

The Influence of Electronic Payroll Management Information System on the Performance of Local Government Authorities (LGAs) in Tanzania

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ABSTRACT

This study examined the influence of Electronic Payroll Management Information System (e-PMIS) components, specifically salary reports, electronic payslips, and employee attendance records, on the performance of Local Government Authorities (LGAs) in Tanzania. A quantitative research approach was adopted, and data were gathered from 200 human resource and administrative officers across 43 LGAs using structured questionnaires. Multiple linear regression analysis was utilised to assess the effect of each e-PMIS component on organisational performance. The results revealed that electronic pay slips, employee attendance records, and salary reports each had a positive, statistically significant impact on LGA performance, with electronic pay slips exerting the most substantial effect. These findings suggest that reliable, timely, and automated payroll systems enhance operational efficiency, accuracy, accountability, and employee trust. Grounded in the Resource-Based View (RBV), the study conceptualises the e-PMIS as a strategic organisational resource. Its value is demonstrated through enhanced HR efficiency and improved payroll accuracy. Rarity is reflected in the limited adoption of integrated digital payroll systems across LGAs. Inimitability arises from its close alignment with local HR policies and regulatory frameworks, making it difficult for other organisations to replicate effectively. Organisation is evidenced by the presence of structured workflows and trained personnel that support its efficient utilisation. Future studies are proposed to examine additional e-PMIS components and contextual factors that influence system effectiveness to optimise payroll processes and sustain performance improvements across public organisations.

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1.0 Introduction

Public sector organisations worldwide are expected to deliver efficient, accountable, and high-quality services that respond to citizens' needs (Mwangwala, 2022; Wahyuni & Cahyani, 2025). At the local level, Tanzania's Local Government Authorities (LGAs), established under the Constitution of the United Republic of Tanzania (URT, 1977) and operationalised through the Local Government (District Authorities) Act (URT, 1982), are mandated to promote democratic participation and ensure effective service delivery (Kamugisha *et al.*, 2024). In this context, LGA performance reflects both external service provision and internal administrative efficiency and financial accountability (URT, 2020).

Despite these expectations, many public organisations worldwide struggle to meet performance standards (Selepe & Thusi, 2023). Similarly, Tanzanian LGAs continue to experience persistent performance challenges. Reports from the Controller and Auditor General (URT, 2019, 2020, 2021, 2023a) consistently reveal payroll-related irregularities, including salary processing errors, non-remittance of statutory deductions, delayed pension payments, and payments to non-existent employees. These recurring weaknesses signal deficiencies in internal administrative systems and financial controls, undermining accountability, reducing employee morale, and compromising overall institutional performance (URT, 2023a). Among the key contributors to this underperformance are weaknesses in payroll administration processes. Ineffective salary reporting, inaccurate electronic payslips, unreliable attendance records, and weak payroll reconciliation mechanisms create opportunities for fraud, budgeting inefficiencies, and poor financial discipline (Matimbwa, 2023; Payowela, 2024; URT, 2023a). Given that payroll expenditure constitutes a significant portion of public sector budgets, payroll management inefficiencies directly affect operational efficiency and accountability within LGAs.

To address these challenges, governments globally adopted Electronic Payroll Management Information Systems (e-PMIS), which first emerged in the 1950s and 1960s through the computerisation of payroll functions. Over time,

these systems evolved to incorporate automated salary calculations, statutory deductions, attendance monitoring, and real-time reporting capabilities (Fernando & Janadari, 2025; Meenugu, 2025). Empirical evidence from Europe indicates that e-PMIS enhances efficiency, transparency, and financial discipline through automated payroll processing and improved reporting systems (Abuhantash, 2023; Ruiz *et al.*, 2024). Similarly, across Africa, e-PMIS adoption expanded in the late 1990s as part of public sector reforms aimed at controlling wage bills and eliminating ghost workers (Danbala *et al.*, 2024; IMF, 2016).

In Tanzania, e-PMIS was introduced in the early 2000s under the Public Service Reform Programme (PSRP) to modernise payroll administration, strengthen accountability, and control public wage expenditure (URT, 2020). Within LGAs, electronic payroll systems automate salary calculations, generate reports, and manage statutory deductions, with human resource officers responsible for updating and verifying employee data before payment processing (Innocent *et al.*, 2025; Matimbwa, 2024). The e-Government Authority further emphasises training and system capacity-building to enhance the effective utilisation of digital payroll systems (URT, 2024a).

Despite the introduction of e-PMIS to improve payroll efficiency and accountability, performance deficiencies persist in Tanzanian LGAs. Audit reports continue to document delayed salary reports, inaccurate electronic payslips, unreliable attendance records, and payroll inconsistencies (URT, 2023b). These ongoing challenges suggest that the mere existence of e-PMIS has not automatically translated into improved organisational performance. This situation presents a performance paradox; although the LGAs implemented electronic payroll systems to strengthen efficiency and accountability, the expected performance gains have not yet been fully realised.

Empirically, existing studies on electronic payroll systems have largely focused on system adoption or treated payroll management as a single construct without disaggregating its functional components (Bwalya & Phiri, 2024; Innocent *et al.*, 2025; Mollel, 2024; Tefurukwa, 2025).

Limited attention has been paid to examining how specific e-PMIS components, such as salary reports, electronic payslips, and employee attendance records, individually influence performance dimensions, particularly efficiency and accountability, within Tanzanian LGAs. Consequently, a contextual and conceptual gap remains regarding the actual influence of e-PMIS components on LGA performance.

Guided by the Resource-Based View (RBV), this study conceptualises e-PMIS as a valuable internal organisational resource that enhances organisational performance by improving payroll accuracy, transparency, and administrative efficiency (Abuhantash, 2023; Mlicka, 2017; Purwanto *et al.*, 2022). In the public sector context, the objective is not competitive advantage but improved governance and service delivery outcomes. Accordingly, salary reporting systems, electronic payslips, and attendance management functions are treated as operational resources that may strengthen efficiency and accountability within LGAs.

Therefore, in light of persistent payroll-related inefficiencies despite digital reforms and limited empirical evidence on component-specific system usage, this study examines the influence of e-PMIS components, specifically salary reports, electronic payslips, and employee attendance records, on the performance of selected local government authorities in Tanzania.

2.0 Materials and Methods

2.1 Ethics Statement

The study adhered to ethical principles throughout the research process. The researcher obtained approval to conduct the research from Mzumbe University and other relevant authorities. Participants were fully informed about the study's purpose, their voluntary participation, and the confidentiality of their information before providing consent. During data collection, the researcher maintained integrity and ensured participant anonymity, handling all personal information securely. In reporting, care was taken to follow research guidelines, use clear and simple language, and avoid plagiarism, thereby upholding the highest ethical standards throughout the study.

2.2 Study Area

The study was conducted in mainland Tanzania using a multistage random sampling technique. Three geographical zones (Eastern, Southern Highlands, and Lake Zone) were randomly selected, followed by two regions from each zone: Dar es Salaam and Pwani Region; Mbeya Region and Songwe Region; and Mwanza Region and Mara Region. Finally, the researcher included all 43 Local Government Authorities (LGAs) within these regions through a census approach to enhance representativeness, reduce sampling error, and strengthen the reliability and generalisability of the findings.

2.3 Research Approach and Design

This study adopted a quantitative research approach, appropriate for examining statistical relationships between variables. Guided by a positivist philosophy, the approach emphasises objective measurement, researcher independence, and empirical testing to produce generalisable findings (Saunders *et al.*, 2019).

In terms of research design, the study employed a concurrent cross-sectional design. This design was suitable for assessing the influence of Human Resource Information Systems (HRIS) use on the performance of local government authorities (LGAs). It enabled data collection at a single point in time across multiple LGAs. In the collection of standardised data, structured questionnaires were used, and the researcher used multiple regression analysis to test the hypothesised relationships among variables.

2.4 Sampling and Sample Size Determination

A multistage random sampling method was employed to select a representative subset of respondents from the population of 367 Human Resource Officers (HROs) and Administrative Officers (AOs) across 43 selected Local Government Authorities (LGAs) in six regions of Tanzania (Dar es Salaam, Pwani, Mbeya, Songwe, Mwanza, and Mara). This approach involved randomly selecting zones, then regions within those zones, and finally LGAs within the selected regions, ensuring coverage of geographically dispersed areas and enhancing the representativeness of the sample (Creswell & Creswell, 2017).

The sample size for quantitative data was determined using Yamane's (1967) formula for a finite population with a 5% margin of error:
 $n = N / (1 + Ne^2)$, $n = 367 / (1 + 367 * 0.0025)$
 $n = 191$ Human Resource Officers (HROs). Thus, 191 HROs were selected, representing approximately 52% of the target population, which is sufficient for reliable statistical analysis and generalisation (Hair, *et al.*, 2017; Saunders *et al.*, 2019).

To ensure that the study maintained sufficient statistical power despite potential non-response or incomplete questionnaires, 10% was added to the initial sample size of 191 respondents, which is approximately 19.1, approximated to 20, so when 20 is added to 121, resulting in a final sample size of 211 Human Resource Officers (HROs) and Administrative Officers (AOs). This adjustment accounts for the possibility that some respondents may be unavailable, decline to participate, or provide unusable data, which is a common practice in survey research to safeguard the representativeness of the sample (Saunders *et al.*, 2019). Furthermore, the sample size was proportionately allocated across LGAs based on the actual number of HROs and AOs in each LGA, ensuring that all LGAs were fairly represented and that the researcher could accurately generalise the findings to the population.

2.5 Unity of Inquiry and Unity of Analysis

The unit of inquiry for this study was individual Human Resource Officers (HROs) and Administrative Officers (AOs), as data were directly collected from them through questionnaires and interviews. The unit of analysis, however, is the Local Government Authority (LGA), since the study seeks to assess HRIS usage and its influence on overall LGA performance. To ensure representativeness, the sample size was proportionately allocated across LGAs based on the actual number of HROs and AOs in each authority, ensuring that all LGAs were fairly represented and that the findings could be generalised accurately to the population of LGAs.

2.6 Sampling Technique

In this study, a fishbowl draw sampling technique was employed as part of the multistage random

sampling process to select individual human resource officers (HROs) and administrative officers (AOs) from each local government authority (LGA). This method involves placing the names of all eligible HROs and AOs in a container and randomly drawing the required number of participants, ensuring that each officer has an equal chance of selection. By using this approach, the study reduces the risk of selection bias and guarantees that the sample is representative of the population within each LGA. The fishbowl drawing method is particularly suitable for studies like this, where the population is well-defined and manageable, allowing for fair and transparent randomisation of participants while maintaining the integrity and reliability of the collected data.

2.7 Data Collection Technique

Data for this study were collected using 211 structured questionnaires comprising closed-ended questions measured on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The questionnaires were administered to Human Resource Officers (HROs) and Administrative Officers (AOs) using a combination of physical copies and online platforms, depending on participants' accessibility. The data collected focused on key components of the electronic payroll management information system (e-PMIS), including salary reports, electronic pay slips, and employee attendance records.

2.8 Statistical Analysis

Data were analysed using IBM SPSS Statistics Version 27, employing descriptive statistics and inferential approaches to examine the study variables. The study employed 5-point Likert scale items to measure respondents' ratings of each construct. These items were treated as interval data because the response options are assumed to be equidistant and symmetric, meaning the distances between categories are equal and balanced around a neutral point (Hair *et al.*, 2017).

3.0 Results

3.1 Response Rate

Out of 211 distributed questionnaires, 200 (94.8%) were properly completed, 4 (1.9%) were

incomplete, and 7 (3.3%) were not returned. The high completion rate indicates strong participant response and provides adequate data for reliable analysis, as shown in Table 1.

Table 1
Response Rate

Response category	Counts	Percentage (%)
Appropriately filled questionnaires	200	94.8
Incomplete filled questionnaires	4	1.9
Non-response	7	3.3
Total	211	100

3.2 Demographic Information of Respondents

The study had 200 respondents, of whom the majority were females (n = 129; 64.5%), aged 36 - 45 years (n = 95; 47.5%), had a bachelor's degree (n = 146; 73%), and were married (n = 147; 73.5%). Moreover, the majority had 11-15 years of work experience (n = 72; 36%) and had rarely received training on HRSI (n = 110; 55%). These results imply that the recruited study participants had sufficient work experience in the study area; hence, the results presented provide a clear picture of what is happening within our local government authorities, as shown in the Demographic Information of Respondents table.

Table 2
Demographic Information of Respondents

Variable	Frequency	Percentage
Sex		
Male	71	35.5
Female	129	64.5
Age		
18 - 35	61	30.5
36 - 45	95	47.5
46 - 60	44	22.0
Education level		
Bachelor	146	73.0
At least a masters	54	27.0
Marital status		
Married	147	73.5
Single	52	26.0
Widowed	1	.5
Work experience in LGAs		

Table 3
Descriptive statistics of the Influence of Salary Reports, Electronic Pay Slips, and Employee Attendance Data on Local Government Authority Performance

Variable	N	Minimum	Maximum	Mean	Std. Deviation
LGP	200	2	5	3.63	0.855
SR	200	1	5	3.59	0.732
EPS	200	1	5	3.21	1.083
EAD	200	1	5	3.38	1.078

Variable	Frequency	Percentage
Below 5 years	25	12.5
6 - 10 years	64	32.0
11 - 15 years	72	36.0
16 - 20 years	30	15.0
Over 20 years	9	4.5
Times attended HRIS training		
Never	45	22.5
Rarely	110	55.0
Occasionally	37	18.5
Frequently	3	1.5
Very frequently	5	2.5

Source: Field data (2025)

3.3 Influence of Salary Reports (SR), Electronic Pay Slips (PS), and Employee Attendance Data (EAD) on Local Government Authority Performance (LGAP)

The study examined four constructs, namely Employee Attendance Data (EAD), Pay Slips (PS), Salary Reports (SR), and Local Government Authorities' Performance (LGAP), with LGAP as the dependent variable. All constructs were measured using multiple items on a five-point Likert scale (from 1 = strongly disagree to 5 = strongly agree).

3.4 Descriptive Statistics: Summary of the Influence of Salary Reports (SR), Electronic Pay Slips (PS), and Employee Attendance Data (EAD) on Local Government Authority Performance (LGAP)

The descriptive statistics table (Table 3) summarises four variables (LGAP, SR, PS, and EAD) from a sample of 200 observations each. The study revealed that the possible score range for each variable was 1 (minimum) to 5 (maximum). The means range was from 3.21 (PS) to 3.63 (LGAP), suggesting moderate average levels for the variables. Standard deviations range from 0.732 (SR) to 1.083 (PS), indicating variability around the mean, with PS and EAD showing a relatively higher spread.

3.5 Exploratory Factor Analysis (EFA) of Salary Reports, Electronic Pay Slips, and Employee Attendance Data

To assess the validity of the measurement items, the researcher first evaluated the sample's adequacy for factor analysis for Salary Reports (SR), Electronic Pay Slips (PS), and Employee Attendance Data (EAD). The Kaiser-Meyer-Olkin measure was 0.935, indicating excellent sampling adequacy, and Bartlett's test of sphericity was 3248.712, which was significant ($\chi^2 = 3248.712$, $p < 0.001$). These results imply that there were sufficient correlations among items to form distinct constructs. The determinant of the correlation matrix was 3.924×10^{-8} , indicating acceptable inter-item correlations, as shown in Table 4 of the Assessment of Sampling Adequacy for Salary Reports, Electronic Pay Slips, and Employee Attendance Data.

Table 4
Assessment of Sampling Adequacy Sphericity for Salary Reports, Electronic Pay Slips, and Employee Attendance Data

Test	Value
KMO Measure	0.935
Bartlett's Chi-Square	3248.712
Df	253
Sig.	0.000

3.6 Principal Component Analysis (PCA)

Principal Component Analysis (PCA) was conducted to verify the study constructs. Using 23 items, PCA extracted four components with eigenvalues above 1, explaining 70.17% of the total variance, indicating strong construct validity (see Table 5).

Table 5
Initial Eigenvalues of Extracted Components

Component	Eigen value	Variance %	Cumulative %
1	10.028	43.599	43.599
2	3.143	13.666	57.265
3	1.677	7.292	64.557
4	1.290	5.611	70.168

Table 6
Rotation Sums of Squared Loadings of Extracted Components

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	6.586	28.635	28.635
2	3.427	14.899	43.535
3	3.276	14.244	57.779
4	2.850	12.389	70.168

After rotation, the four components collectively account for 70.168% of the variance, with the first component accounting for 28.635%. Rotation redistributes variance across components to enhance interpretability without changing the total variance explained (Hair *et al.*, 2019).

3.7 Rotated Component Matrix

The rotated component matrix confirmed that items loaded correctly onto their respective constructs. The researcher observed all 10 LGAP items loaded onto the first component, with factor loadings above 0.5, consistent with recommendations, and similar patterns were observed for the remaining constructs (Table 7).

Table 7
Rotated components matrix of study item

	Component			
	1	2	3	4
LGP7	0.804			
LGP10	0.791			
LGP6	0.791			
LGP4	0.778			
LGP2	0.776			
LGP8	0.77			
LGP3	0.769			
LGP9	0.762			
LGP5	0.755			
LGP1	0.584			
EPS1		0.857		
EPS3		0.843		
EPS4		0.842		
EPS2		0.837		
EAD2			0.826	
EAD3			0.826	
EAD4			0.811	
EAD1			0.738	
SR4				0.756
SR5				0.697
SR2				0.69
SR3				0.676
SR1				0.623

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalisation.

a. Rotation converged in 7 iterations.

3.8 Reliability and Validity Assessment of Constructs

The Cronbach's alpha test was conducted to assess the internal consistency of the transformed variables and to ensure that the items measured the same underlying construct (Mackfallen G. Anasel & Swai Idda I, 2024). As shown in Table 8, all constructs demonstrated adequate convergent validity and high reliability: LGAP (10 items) had a mean loading of 0.760

with $\alpha > 0.95$, EPS (4 items) 0.845 with $\alpha > 0.90$, EAD (4 items) 0.800 with $\alpha > 0.88$, and SR (5

items) 0.688 with $\alpha > 0.85$, indicating good to excellent measurement reliability and validity.

Table 8
 Reliability and Validity Assessment of Constructs

Factor	Items	Mean Loading	Validity Assessment	Cronbach's α
LGAP	10	.760	Excellent (>0.58 all items)	>0.95*
EPS	4	.845	Exceptional (>0.80 all)	>0.90*
EAD	4	.800	Very Good (>0.70 all)	>0.88*
SR	5	.688	Good (>0.60 all)	>0.85*

3.9 Diagnostic Tests for Multiple Linear Regression Model Assumptions

This study involves the relationship between independent variable(s) and the dependent variable, which was presented using the mathematical equation: $LGAP = \beta_0 + \beta_1SR + \beta_2PS + \beta_3EAD + \varepsilon$. For which, cap L, cap G, cap A, and cap P refer to Local Government Authority Performance (dependent variable). The β_0 is the constant while β_1 , β_2 and β_3 are the coefficients representing the effects of the independent variables (SR, PS, and EAD) on LGAP.

Before conducting the regression analysis, the researcher performed diagnostic tests to verify that the data met the model's assumptions. As shown in Table 9 and Figures 1–3, all assumptions were satisfied. Scatterplots confirmed linear relationships between the independent variables (SR, EPS, and EAD) and the dependent variable (LGP). The residuals were approximately normally distributed, and the residual plots indicated homoscedasticity. Furthermore, there was no multicollinearity, as VIF values ranged from 1.138 to 1.458 (below the threshold of 5) and tolerance values exceeded 0.1.

Table 9
 Assessment of Multicollinearity

Variables	Collinearity Statistics	
	Tolerance	VIF
SR	.756	1.322
PS	.879	1.138
EAD	.686	1.458

Figure 1
 Linearity between the Independent Variable and the Dependent Variable

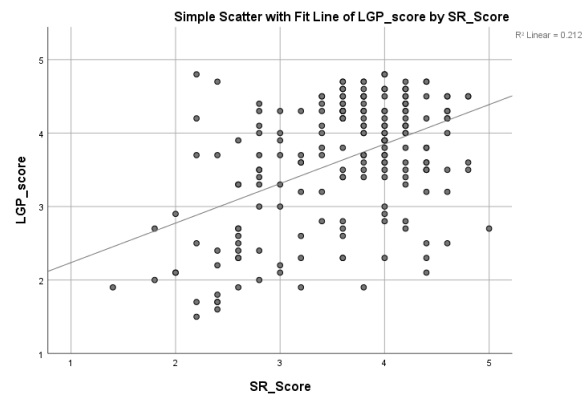


Figure 2
 Homoscedasticity

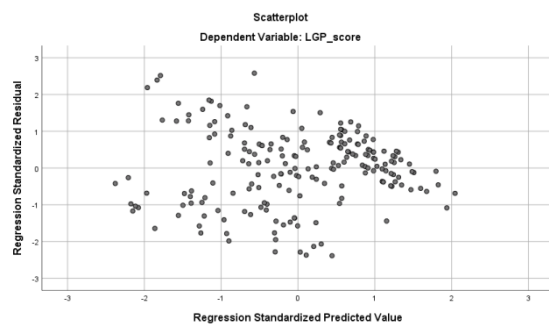
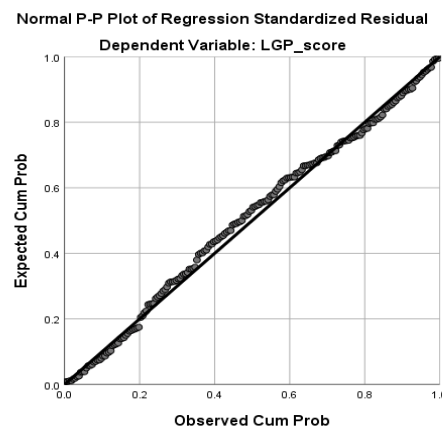


Figure 3
 Normality



3.10 Coefficient of Determination (R^2) and Model Fit

The R^2 value of 0.532 in Table 10 indicates that SR, PS, and EAD explain 53.2% of the variation in LGAP, showing moderate explanatory power. However, 46.8% of the variation remains unexplained, suggesting that other factors such as leadership, organisational culture, employee motivation, ICT infrastructure, policy environment, and financial resources may also influence LGA performance. Therefore, although the variables included in this model provide meaningful explanatory insight, they do not capture all determinants of LGA performance, and future studies should incorporate additional variables to provide a more comprehensive explanation.

Table 10

Coefficient of Determination (R^2) and Model Fit

Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
1	.729 ^a	.532	.524	.590

a. Predictors: (Constant), EAD, PS, SR
b. Dependent Variable: LGAP

3.9 Analysis of Variance (ANOVA)

Moreover, the researcher used Analysis of Variance (ANOVA) to test the overall significance of the regression model. The F-test statistic (F = 74.121, $p < 0.001$) indicates that the model is statistically significant, meaning that the independent variables jointly explain a significant proportion of the variation in LGAP.

Table 11

Analysis of Variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	77.342	3	25.781	74.121	.000 ^p
	Residual	68.173	196	.348		
	Total	145.515	199			

a. Dependent Variable: LGAP

b. Predictors: (Constant), EAD, PS, SR

3.11 Influence of Electronic Salary Reports (SR), Electronic Pay Slip (PS), and Employees Attendance Data (EAD) on Local Government Performance

The study used the multiple linear regression model to assess the influence of electronic Payroll Management components (SR, PS, and EAD) on LGAP. Controlling for PS and EAD, the study revealed that for each unit increase in SR,

the LGA Pincreased by 0.36 (95% CI: 0.234, 0.493; $p < 0.001$). Based on the effects of PS and LGAP, it is established that, controlling for SR and EAD, each unit increase in PS was associated with a statistically significant increase of 0.32 (95% CI: 0.235, 0.397; $p < 0.001$). Moreover, for each unit increase in EAD, the LGAP increased by 0.25 (95% CI: 0.16, 0.35) at $p < 0.001$, as shown in the regression coefficient table (Table 12).

Table 12

Influence of Electronic Salary Reports (SR), Electronic Pay Slip (PS), and Employees Attendance Data (EAD) on Local Government Performance

Variables	Unstandardised Coefficients		Standardised Coefficients Beta	Sig.	95.0% Confidence Interval for B	
	B	Std. Error			Lower Bound	Upper Bound
EAD	.364	.066	.312	.000	.234	.493
PS	.316	.041	.400	.000	.235	.397
SR	.255	.047	.321	.000	.163	.347

4.0 Discussion

This study examined the influence of electronic payroll management information system (e-PMIS) components, salary reports (SR), electronic payslips (PS), and employee attendance data

(EAD) on the performance of Local Government Authorities (LGAs) in Tanzania. The results revealed that all three components had a positive, statistically significant effect on LGAP, with PS exerting the strongest influence, followed by SR and EAD. These findings indicate

that e-PMIS contributes to operational efficiency, accuracy, and accountability in HR management, supporting improved service delivery.

The effect of SR on LGAP aligns with findings by Bwalya & Phiri (2024) and Abuhantash (2023), who reported that comprehensive salary reporting reduces errors and strengthens performance oversight in public sector organisations. Similarly, the positive influence of PS is consistent with Desmalita & Setyadi (2025) and Gathenya & Kimani (2023), highlighting the role of electronic payslips in promoting transparency and timely remuneration. EAD's significant association with LGAP concurs with the observations of Justine (2023) and Matimbwa (2023), who emphasise that systematic attendance monitoring supports efficiency and accountability. While these studies were conducted in different countries, contextual factors such as the level of IT infrastructure, administrative capacity, and organisational practices may influence the magnitude of the effects, indicating that e-PMIS implementation must consider local conditions.

From a Resource-Based View (RBV) perspective, e-PMIS functions as a strategic organisational resource that enhances LGAs' performance. Value is realised through improved HR efficiency, accurate payroll processing, and strengthened accountability. Rarity is evident because integrated digital payroll systems are not widely implemented across Tanzanian LGAs. Inimitability arises from the system's adaptation to local HR policies, procedures, and regulations, which makes replication by other organisations challenging. Finally, the organisation demonstrates through structured workflows, trained personnel, and oversight mechanisms that e-PMIS is effectively deployed to support decision-making and service delivery. Together, these dimensions confirm that e-PMIS is not merely a technological tool but a strategically valuable resource that the government can leverage to improve organisational outcomes.

Despite these positive effects, the study identified challenges that limit the full utilisation of e-PMIS, including inadequate IT infrastructure, inconsistent network access, and insufficient technical training among end users. Addressing these constraints through capacity building,

system monitoring, and infrastructure upgrades could maximise system benefits, as emphasised by the e-Government Authority (URT, 2024b). Practically, the findings highlight the importance of sustained investment in payroll technology and structured user training to ensure accurate, timely, and transparent payroll management. Such interventions can enhance employee satisfaction, strengthen internal service delivery, and improve cost-effectiveness. Future research would examine the long-term effects of e-PMIS on organisational performance and explore its integration with other digital HR modules, such as e-recruitment, e-training, and e-performance management, to create a more comprehensive and efficient HR management ecosystem in the public sector.

5.0 Conclusion

This study shows that e-PMIS components, salary reports (SR), electronic payslips (PS), and employee attendance data (EAD) are positively and significantly associated with the performance of Tanzanian Local Government Authorities (LGAs), with electronic payslips (PS) showing the strongest association. These findings suggest that digital payroll systems are linked to improvements in operational efficiency, transparency, and accountability, which may contribute to better service delivery.

From a Resource-Based View perspective, e-PMIS can be considered a potentially valuable organisational resource, supporting HR management through structured processes, system integration, and trained personnel. However, challenges such as inadequate IT infrastructure and limited technical training were identified as barriers that may constrain effective utilisation of the system across LGAs. These challenges highlight the importance of strengthening technical capacity, improving system monitoring, and investing in infrastructure to support the effective use of digital payroll systems. Future longitudinal or experimental studies are recommended to further examine the causal relationships between e-PMIS implementation and organisational performance.

6.0 Recommendation

To maximise the benefits of e-PMIS, it is recommended that the government, in collaboration with LGA management, invest in upgrading technological infrastructure and ensuring reliable system support. The government has to provide technical training to enhance employees' ability to effectively use salary reports, payslips, and attendance data. Management ought to strengthen monitoring and oversight mechanisms to prevent errors and fraud and establish clear policy guidelines and standard operating procedures that are regularly updated to ensure consistency and efficiency. By addressing these challenges, LGAs can fully leverage e-PMIS as a strategic tool to improve employee satisfaction, cost-effectiveness, and service delivery.

Future research needs to examine the long-term effects of e-PMIS on LGA performance and explore its integration with other digital HR systems, such as e-recruitment, e-training, and e-performance management, to enhance public sector human resource management.

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9.0 Declaration of Conflicting Interest

The authors declare no conflict of interest.

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