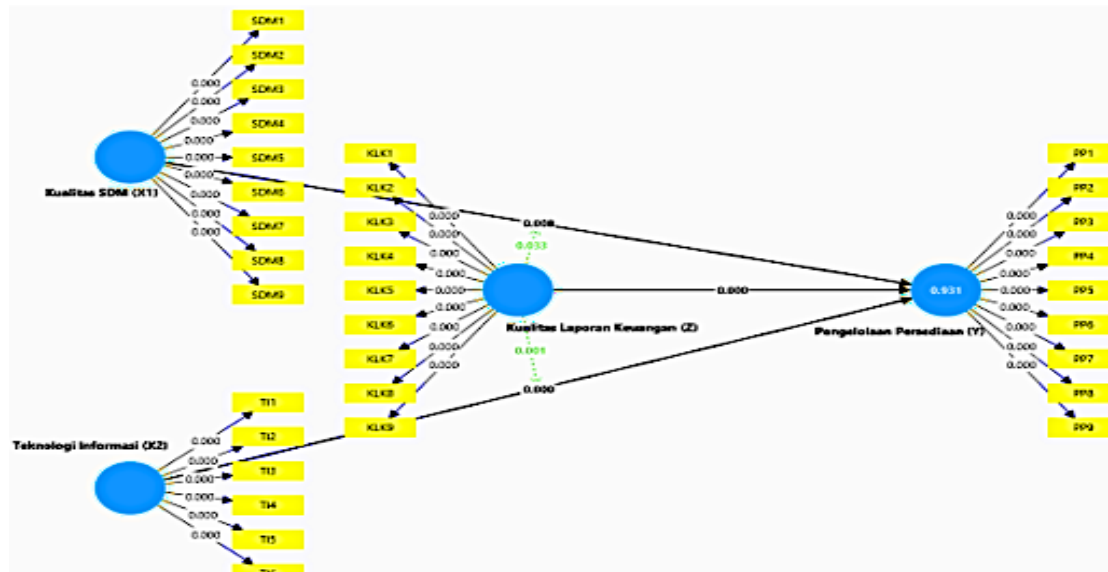


Figure 3. The Bootstrap Result
 Source: Adapted Smartpls 4 Output, (2024)

Table 5. Summary of Path Results

Paths	Effect size	t-value	p-values
Quality of Financial Reports -> Inventory Management	0.580	6.076	0.000
HR Quality -> Inventory Management	0.273	2.637	0.008
Information Technology -> Inventory Management	0.321	4.518	0.000
Quality of Financial Reports Mod. Quality of Human Resources -> Inventory Management	0.231	2.128	0.033
Quality of Financial Reports Mod. Information Technology (X2) -> Inventory Management	-0.294	3.206	0.001

Source: Adapted Smartpls 4 Output, (2024)

DISCUSSION

The findings of this study confirm the significant roles that information technology and human resource (HR) capacity play in enhancing inventory management in public sector contexts, lending support to H1 and H2. These results align with prior studies by Mardani et al. (2020) and Nasir et al. (2023), both of which emphasized that robust digital infrastructures and competent personnel are essential enablers of accurate asset reporting. When technology such as ERP systems is well-integrated, organizations can achieve real-time visibility over inventory, minimize errors, and increase decision-making speed—effects echoed in Wang et al. (2020), who found that IT-enabled inventory control could reduce operational costs by up to 15%. These efficiency gains are further amplified when paired with trained personnel who can leverage technological tools for strategic planning and execution. In this respect, Jones and Clark (2022) demonstrate that investments in HR development significantly improve inventory accuracy, especially when employees are trained to use inventory management software. Beyond technical skill, our findings underscore the importance of managerial acumen and inter-departmental collaboration, reinforcing the argument that human capital is not merely a support system but a strategic asset in public inventory systems.

Consistent with H3, this study also demonstrates that financial report quality has a strong direct effect on inventory management. High-quality reports—accurate, timely, and relevant—contribute to more reliable procurement planning, stock valuation, and budgeting practices. The work of Fitria and Setiawan (2020) supports this, noting that detailed and dependable financial

reporting can reduce inventory planning errors by up to 20%, primarily due to improved transparency in carrying costs and purchasing decisions. Furthermore, compliance with regulatory standards through sound reporting fosters public trust, enhances fiscal discipline, and facilitates strategic stock management across government units. As Hidayat et al. (2023) argue, such alignment between reporting and inventory data reinforces data integrity and reduces discrepancies in asset records.

However, an unexpected outcome emerges in H4, where the moderating effect of financial report quality on the relationship between IT and inventory management is found to be negatively significant. This result diverges from the dominant narrative in public sector literature, where IT and financial reporting are generally seen as mutually reinforcing (Al-Emran et al., 2022). While high-quality financial reporting promotes control and standardization, it may simultaneously reduce the adaptive capacity of IT systems, especially in dynamic or complex inventory environments. One plausible interpretation is that rigid reporting structures prioritize historical accuracy over predictive flexibility, thereby dulling the responsiveness that digital systems are otherwise designed to offer. Smith and Brown (2021) make a similar observation, suggesting that institutions with mature financial reporting systems often lean heavily on retrospective financial data, diminishing the strategic use of real-time, forward-looking IT analytics. This rigidity could inadvertently constrain the very efficiencies that IT was meant to unlock, particularly in contexts—like inventory management—where agility is crucial. Thus, the findings prompt a reconsideration of how digital workflows are integrated with financial oversight in the public sector, where excessive structural control may impair system responsiveness rather than improve it.

In contrast, the moderation of financial report quality in the relationship between HR capacity and inventory management (H5) yields a synergistic effect, validating earlier insights from Nurseto and Handayani (2022). When skilled personnel are empowered with reliable and accessible financial information, their capacity to make informed inventory decisions increases markedly. These findings demonstrate that financial reports not only serve a compliance function but also act as cognitive tools that enhance human reasoning and operational judgment. For instance, as Nurseto and Handayani observed, HR staff trained in financial interpretation can improve logistics efficiency and warehouse utilization by up to 25 percentage points. This integration of human skill and high-quality data creates a strategic complementarity, forming a feedback loop of better decisions and clearer accountability. Moreover, this synergy is particularly critical for resource-constrained regions, such as Malinau Regency, Indonesia, and carries wider implications for other developing areas with limited IT infrastructure or HR proficiency. In such contexts, the interplay of capable personnel and robust financial information can serve as a replicable model for strengthening institutional control over inventory assets.

The results of this study offer important insights into the complex interplay between technology, human capital, and structural accountability mechanisms in public sector inventory management. While both IT and HR capacity have intrinsic value, their effectiveness is mediated by the quality and flexibility of the reporting systems that frame their use. These findings suggest that reform efforts must avoid one-size-fits-all approaches. Instead, tailored strategies that recognize the contextual constraints of bureaucratic culture, reporting schedules, and system interoperability are more likely to succeed. Rather than viewing technology, HR, and reporting as isolated levers, institutions must pursue integrated solutions that enhance their alignment. The practical implication is clear: digital transformation efforts in the public sector must go hand-in-hand with financial governance reforms and targeted HR development if they are to yield sustainable improvements in inventory efficiency.

CONCLUSION AND FURTHER STUDY

This study concludes that information technology and human resource (HR) capacity significantly enhance inventory management performance in the public sector, particularly within the Malinau Regency Government, Indonesia. Technology facilitates precision, speed, and error reduction in inventory processes, while competent HR personnel ensure proper system utilization and problem-solving. Additionally, the quality of financial reporting emerged as a dominant factor directly improving inventory control; however, it also exhibited a negative moderating effect on the relationship between both IT and HR with inventory outcomes. This

suggests that while structured reporting improves transparency and accountability, it may inadvertently constrain the adaptive potential of digital systems and human discretion, especially within bureaucratic and rigid institutional settings.

Nonetheless, the study is limited by its focus on a single regional government entity, which may not fully capture the diversity of technological infrastructure, governance maturity, or organizational culture across other regions or sectors. The cross-sectional nature of the data also restricts the ability to observe causal or evolving dynamics over time. Future research should adopt comparative, longitudinal, or multi-sectoral designs, particularly exploring private enterprises or state-level institutions where inventory management environments may differ in complexity. Moreover, sector-specific investigations could reveal nuanced challenges related to digital-readiness or financial integration. From a practical standpoint, these findings imply that public managers must balance structural control with operational flexibility, ensuring that financial reporting frameworks support—not restrict—technological adaptability and human decision-making. Integrated reform strategies that align IT investment, HR training, and financial governance are essential for achieving sustainable improvements in inventory efficiency.

ETHICAL DISCLOSURE

This study has received ethical approval from the Ethics Committee of the Faculty of Economics, Universitas Borneo Tarakan, Indonesia, under approval number 002/KE/FEB-UBT/2024.

CONFLICT OF INTERESTS

The authors declare no conflict of interest.

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Appendix 1. Outer loading values before indicator elimination

Items	Quality of Financial Reports	Quality of HR	Inventory Management	Information Technology
QFZ1	0.83			
QFZ2	0.794			
QFZ3	0.806			
QFZ4	0.875			
QFZ5	0.854			
QFZ6	0.822			
QFZ7	0.813			
QFZ8	0.877			
QFZ9	0.77			
IM1			0.844	
IM2			0.758	
IM3			0.812	
IM4			0.736	
IM5			0.812	
IM6			0.842	
IM7			0.754	
IM8			0.836	
IM9			0.784	
QHR1		0.826		
QHR2		0.739		
QHR3		0.723		
QHR4		0.783		
QHR5		0.791		
QHR6		0.848		
QHR7		0.763		
QHR8		0.853		
QHR9		0.788		
TI1				0.79
TI2				0.73
TI3				0.786
TI4				0.871
TI5				0.891
TI6				0.734

Source: Data that has been processed by researchers using SmartPLS software, 2024