

Challenges that hinder the effective implementation and use of the Public Employees Performance Management Information System (PEPMIS) in performance management at Kinondoni Municipal Council, Tanzania

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ABSTRACT

The Public Employees Performance Management Information System (PEPMIS) was launched in Tanzania in 2024 to supersede the Open Performance Review and Appraisal System (OPRAS) and to digitise performance appraisal across the public service. Its intended gains, however, depend on whether the institutional and infrastructural conditions in which it operates are conducive to its use. This study examined the challenges that hinder the effective implementation and use of PEPMIS in performance management at Kinondoni Municipal Council. A case study design with a mixed methods approach was adopted, guided by Goal-Setting Theory. Five implementation challenges were treated as independent variables, namely unreliable internet connectivity, inadequate training, weak supervisory capacity, limited access to devices and difficulty of system navigation, while the effective implementation and use of PEPMIS in performance management, operationalised through perceived fairness of the appraisal process and the transparency and accuracy of the performance data recorded in the system, was treated as the dependent variable. Quantitative data were collected from 150 purposively selected employees across four departments using a five-point Likert scale questionnaire and analysed using the Statistical Package for the Social Sciences (SPSS) through frequencies, percentages, means (M) and standard deviations (SD). Qualitative data were obtained from 20 key informants through semi-structured interviews and analysed thematically. The dependent variable stood at only a moderate level (M = 3.36; SD = 1.06), with fairness at 3.39 and transparency and accuracy at 3.32, and with the lowest ratings recorded on freedom from bias (M = 2.84) and freedom from errors and manipulation (M = 2.88). By contrast, the five implementation challenges were rated as severe (M = 3.91; SD = 1.00), led by unreliable internet connectivity (M = 4.27; 88.0 per cent agreement) and inadequate training (M = 4.00). The inverse pattern between the two sets of variables, corroborated by the qualitative accounts, indicates that the infrastructural, capacity and supervisory constraints depress the fairness, transparency and accuracy that PEPMIS was designed to deliver. The study concludes that the shortfall is systemic rather than one of connectivity alone, and recommends a council-level digital readiness assessment, offline data-capture capability, a restructured and continuous training regime including mandatory certification for supervisors, and a strengthened governance and data-quality framework.

Keywords: Digital Infrastructure; Implementation Challenges; Kinondoni Municipal Council, PEPMIS; Performance Management; Public Service

I. INTRODUCTION

Performance management is one of the principal strategies used to strengthen accountability, efficiency and service delivery in the public sector. Its central purpose is to align the performance of individual employees with the goals and objectives of the institution so that individual effort translates into measurable institutional achievement (Armstrong, 2017). Effective performance management is not an annual event but a continuous cycle of goal setting, monitoring, feedback and appraisal that connects the daily work of employees to the strategic priorities of the organisation. Because such systems operate through people rather than upon them, employee attitudes towards the appraisal tools materially affect whether the systems succeed: where staff regard the process as fair, transparent and accurate they engage with it, and where they do not, the anticipated benefits are largely forfeited (Komungemwe & Marijani, 2025).

Many public organisations have consequently moved from paper-based appraisal towards digitalised performance management systems, which promise reduced processing time, lighter documentation burdens and less scope for bias and inaccuracy. Evidence from Indonesia illustrates the potential. Niswaty et al. (2023) found that the introduction of the E-Kinerja electronic appraisal system in a district administration in Makassar City accounted for a substantial share of the observed variation in employee performance, with the remainder attributable to factors outside the system itself. That qualification matters: the same body of evidence warns that technology alone does not guarantee

fairness, transparency or improved performance, and that outcomes depend heavily on the conditions under which a system is deployed.

Across the African continent the picture is similarly conditional. Studies of electronic human resource management (e-HRM) and related digital systems in Tanzanian public institutions consistently identify a recurring cluster of constraints rather than isolated, organisation-specific faults. Mollel and Rutenge (2024) reported that limited access to technology among older and field-based employees, power and connectivity failures, skills gaps, resistance to change and cost all constrained the adoption of electronic human resource management systems at the Tanzania Airports Authority, and concluded that continuous training, improved infrastructure and deliberate change management were prerequisites for those systems to deliver value. In the health sector, Mwogosi and Kibusi (2024) identified weak leadership support, poor network infrastructure, increased workload and resistance rooted in concerns about professional autonomy as the critical barriers to electronic health record (EHR) implementation in Tanzanian primary healthcare. In higher education, Komungemwe and Marijani (2025) found that performance management arrangements in Tanzanian higher learning institutions were poorly matched to the organisational contexts in which they operated. The barriers, in short, are systemic and recurrent, and they cut across institutional and sectoral boundaries.

Within Tanzania, OPRAS had long been criticised for imposing a heavy administrative burden, setting impractical targets, permitting favouritism and failing to monitor agreed targets, all of which weakened its credibility and its capacity to improve performance. The Government therefore discontinued OPRAS and, in 2024, launched PEPMIS, an online system intended to streamline the appraisal process, improve the accuracy of appraisal data and strengthen the fairness and transparency of employee assessment (Silidion & Rutenge, 2024). The international and regional evidence, however, is consistent on one point: the benefits of such systems depend on sound information and communication technology (ICT) infrastructure, adequate user competence, institutional support and clear performance indicators. Where these are absent, a technically sound system may nonetheless fail in practice.

Early evidence on PEPMIS itself reflects this conditionality. Silidion and Rutenge (2024) found that employees of the Judiciary of Tanzania perceived PEPMIS to be effective, a perception shaped by its perceived fairness and accuracy, timely feedback, clarity of assessment procedure, linkage of assessment to goals and rewards, and the provision of training. Njunwa and Magoiga (2026) similarly reported a significant positive effect of perceived usefulness on PEPMIS adoption in local government authorities (LGAs). Other studies report considerable difficulty. Kalifumu and Njunwa (2025) found that limited stakeholder engagement constrained PEPMIS adoption at Kigamboni Municipal Council, while Lucumay (2025) documented substantial implementation challenges at Arusha City Council. Isanzu (2026), drawing on interviews with human resource (HR) practitioners, found that PEPMIS usability was undermined by slow system responses, complex navigation and inconsistent functionality; that organisational support was weakened by limited leadership involvement and inadequate technical assistance; that user competence was compromised by insufficient practical training; and that technical difficulties stemmed from weak infrastructure and unreliable connectivity. The evidence base is therefore mixed, and it is contextually uneven.

Kinondoni Municipal Council is one of the largest and most active municipal councils in Tanzania, with a wide range of departments, a large workforce and a continuous service-delivery workload. It therefore offers an important setting in which to examine how PEPMIS functions under real operating conditions. Early indications at the council point to difficulties with consistent access to the system, timely completion of appraisal cycles and prompt feedback, while a national performance audit has identified weak performance management practices in a number of local government organisations, including inconsistent goal setting, weak accountability for performance outcomes and limited feedback mechanisms (National Audit Office [NAO], 2023). Understanding the specific constraints that limit the system therefore matters, because a well-designed platform delivers little value where the infrastructural, human and institutional conditions required to operate it are absent.

1.1 Statement of the Problem

PEPMIS was designed to advance transparency, accountability and productivity through a digitalised appraisal process. Evidence from Tanzanian public institutions nonetheless indicates that its implementation is constrained by weak digital infrastructure, insufficient user training and inconsistent oversight of how the system is used (Isanzu, 2026; Kalifumu & Njunwa, 2025; Lucumay, 2025). Where a performance management system is not trusted, is unduly complex, or is inadequately supported, the result is resistance, reduced motivation and diminished impact on productivity and service delivery.

At Kinondoni Municipal Council, employees have reported difficulty in accessing PEPMIS, in completing appraisals on schedule and in receiving timely feedback, which suggests that the council may not be realising the benefits the system was intended to deliver. Although the policy significance of PEPMIS is clear, there is little empirical evidence on the challenges that constrain its implementation and use in a municipal council setting, where resource levels and governance arrangements differ appreciably from those of the educational institutions, central ministries and specialised agencies that have received most scholarly attention. Moreover, existing studies have tended to document the challenges

in isolation, without establishing the level of effectiveness those challenges coexist with. This study addresses both gaps by measuring the outcome variable directly alongside the challenges and examining the relationship between them.

1.2 Research Objectives

- i. To assess the level of effective implementation and use of PEPMIS in performance management at Kinondoni Municipal Council;
- ii. To examine the severity of the challenges hindering the effective implementation and use of PEPMIS at the council; and
- iii. To examine the relationship between the identified challenges and the level of effective implementation and use of PEPMIS in performance management at the council.

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Goal-Setting Theory

The study is guided by Goal-Setting Theory, developed by Locke and Latham (1990, 2002). Its central proposition is that people perform better when goals are specific, challenging but attainable, and accompanied by feedback, than when they are given vague instruction such as to do their best. The theory identifies moderators that determine whether goals translate into performance, namely goal clarity, goal difficulty, feedback, task complexity, ability and goal commitment, and it recognises that environmental constraints and individual differences can weaken the relationship between goals and outcomes (Locke & Latham, 2006).

The clarity, fairness and feedback that PEPMIS is designed to provide correspond to the goal-clarity and feedback components of the theory, and they constitute the dependent variable of this study. The challenges examined, namely unreliable connectivity, insufficient training, limited device access, weak supervisory capacity and navigation difficulty, correspond to its environmental-constraint and task-complexity moderators. Applied to a structured goal system such as PEPMIS, the theory predicts that the intended gains will not materialise where the environmental resources required to enact the goals are unavailable (Locke & Latham, 1990). The theory therefore provides the basis for expecting that implementation conditions, rather than the design of PEPMIS itself, explain the limited effectiveness observed at council level.

2.2 Empirical Review

2.2.1 The Level of Effective Implementation and Use of Digital Performance Management Systems

Evidence on how well digital appraisal systems function once they are in operation is uneven. Silidion and Rutenge (2024) surveyed 142 staff of the Judiciary of Tanzania and found that employees perceived PEPMIS to be effective, attributing that perception to its perceived fairness and accuracy, timely feedback, adequate user skill, clarity of assessment procedures, the linkage of assessment to goals and rewards, and the provision of training. Kweka and Kitula (2025) similarly reported that PEPMIS supported the management of teachers' professional activities in secondary schools in Monduli District. Njunwa and Magoiga (2026) found a significant positive effect of perceived usefulness on PEPMIS adoption in local government authorities and recommended targeted training, awareness campaigns and practical demonstrations to raise adoption further.

Beyond Tanzania, Niswaty et al. (2023) showed that the E-Kinerja electronic appraisal system accounted for a substantial share of the observed variation in employee performance in a district administration in Makassar City, while a considerable proportion of that variation remained attributable to factors outside the system itself. Two observations follow for the present study. First, favourable results have been recorded predominantly in judicial, educational and specialised institutions rather than in municipal councils. Second, the level of effectiveness reported is almost always a perception held by users rather than a property of the software, and it is rarely measured directly against the conditions in which the system is operated. The first objective of this study therefore measures that level directly at council level.

2.2.2 The Severity of the Challenges Hindering Implementation and Use

A parallel body of research documents the constraints under which these systems operate, and points consistently to three clusters of barriers: infrastructure, training and competence, and governance and behavioural resistance. Mollel and Rutenge (2024) examined the adoption and use of electronic human resource management systems at the Tanzania Airports Authority and found that limited access to technology among older and field-based staff, power and connectivity failures, skills deficits, resistance to change and cost each constrained adoption, concluding that continuous training, improved infrastructure and structured change management were necessary for the systems to realise their potential. Mwogosi and Kibusi (2024) reached comparable conclusions in the health sector, identifying weak leadership support, poor network infrastructure, increased workload and resistance arising from concerns over professional autonomy as the critical barriers to EHR implementation in Tanzanian primary healthcare facilities.

Within PEPMIS itself the same clusters recur. Kalifumu and Njunwa (2025) found that limited stakeholder engagement constrained PEPMIS adoption at Kigamboni Municipal Council and recommended sustained training and capacity-building to overcome the barriers identified. Lucumay (2025) documented system downtime, slow processing speeds, an interface that users did not find navigable, insufficient initial training and an absence of continuous support at Arusha City Council. Most directly relevant here, Isanzu (2026) interviewed twenty-five HR practitioners and found that system usability was undermined by slow responses, complex navigation and inconsistent functionality; that organisational support was weakened by limited leadership involvement, poor coordination and inadequate technical assistance; that user competence was compromised by insufficient practical training; and that technical difficulties stemmed from weak infrastructure and unreliable connectivity. At national level, a performance audit identified weak performance management practices across a number of local government organisations, including inconsistent goal setting, weak accountability for performance outcomes and limited feedback mechanisms (National Audit Office [NAO], 2023). What this body of work has not established is how severe each of these constraints is relative to the others within a single municipal setting, which is what the second objective of this study measures.

2.2.3 The Relationship between the Challenges and the Level of Effective Implementation and Use

The third strand of evidence concerns how the two sets of variables are related. That relationship is asserted more often than it is demonstrated, largely because studies tend to measure one side or the other. Isanzu (2026) comes closest, concluding that although PEPMIS improves documentation and transparency, its effectiveness is undermined by a misalignment between the demands the system makes and the capacity of the institutions expected to meet them. Niswaty et al. (2023) approach the same point from the opposite direction, showing that a substantial share of the variation in performance lay outside the electronic appraisal system itself, which locates the determinants of effectiveness in the operating environment rather than in the design of the system. Komungemwe and Marijani (2025) found that performance management arrangements in Tanzanian higher learning institutions were poorly matched to the organisational contexts in which they operated, and Mwogosi and Kibusi (2024) showed that infrastructural, skills and leadership deficiencies acted collectively rather than individually in undermining the benefits of electronic records.

Taken together, these studies establish the plausibility of an inverse relationship between the severity of implementation constraints and the level of effectiveness achieved. None of them, however, measures both sides within the same institution and the same respondent group, and none traces the mechanism by which a particular constraint depresses a particular aspect of effectiveness. The third objective of this study addresses that omission.

2.3 Research Gap

The reviewed literature establishes that PEPMIS operates unevenly across institutional settings. Studies in the Judiciary (Silidion & Rutenge, 2024) and in secondary schools (Kweka & Kitula, 2025) report broadly favourable outcomes, while studies in municipal and city councils (Kalifumu & Njunwa, 2025; Lucumay, 2025) and among HR practitioners (Isanzu, 2026) report considerable difficulty. This divergence indicates that the effectiveness of PEPMIS is contingent on institutional context, and that findings from central and specialised institutions cannot be extended to local government authorities, where resource levels, infrastructure and governance arrangements differ materially.

Two gaps follow. First, no published study has examined the implementation and use of PEPMIS at Kinondoni Municipal Council, one of the largest local government authorities in the country. Second, the existing studies tend to examine either the barriers or the perceived effectiveness of the system, but rarely both within the same institution and the same respondent group. Kalifumu and Njunwa (2025), Lucumay (2025) and Isanzu (2026) document the barriers; Silidion and Rutenge (2024), Njunwa and Magoiga (2026) and Kweka and Kitula (2025) assess effectiveness or adoption. Measuring both together permits the level of effectiveness achieved to be read directly against the severity of the constraints that coexist with it, which is what this study does.

III. METHODOLOGY

3.1 Research Design and Approach

The study adopted a case study research design combining quantitative and qualitative approaches. A case study design permits in-depth examination of a phenomenon within its natural context (Yin, 2014), while the mixed methods approach allows the severity of the implementation challenges and the level of system effectiveness to be quantified, and at the same time allows employees' lived experience of those challenges to be explored in depth (Creswell, 2014). The quantitative strand was cross-sectional and descriptive.

3.2 Study Area

The study was conducted at Kinondoni Municipal Council in Dar es Salaam. The council was selected as one of the largest and most active municipal councils in Tanzania and as a setting in which PEPMIS is being implemented under the national public-service reform programme. Its multiple departments, large workforce and continuous service-delivery obligations make it a suitable site for observing the difficulties encountered when the system is put into operation.

3.3 Target Population

The target population comprised employees of Kinondoni Municipal Council who actively use PEPMIS in their work, including those who had completed at least one full appraisal cycle using the system, drawn from the departments of Administration, Technical Services, Finance and Accounts, and Human Resources, together with departmental heads and supervisors involved in evaluating the system. Records from the Human Resources Department indicated that approximately 420 employees met this criterion.

3.4 Sample Size and Sampling Procedures

Purposive sampling was applied across all data collection activities in order to ensure that every respondent had direct exposure to PEPMIS; random sampling was avoided precisely because it would have admitted employees with insufficient exposure to the system. Stratification was applied at departmental level across four departments so that no single department would unduly influence the results: Administration (45), Technical Services (40), Finance and Accounts (35) and Human Resources (30).

The resulting sample of 150 is consistent with recommendations for purposive sampling in mixed methods research (Creswell, 2014) and represents approximately 36 per cent of the sampling frame of employees active in PEPMIS. Questionnaires were administered directly during scheduled departmental meetings, yielding a 100 per cent return of all 150 questionnaires. A further 20 key informants were selected purposively for interview.

3.5 Data Collection Methods

Primary data were collected using structured questionnaires and semi-structured interviews. The questionnaire measured both the level of effective implementation and use of PEPMIS and the severity of the implementation challenges, and included open-ended items; it was administered to the 150 purposively selected employees. Twenty key informants, comprising departmental heads, human-resource officers and administrative supervisors, were interviewed using a semi-structured guide that explored the challenges affecting the system, the implementation of relevant policies and managerial perspectives on system use.

3.6 Measurement of the Study Variables

All constructs were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The dependent variable, the effective implementation and use of PEPMIS in performance management, was measured by ten statements grouped into two dimensions. The fairness dimension comprised five items covering the clarity of evaluation criteria, the realism of the targets set, freedom of appraisal outcomes from bias and personal relationships, equality of treatment relative to colleagues, and satisfaction with how the system measures overall contribution. The transparency and accuracy dimension comprised five items covering the clarity with which the system communicates performance expectations, employee access to their own performance records, the accuracy with which recorded data reflect actual work, the timeliness with which evaluation results are shared, and the freedom of records from errors and manipulation. For these items a higher score denotes a higher level of effective implementation and use.

The five independent variables were each measured by a single statement capturing the severity of the challenge concerned, namely unreliable internet connectivity, inadequate training, weak supervisory capacity, limited access to devices, and difficulty of navigation without technical support. For these items a higher score denotes a more severely experienced challenge. Mean scores for both sets of variables were interpreted using the conventional five-point interval: 1.00 to 1.80 very low, 1.81 to 2.60 low, 2.61 to 3.40 moderate, 3.41 to 4.20 high and 4.21 to 5.00 very high.

3.7 Data Analysis

Quantitative data were analysed using the Statistical Package for the Social Sciences (SPSS). Frequencies and percentages were computed for each item, together with means and standard deviations for each item, each dimension and each composite variable. The relationship between the study variables was then examined by comparing the composite scores of the dependent and independent variables, by ranking the individual items within each variable to identify which aspects of effectiveness were weakest and which constraints were most severe, and by mapping the qualitative accounts onto specific dependent-variable items in order to trace the mechanisms through which each constraint operates.

Inferential modelling of the association between the variables through correlation or regression was not undertaken. The study design was descriptive rather than explanatory, each independent variable was captured by a single indicator rather than a multi-item scale, and a cross-sectional sample drawn purposively from a single council does not support the inference of directional effects. Introducing such techniques on this design would have lent an unwarranted appearance of precision to what the data can properly sustain. The relationship between the variables is therefore established through convergent evidence, in which the quantitative patterns and the qualitative mechanisms are read against one another, as set out in Section 4.5. This constraint is acknowledged in Section 5.3 and addressed in the recommendations for further research. Qualitative data from the interviews were analysed thematically. Responses were transcribed, read repeatedly, coded, and grouped into themes, which were then interpreted in relation to the research objectives. The findings of the two strands were subsequently integrated so that each could corroborate and elaborate the other.

3.8 Validity, Reliability and Ethical Considerations

Content validity was established through expert panel review by two academic supervisors and one public-service practitioner, who assessed the relevance, clarity and coverage of the questionnaire items in relation to the study constructs and objectives. Construct validity was addressed by grounding the instrument items in Goal-Setting Theory and aligning each item with the operationalised dimensions of the conceptual framework.

A pilot study was conducted with 15 employees drawn from departments not included in the main study, following which three questionnaire items with ambiguous wording were revised and two interview guide questions were resequenced to improve logical flow. Reliability was supported by uniform administration procedures, consistency in question wording, and triangulation between the questionnaire and interview data. Ethically, informed consent was obtained from all participants, participation was voluntary with the right to withdraw at any point, anonymity and confidentiality were assured, and ethical clearance was obtained from the relevant institutional and municipal authorities before fieldwork commenced.

IV. FINDINGS & DISCUSSION

4.1 Response Rate and Demographic Profile of Respondents

All 150 distributed questionnaires were completed and returned, giving a response rate of 100 per cent, and all 20 key informants participated in the interviews. Table 1 summarises the demographic profile of the questionnaire respondents.

Table 1

Demographic Profile of Respondents (n = 150)

Demographic variable	Category	Frequency (f)	Percentage (%)
Gender	Male	85	56.7
	Female	65	43.3
Age	Below 30 years	30	20.0
	30–39 years	61	40.7
	40–49 years	41	27.3
	50 years and above	18	12.0
Educational qualification	Certificate	30	20.0
	Diploma	21	14.0
	Bachelor's degree	67	44.7
	Postgraduate	32	21.3
Department	Administration	45	30.0
	Technical Services	40	26.7
	Finance and Accounts	35	23.3
	Human Resources	30	20.0
PEPMIS experience	Less than 1 year	41	27.3
	1–2 years	86	57.3
	More than 2 years	23	15.3

The respondents were reasonably balanced by gender, with 56.7 per cent male and 43.3 per cent female, and were concentrated in the 30 to 39 year age band (40.7 per cent), indicating a workforce that is experienced but still digitally active. Most held a bachelor's degree (44.7 per cent) or a postgraduate qualification (21.3 per cent), an educational base that should in principle ease digital adoption, although the certificate-level minority of 20.0 per cent

underlines the need for training pitched to varying levels of digital literacy. Notably, 57.3 per cent had used PEPMIS for only one to two years, reflecting the system's introduction in 2024 and placing most users at the early-to-intermediate stage of adoption, which is precisely the period in which training, interface and connectivity problems are most acutely felt.

4.2 Level of Effective Implementation and Use of PEPMIS (Dependent Variable)

The first specific objective was to assess the level of effective implementation and use of PEPMIS in performance management at the council. This was measured through two dimensions, fairness of the appraisal process and transparency and accuracy of the performance data recorded in the system. Tables 2 and 3 present the results for each dimension, and Table 4 summarises the composite variable.

4.2.1 Fairness of the PEPMIS Appraisal Process

Table 2 presents the frequency distribution, mean and standard deviation for each of the five items measuring the fairness of the PEPMIS appraisal process.

Table 2

Fairness of the PEPMIS Appraisal Process (n = 150)

Statement	SD	D	N	A	SA	Mean	Std. Dev.	Interpretation
PEPMIS evaluates my performance based on clearly defined criteria	5 (3.3)	8 (5.3)	25 (16.7)	62 (41.3)	50 (33.3)	3.96	0.91	High
The performance targets set in PEPMIS are realistic and achievable	8 (5.3)	20 (13.3)	32 (21.3)	55 (36.7)	35 (23.3)	3.59	1.02	High
PEPMIS appraisal outcomes are not influenced by personal relationships or bias	25 (16.7)	38 (25.3)	40 (26.7)	30 (20.0)	17 (11.3)	2.84	1.18	Moderate
I am treated equally to my colleagues in the PEPMIS evaluation process	18 (12.0)	31 (20.7)	37 (24.7)	40 (26.7)	24 (16.0)	3.14	1.09	Moderate
I am satisfied with how PEPMIS measures my overall contribution to the council	10 (6.7)	25 (16.7)	35 (23.3)	50 (33.3)	30 (20.0)	3.43	1.06	High
Dimension mean – Fairness						3.39	1.05	Moderate

Figures in the SD to SA columns are frequencies with percentages in parentheses. Scale: SD = strongly disagree, D = disagree, N = neutral, A = agree, SA = strongly agree. Source: Field Data (2025)

The statement on clearly defined evaluation criteria attracted the most favourable responses, with 74.6 per cent of respondents agreeing or strongly agreeing and a mean of 3.96, which falls in the high band. The statement on realistic and achievable targets also attracted majority agreement (60.0 per cent), with a mean of 3.59. By contrast, the statement on freedom from bias and personal relationships received the most critical responses, with 42.0 per cent disagreeing or strongly disagreeing and a mean of 2.84, the lowest of the fairness items. Equal treatment in the evaluation process registered a mean of 3.14 and satisfaction with how the system measures overall contribution a mean of 3.43. The dimension mean of 3.39 falls just below the high threshold of 3.41, signifying a moderate perception of fairness. This indicates that although PEPMIS is structurally designed with equity in mind, its practical administration at the council does not fully translate that design into outcomes employees perceive as fair.

4.2.2 Transparency and Accuracy of Performance Data Recorded under PEPMIS

Table 3 presents the corresponding results for the five items measuring the transparency of the appraisal process and the accuracy of the performance data recorded in the system.

Table 3*Transparency and Accuracy of Performance Data under PEPMIS (n = 150)*

Statement	SD	D	N	A	SA	Mean	Std. Dev.	Interpretation
PEPMIS clearly communicates performance expectations to employees	4 (2.7)	10 (6.7)	22 (14.7)	64 (42.7)	50 (33.3)	3.97	0.88	High
I can access my own performance records and appraisal results at any time	12 (8.0)	30 (20.0)	35 (23.3)	48 (32.0)	25 (16.7)	3.29	1.12	Moderate
The data captured by PEPMIS accurately reflects my actual work performance	14 (9.3)	34 (22.7)	40 (26.7)	42 (28.0)	20 (13.3)	3.13	1.09	Moderate
Performance evaluation results in PEPMIS are shared with employees in a timely manner	10 (6.7)	28 (18.7)	38 (25.3)	52 (34.7)	22 (14.7)	3.32	1.05	Moderate
PEPMIS records are free from errors and manipulation	20 (13.3)	40 (26.7)	44 (29.3)	30 (20.0)	16 (10.7)	2.88	1.16	Moderate
Dimension mean Transparency and accuracy						3.32	1.06	Moderate

Figures in the SD to SA columns are frequencies with percentages in parentheses. Source: Field Data (2025)

The clarity with which PEPMIS communicates performance expectations received the most positive ratings, with 76.0 per cent agreement and a mean of 3.97, the highest single score recorded on the dependent variable. Employee access to personal performance records registered a mean of 3.29, with 48.7 per cent agreement. The accuracy with which recorded data reflect actual work performance was rated at 3.13, with only 41.3 per cent agreement, and the timely sharing of evaluation results at 3.32. Freedom from errors and manipulation received the lowest rating of the dimension at 2.88, with 40.0 per cent of respondents disagreeing or strongly disagreeing. The dimension mean of 3.32 places transparency and accuracy at a moderate level.

4.2.3 Composite Level of the Dependent Variable

Table 4 brings the two dimensions together and presents the composite level of the dependent variable.

Table 4*Composite Level of Effective Implementation and Use of PEPMIS (n = 150)*

Dimension	Items	Mean	Std. Dev.	Interpretation
Fairness of the appraisal process	5	3.39	1.05	Moderate
Transparency and accuracy of performance data	5	3.32	1.06	Moderate
Effective implementation and use of PEPMIS (overall)	10	3.36	1.06	Moderate

Interpretation scale: 1.00–1.80 very low; 1.81–2.60 low; 2.61–3.40 moderate; 3.41–4.20 high; 4.21–5.00 very high. Source: Field Data (2025)

The composite mean for the dependent variable was 3.36 with a standard deviation of 1.06, placing the effective implementation and use of PEPMIS in performance management at a moderate level. The system is therefore functioning, but it is not delivering the standard of fairness, transparency and accuracy it was designed to achieve. The internal pattern is instructive. The two highest-rated items concern what the system communicates to employees, namely clear evaluation criteria ($M = 3.96$) and clear performance expectations ($M = 3.97$), which are properties of the software design itself. The two lowest-rated items concern the integrity of what enters the system, namely freedom from bias ($M = 2.84$) and freedom from errors and manipulation ($M = 2.88$), which are properties of how the system is administered. The shortfall in effectiveness therefore lies not in the design of PEPMIS but in the conditions under which it is operated, which is precisely what the second objective examines.

This moderate result stands in contrast to Silidion and Rutenge (2024), who reported that employees of the Judiciary of Tanzania perceived PEPMIS to be effective on substantially the same criteria of fairness, accuracy, timeliness and clarity of procedure. It is more consistent with Kalifumu and Njunwa (2025) and Lucumay (2025), who documented considerable implementation difficulty in municipal and city council settings, and with Isanzu (2026), who found that PEPMIS improves documentation and transparency but is undermined by a misalignment between the demands the system makes and the capacity of the institutions expected to meet them. The divergence supports the view that the effectiveness of PEPMIS is contingent on institutional context rather than uniform across the public service.

4.3 Severity of the Challenges Hindering Implementation and Use of PEPMIS (Independent Variables)

The second specific objective was to examine the severity of the challenges hindering effective implementation and use of PEPMIS. Table 5 presents the results, ordered from the most to the least severe.

Table 5*Challenges Hindering Effective PEPMIS Implementation and Use (n = 150)*

Challenge statement	SD	D	N	A	SA	Mean	Std. Dev.	Interpretation
Unreliable internet connectivity affects my ability to use PEPMIS consistently	3 (2.0)	5 (3.3)	10 (6.7)	62 (41.3)	70 (46.7)	4.27	0.84	Very high
I did not receive adequate training on how to use PEPMIS effectively	5 (3.3)	10 (6.7)	20 (13.3)	60 (40.0)	55 (36.7)	4.00	0.97	High
Supervisors lack the capacity to guide employees in the proper use of PEPMIS	6 (4.0)	12 (8.0)	28 (18.7)	62 (41.3)	42 (28.0)	3.82	1.01	High
Limited access to computers or mobile devices restricts my use of PEPMIS	8 (5.3)	14 (9.3)	25 (16.7)	58 (38.7)	45 (30.0)	3.79	1.08	High
PEPMIS is difficult to navigate and use without technical support	8 (5.3)	18 (12.0)	30 (20.0)	55 (36.7)	39 (26.0)	3.66	1.12	High
Composite mean – Implementation challenges						3.91	1.00	High

Figures in the SD to SA columns are frequencies with percentages in parentheses. Source: Field Data (2025)

Unreliable internet connectivity was the most severely experienced challenge, with 88.0 per cent of respondents agreeing or strongly agreeing and a mean of 4.27, which falls within the very high severity band. Digital infrastructure therefore emerges as the single most critical constraint on PEPMIS at the council. This is consistent with Isanzu (2026), who found that technical difficulties with PEPMIS stemmed from weak infrastructure and unreliable connectivity, and with Mollel and Rutenge (2024), who identified connectivity and power failures among the principal obstacles to electronic human resource systems at the Tanzania Airports Authority.

Inadequate training was the second most severe challenge, with 76.7 per cent agreement and a mean of 4.00, reflecting a capacity-building deficit that recurs across digital-government initiatives in Tanzania. Weak supervisory capacity ($M = 3.82$), limited device access ($M = 3.79$) and difficulty of navigation without technical support ($M = 3.66$) were all rated in the high severity band. The finding on training corroborates Isanzu (2026), who attributed compromised user competence to insufficient practical training, and Kalifumu and Njunwa (2025), who recommended sustained training and capacity-building as the principal remedy for constrained PEPMIS adoption at Kigamboni Municipal Council. The finding on navigation difficulty aligns closely with Isanzu's observation that PEPMIS usability is undermined by complex navigation and inconsistent functionality.

The composite mean of 3.91 with a standard deviation of 1.00 indicates broad agreement among respondents that these constraints are severe, and the relatively narrow dispersion indicates that the experience is shared rather than confined to particular departments. The pattern mirrors the conclusion of Mwogosi and Kibusi (2024) in Tanzanian primary healthcare, where deficiencies in network infrastructure, technical skills and leadership support collectively undermined the benefits of electronic records, indicating a difficulty that is systemic rather than confined to any one institution.

4.4 Relationship between the Study Variables

The third specific objective was to examine the relationship between the identified challenges and the level of effective implementation and use of PEPMIS. Table 6 sets the two sets of variables against one another.

Table 6*Comparative Summary of the Study Variables (n = 150)*

Variable	Items	Mean	Std. Dev.	Interpretation
Dependent variable				
Fairness of the appraisal process	5	3.39	1.05	Moderate
Transparency and accuracy of performance data	5	3.32	1.06	Moderate
Effective implementation and use of PEPMIS (overall)	10	3.36	1.06	Moderate
Independent variables				
Unreliable internet connectivity	1	4.27	0.84	Very high severity
Inadequate training	1	4.00	0.97	High severity
Weak supervisory capacity	1	3.82	1.01	High severity
Limited access to devices	1	3.79	1.08	High severity
Difficulty of system navigation	1	3.66	1.12	High severity
Implementation challenges (composite)	5	3.91	1.00	High severity

The comparison reveals a clear inverse pattern. The implementation challenges were rated at a composite mean of 3.91, a full 0.55 of a scale point above the composite mean of 3.36 recorded for effective implementation and use, and every individual challenge was rated more severely than the overall level of effectiveness achieved. Both dependent-variable dimensions fall in the moderate band while all five constraints fall in the high or very high band. Employees therefore report experiencing the barriers to PEPMIS more intensely than they report experiencing its benefits, which is the central empirical finding of this study.

The item-level pattern indicates where the two sets of variables meet. The most severe constraint, unreliable connectivity ($M = 4.27$), corresponds directly to the two weakest effectiveness items, namely the accuracy with which recorded data reflect actual work ($M = 3.13$) and freedom of records from errors and manipulation ($M = 2.88$): where the system cannot be accessed when work is performed, entries are made retrospectively and in haste, and the recorded data diverge from the work actually done. Weak supervisory capacity ($M = 3.82$) corresponds to the lowest-rated fairness item, freedom from bias and personal relationships ($M = 2.84$), and to the moderate rating on equal treatment ($M = 3.14$): where supervisors are untrained, ratings are applied inconsistently or uniformly and employees perceive the outcome as arbitrary. Limited device access ($M = 3.79$) corresponds to the moderate rating on access to one's own performance records ($M = 3.29$). By contrast, the two items that scored highest on the dependent variable, clarity of evaluation criteria ($M = 3.96$) and clarity of performance expectations ($M = 3.97$), concern what the system displays rather than what users must do to interact with it, and are therefore the aspects least exposed to the constraints identified.

The qualitative evidence, presented in Section 4.5, traces these correspondences directly and supplies the mechanisms that the descriptive comparison can only imply. Read together, the two strands indicate that the constraints operate on the dependent variable at the point of data entry and supervisory review rather than at the point of system design, and that the moderate level of effectiveness recorded is best understood as the level PEPMIS achieves despite, rather than because of, the conditions prevailing at the council.

4.5 Qualitative Findings

The interviews were transcribed and analysed thematically, and the accounts of departmental heads, human-resource officers and administrative supervisors were interpreted in relation to the study objectives. Three themes emerged, each of which elaborates a specific link between a constraint and an aspect of the dependent variable.

4.5.1 Infrastructural Bottlenecks: Connectivity and Device Access

Participants described connectivity as the most fundamental obstacle, one that halts PEPMIS work entirely and degrades the quality of the data entered once the network returns. One head of department explained:

"Internet connectivity is the most fundamental problem. The system requires a live connection for every interaction, and we experience outages several times a month. There is no offline capability, so when the network goes down, all PEPMIS-related work stops. Employees then rush their data entry when connectivity is restored, and the quality of those entries inevitably suffers." (Asha, 4 July 2026)

A technical services officer described the same mechanism from the perspective of field-based work:

"The system communicates what is expected, and that is genuinely helpful compared to OPRAS. But the problem is that what goes into the system does not always match what actually happens in the field. When I am on site for three weeks and come back to enter my records retrospectively, the data quality is different from what it would have been if I could enter it concurrently. The internet connectivity issue is at the root of a lot of our data accuracy problems." (4 July 2026)

Closely related was the scarcity of devices, which forced staff to queue for access and left some technical work unrecorded:

"In my department, we have only one computer that is connected to the PEPMIS portal, and it is shared among twelve members of staff, which means that accessing the system to update performance records requires scheduling and waiting, often for days at a time. I have noticed that my PEPMIS performance record does not fully reflect the volume of technical work I complete in the field." (Twaibu, 4 July 2026)

These accounts explain the severity ratings for connectivity ($M = 4.27$) and device access ($M = 3.79$), and they identify the precise mechanism by which those constraints depress the dependent variable. Retrospective and rushed data entry produces records that diverge from actual work, which is exactly what the two weakest effectiveness items measure: the accuracy of recorded data ($M = 3.13$) and freedom from errors ($M = 2.88$). The accounts echo Mollel and Rutenge (2024), who found that power and connectivity problems and limited access to technology hampered electronic human-resource systems at the Tanzania Airports Authority, particularly for staff whose duties required significant time in the field, and Isanzu (2026), who traced PEPMIS technical difficulties to weak infrastructure and unreliable connectivity.

4.5.2 Inadequate Training and System Usability

A second theme was the insufficiency of training and the resulting difficulty of using the system independently. A senior human-resource manager described the training as a one-off event with no follow-up:

“The pre-launch training was a single half-day event for most staff, which was wholly inadequate. Since the launch, no formal refresher training has been provided at the council level. The learning that has occurred is largely informal and peer-mediated, which means that knowledge gaps and misconceptions from the initial period have never been systematically corrected.” (Rose, 4 July 2026)

A junior officer linked the brief training directly to problems of navigation and to incomplete submissions:

“My greatest challenge with PEPMIS is navigating the system interface, which I find complicated and not at all intuitive. The training we received lasted only one day, which was grossly insufficient. Since then, I have had to rely on a younger colleague whenever I encounter difficulties, and there are features of the system that I have never used because I simply do not understand their purpose, and I worry that this means my performance submissions are incomplete.” (Lisa, 4 July 2026)

These experiences account for the ratings on inadequate training ($M = 4.00$) and navigation difficulty ($M = 3.66$), and they explain why parts of the appraisal cycle are completed incompletely or not at all, depressing both the accuracy of the record and employee satisfaction with how the system measures their contribution ($M = 3.43$). The accounts are consistent with Isanzu (2026), who found user competence compromised by insufficient practical training and usability undermined by complex navigation, and with Kalifumu and Njunwa (2025), who identified capacity-building as the principal requirement for improving PEPMIS adoption in a municipal council setting.

4.5.3 Governance and Supervisory Weakness

The third theme concerned weak supervisory capacity and its corrosive effect on data quality and employee trust. A human-resource respondent explained how untrained supervisors undermined the process:

“Some supervisors in the council have not been adequately trained on how to conduct PEPMIS evaluations, and as a result they either leave staff ratings at default values or rate all employees at the same level without genuine differentiation based on performance. This defeats the purpose of a performance management system entirely, and when employees discover that their supervisor has given everyone the same rating, it breeds cynicism and disengagement from the entire PEPMIS process.” (Zena, 4 July 2026)

An administrative supervisor identified a parallel failure in the review of self-assessment entries:

“Some supervisors approve self-assessment entries without reviewing them seriously, which means inflated or unsupported claims can enter the system unchallenged. The audit trail exists, but it is only useful if someone actively reviews it. Data transparency in PEPMIS is a function of supervisory diligence as much as it is a function of the technology itself.” (4 July 2026)

An HR officer connected supervisory behaviour explicitly to perceived fairness:

“In departments where supervisors are well trained and engaged, perceptions of fairness tend to be positive. In departments where supervisors treat the appraisal as a compliance formality, employees feel the process is arbitrary. The system architecture supports fairness, but supervisory behaviour ultimately determines whether that potential is realised.” (4 July 2026)

These accounts directly explain the supervisory-capacity rating ($M = 3.82$) and identify a governance mechanism that depresses the dependent variable independently of infrastructure. Undifferentiated or unreviewed ratings produce precisely the outcomes recorded on the two weakest fairness items, namely the perception that appraisal outcomes are influenced by personal relationships ($M = 2.84$) and doubts about equal treatment ($M = 3.14$). The finding is consistent with Isanzu (2026), who attributed weakened organisational support to limited leadership involvement and poor coordination, and with Kalifumu and Njunwa (2025), who found that limited stakeholder engagement constrained PEPMIS adoption at Kigamboni Municipal Council. Supervisory readiness, rather than the sophistication of the software, emerges as the critical human interface in PEPMIS.

4.6 Interpretation through Goal-Setting Theory

Interpreted through Goal-Setting Theory, the findings indicate that clear and fair performance goals do not improve performance where the environmental resources required to act on them are unavailable (Locke & Latham, 1990). The pattern in the data maps closely onto the theory. The goal-clarity condition is largely satisfied: the two highest-rated items on the dependent variable concern the clarity of evaluation criteria and of performance expectations, both rated close to 4.00. The feedback condition is not: timely sharing of results was rated at only 3.32, and the qualitative accounts show why, since undifferentiated supervisory ratings convey no information that an employee can act upon. The environmental-constraint and task-complexity moderators, namely unreliable connectivity, limited devices, insufficient training and weak supervisory capacity, were all rated in the high or very high severity band, and they sever the link between goal commitment and consistent use of the system.

Employees who understand and accept their goals are nonetheless unable to convert that commitment into reliable system use, which is precisely the configuration the theory predicts will produce moderate rather than high performance outcomes. Both strands of evidence converge on the conclusion that the difficulties are systemic rather than incidental, that they span infrastructure, governance and human capacity, and that they require coordinated, resource-based intervention rather than technical adjustment alone.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The study concludes that the challenges hindering the effective implementation and use of PEPMIS at Kinondoni Municipal Council are systemic rather than incidental. The dependent variable, the effective implementation and use of PEPMIS in performance management, stood at only a moderate level ($M = 3.36$; $SD = 1.06$), with fairness at 3.39 and transparency and accuracy at 3.32. The five implementation challenges, by contrast, were rated as severe ($M = 3.91$; $SD = 1.00$), led by unreliable connectivity ($M = 4.27$) and inadequate training ($M = 4.00$), and every individual challenge was rated more severely than the overall level of effectiveness achieved.

The internal pattern of the results locates the problem precisely. The aspects of PEPMIS that scored highest, namely the clarity of evaluation criteria and of performance expectations, are properties of the system as designed. The aspects that scored lowest, namely freedom from bias ($M = 2.84$) and freedom from errors and manipulation ($M = 2.88$), are properties of how the system is administered. The qualitative evidence traced the mechanisms connecting the two: unreliable connectivity and device scarcity force retrospective and rushed data entry, which degrades record accuracy; and untrained supervisors apply default or undifferentiated ratings, which destroys both the informational value of feedback and employee confidence in the system's impartiality. PEPMIS therefore possesses the structural features required for effective performance management, but the institutional and infrastructural conditions at the council were not prepared to support it. The gap between the design of PEPMIS and its effect on performance management will persist unless connectivity, training, device provision and supervisory capacity are addressed together rather than sequentially.

5.2 Recommendations

First, because unreliable connectivity and limited device access were the most severe constraints and were shown to operate directly on record accuracy, the national government and the council should fund a digital-readiness assessment to establish the scale of the connectivity, device and power-supply deficits, and should use the results to allocate a dedicated PEPMIS connection, to expand the shared device pool in line with a defined staff-to-device ratio, and to introduce an offline data-capture capability that permits entry without a live connection and subsequent synchronisation. Second, given the severity of the training deficit, the council should introduce a structured and continuous training regime comprising an annual refresher course, accessible on-demand tutorials, and a requirement that appraisal-submission rights be granted only to supervisors who have passed a PEPMIS proficiency assessment.

Third, because weak supervisory capacity was shown to depress perceived fairness more than any other factor, the council should institute compulsory performance-management skills training covering both the technical operation of PEPMIS and the interpersonal competences of feedback, goal-setting dialogue and differentiated rating, supported by routine analytical checks for patterns of uniform or default rating and for self-assessment entries approved without substantive review. Fourth, the council should establish a data-quality and governance framework that assigns clear responsibility for the completeness, timeliness and accuracy of PEPMIS records, and that reports periodically to management on appraisal-cycle compliance rates and on the distribution of ratings by department.

Declaration of Interest

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REFERENCES

- Armstrong, M. (2017). *Armstrong's handbook of performance management: An evidence-based guide to delivering high performance* (6th ed.). Kogan Page.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Isanzu, J. (2026). Exploring human resource practitioners' experiences of using the Public Employee Performance Management Information System (PEPMIS) in managing employee performance in the public service. *Advances in Law, Pedagogy, and Multidisciplinary Humanities*, 4(1), 309–324.
- Kalifumu, H. W., & Njunwa, K. M. (2025). Influence of limited stakeholder engagement in the adoption of PEPMIS by the Kigamboni Municipal Council. *Journal of Governance and Security Studies*, 1(1). <https://doi.org/10.59645/jgss.v1i1.608>
- Komungemwe, T., & Marijani, R. (2025). Performance management system in the higher learning institutions in Tanzania: Horses for courses? *Cogent Education*, 12(1), Article 2453277. <https://doi.org/10.1080/2331186X.2025.2453277>
- Kweka, E. L., & Kitula, P. R. (2025). Effectiveness of the Public Employee Performance Management Information System in the management of teachers' professional activities in secondary schools in Monduli District, Tanzania. *Journal of Research Innovation and Implications in Education*, 9(4), 992–1004.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Prentice-Hall.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705–717. <https://doi.org/10.1037/0003-066X.57.9.705>
- Locke, E. A., & Latham, G. P. (2006). New directions in goal-setting theory. *Current Directions in Psychological Science*, 15(5), 265–268. <https://doi.org/10.1111/j.1467-8721.2006.00449.x>
- Lucumay, C. J. M. (2025). Challenges facing Public Employees Performance Management Information System (PEPMIS) implementation in Arusha City Council, Tanzania. *International Journal of Innovative Research in Engineering & Multidisciplinary Physical Sciences*, 13(6), 1–9. <https://doi.org/10.37082/IJIRMP.S.v13.i6.232772>
- Mollel, H. L., & Rutenge, M. M. (2024). Adoption and use of electronic human resources management systems for service delivery in Tanzania: A case to Tanzania Airports Authority. *African Journal of Empirical Research*, 5(4), 617–626. <https://doi.org/10.51867/ajernet.5.4.50>
- Mwogosi, A., & Kibusi, S. (2024). Unveiling barriers to EHR implementation for effective decision support in Tanzanian primary healthcare: Insights from practitioners. *Health Informatics Journal*, 30(4), Article 14604582241304698. <https://doi.org/10.1177/14604582241304698>
- National Audit Office of Tanzania. (2024). *Performance audit report on development, monitoring and evaluation of competency of staff in the public sector*. <https://www.nao.go.tz>
- Niswaty, R., Basit, M. A., Nur, A. C., & Arhas, S. H. (2023). Effect of application of E-Kinerja assessment system in improving employee performance. *KnE Social Sciences*, 8(5), 1–9. <https://doi.org/10.18502/kss.v8i5.12984>
- Njunwa, K., & Magoiga, P. (2026). The effect of perceived usefulness on the adoption of the Public Employee Performance Management Information System (PEPMIS) in local governments, Tanzania. *East African Journal of Business and Economics*, 9(1), 386–393. <https://doi.org/10.37284/eajbe.9.1.4640>
- Silidion, B. D., & Rutenge, M. M. (2024). Exploring employees' perception of the effectiveness of the Public Employees' Performance Management Information System: A case of the Judiciary of Tanzania. *African Journal of Empirical Research*, 5(4), 1188–1196. <https://doi.org/10.51867/ajernet.5.4.97>
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). SAGE Publications.