

Influence of Digital Performance Management Systems on Employee Retention in County Government Health Departments in Upper Eastern Kenya

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Abstract

This study examined the influence of digital performance management systems on employee retention in county government health departments in Upper Eastern Kenya. The study was anchored on the Technology Acceptance Model (TAM), which explains how perceived usefulness and perceived ease of use influence the acceptance and use of digital systems. A mixed-methods cross-sectional survey design was adopted. The target population comprised 2,480 health workers in Meru, Tharaka-Nithi, Marsabit, Samburu and Isiolo counties, from which a sample of 344 respondents was determined using Yamane's formula. Data were obtained through structured closed-ended questionnaires and interview schedules. Quantitative data were examined using descriptive statistics, Pearson's correlation analysis, and simple linear regression, whereas qualitative information obtained from human resource managers was subjected to thematic analysis. Of the 344 questionnaires administered, 331 were successfully returned and considered valid for analysis, yielding a response rate of 96.22 per cent. Results showed that digital performance management systems were strongly and positively correlated with employee retention ($r = .758$, $p < .001$). The regression model was statistically significant, with digital performance management systems explaining 57.4 per cent of the variation in employee retention. The findings indicate that digital goal setting and appraisal, real-time feedback, and data analytics and reporting can strengthen transparency, recognition and career development processes relevant to retention. The study provides evidence from Kenya's devolved health sector and a basis for strengthening technology-supported performance management while addressing digital skills, infrastructure and implementation challenges.

Keywords: County government, digital performance management, employee retention, health workforce, Technology Acceptance Model.

INTRODUCTION

This study examined the influence of digital performance management systems on employee retention in county government health departments in Upper Eastern Kenya. Employee retention has become an important human resource concern because health systems depend on a stable workforce to maintain continuity, quality and accessibility of services. The World Health Organization (WHO, 2016) identifies attraction, recruitment, development and retention of health workers as central to strengthening health systems, particularly in rural and remote areas where workforce shortages can be more pronounced. Digitalisation has increasingly become part of human resource management because information systems can support performance monitoring, feedback, workforce planning and evidence-based managerial decisions.

At the global level, digital technologies are being incorporated into health and human resource processes to improve the availability and use of workforce information. The WHO (2020) emphasises the importance of reliable workforce information, effective management and supportive working environments in strengthening health worker retention. Davenport and Kalakota (2019) further demonstrate that artificial intelligence and digital technologies can support administrative and information-intensive activities in healthcare, although their implementation depends on organisational and human factors. These studies establish the potential of technology to improve management processes, but they do not directly establish whether digital performance management translates into employee retention in devolved public health systems.

In African health systems, the challenge is compounded by workforce shortages, uneven distribution of staff, infrastructure constraints and differences in institutional capacity. Mirkuzie et al. (2025), in Ethiopia, developed a digitally enabled performance management and incentive intervention that combined performance indicators, digital supervision and feedback within a community health information system. Their work demonstrates that digital performance information can be integrated into supervision and incentive processes. However, the

study focused on the design and implementation of an intervention in a community-health programme rather than employee retention within county government health departments. Thus, evidence from African settings supports the relevance of digital performance management while leaving uncertainty about its relationship with retention in decentralised public health employment.

The Kenyan context is particularly important because health service delivery and routine human resource management are devolved to county governments. Nyawira et al. (2022) found that county health systems face challenges involving workforce adequacy, skill mix, distribution, contractual arrangements, incentives and supervision. These factors have implications for motivation and the ability of counties to maintain an effective health workforce. The Kenya Health Facility Census further provides national evidence on variation in health system capacity and staffing conditions across counties (Ministry of Health, 2023). However, these sources do not specifically examine the role of digital performance management systems in employee retention.

Digital performance management systems refer to technology-supported processes used to set performance expectations, monitor work activities, provide feedback, document achievements and generate information for appraisal and managerial decision-making. In this study, the construct was operationalised through three dimensions: digital goal setting and appraisal tools; real-time, system-based feedback; and data analytics and reporting. These dimensions were selected because they represent the main ways in which digital systems can influence the employee experience of performance management by improving clarity of expectations, timeliness of feedback and accessibility of performance information.

The Upper Eastern counties of Meru, Tharaka-Nithi, Marsabit, Samburu and Isiolo provide an important context for examining this relationship because they differ in geographical characteristics, health-system capacity and workforce conditions. The WHO (2020) notes that retention in rural and remote areas requires context-sensitive workforce policies, while evidence

from Kenya indicates that county-level HRH management is affected by staffing shortages, distribution, contractual arrangements, incentives and supervision (Nyawira et al., 2022). Digital performance management may therefore provide an additional mechanism for improving transparency, feedback and recognition, but its usefulness depends on whether employees can access and use the systems effectively.

The problem is that conventional performance management can be constrained by delayed assessments, limited access to performance information, inconsistent feedback and weak links between performance results and employee development. Such limitations may reduce employees' understanding of expectations and their perceptions of fairness and recognition. Digital systems have the potential to address these weaknesses by allowing performance information to be captured and communicated more continuously. Nevertheless, technology does not automatically produce positive workforce outcomes; its usefulness, ease of use, infrastructure, training and managerial support can determine whether employees actually benefit from the systems (Davis, 1989; Venkatesh & Davis, 2000).

Existing empirical evidence therefore leaves an important gap. Research has demonstrated the relevance of digital performance management and broader digital HR systems to performance monitoring, supervision and employee experiences, but relatively little evidence directly tests whether digital performance management systems influence employee retention in Kenya's devolved health sector. In particular, evidence is limited on whether digital goal setting and appraisal, real-time feedback, and data analytics and reporting are associated with employees' intention to remain, perceived job stability, willingness to recommend the employer and opportunities for career growth. This study addresses that gap by examining employees in the five Upper Eastern counties.

The study therefore aimed to determine the effect of digital performance management systems on employee retention in county government health departments in Upper Eastern Kenya. The findings are expected to assist county governments, County Public

Service Boards and health-sector managers in understanding how digital performance information can be used to strengthen transparent performance management and workforce stability, while also identifying implementation challenges that may limit the benefits of digital systems. To establish this influence, the study examined the relationship between digital performance management systems and employee retention in county government health departments in Upper Eastern Kenya.

LITERATURE REVIEW

Empirical Literature Review

Mirkuzie et al. (2025) examined the design of a digitally enabled performance management and incentive intervention for community health programmes in Ethiopia. The intervention incorporated performance indicators, digitally supported supervision, mentorship and feedback. The study is relevant because it demonstrates how digital performance information can be connected to supervisory and incentive processes rather than merely storing employee records. Its main strength is the explicit integration of digital performance measures with management processes. However, the study was focused on intervention design and community health programmes, and it did not directly test employee retention as the dependent outcome. The present study extends this evidence by statistically examining the relationship between digital performance management systems and employee retention among county health workers in Kenya.

Nyawira et al. (2022) investigated human resource management for health and its implications for health system efficiency in Kenya using a mixed-methods case study approach. The study found that staffing shortages, maldistribution, contractual arrangements, delayed salaries, incentives and supervision affected health-system efficiency and health-worker motivation. Its strength lies in combining interviews with document and secondary-data review, thereby providing contextual evidence on county HRH management. However, the study did not isolate digital performance management as a predictor of employee retention. The present study addresses this conceptual gap by focusing specifically on digital

performance management systems and by measuring employee retention directly.

Shikuku et al. (2022) examined staff retention following Emergency Obstetrics and Newborn Care training in five Kenyan counties using a cross-sectional review of training records and logistic regression. The study showed that retention varied by county, cadre and time since training, demonstrating that workforce retention in Kenya is influenced by contextual and employment-related factors. The study is methodologically useful because it examined actual retention rather than relying only on satisfaction. Nevertheless, it did not investigate technology-enabled performance management. The current study therefore shifts attention from training-related retention to the role of digital performance management processes in county health departments.

Alajlani and Yesufu (2022) examined human resource practices and employee retention in three private higher-education institutions in the United Arab Emirates. Their study provides evidence that HR practices are relevant to retention, but the institutional setting differs substantially from Kenya's devolved public health sector. The study therefore provides broader HRM evidence rather than direct contextual evidence for county health departments. This limitation reinforces the need for context-specific evidence from public health systems, where staffing arrangements, public-sector procedures and geographical conditions may influence how digital performance systems are experienced by employees.

The reviewed studies collectively demonstrate that digital performance tools and broader HR practices can improve information availability, supervision and workforce management, while Kenyan evidence shows that staffing, incentives, contractual conditions and management practices remain important to workforce outcomes. However, the reviewed evidence does not sufficiently isolate digital performance management systems as a determinant of employee retention in county government health departments in Upper Eastern Kenya. The study aims to bridge this gap by analysing three core dimensions of DPMS: digital goal-setting and appraisal tools, real-time system-generated feedback, and data analytics

and reporting, and their relationship with employee retention. It further combines quantitative evidence with qualitative insights from HR managers to explain how the systems operate in practice.

Theoretical Review

The Technology Acceptance Model (TAM), developed by Davis (1989), explains users' acceptance and use of information technology through perceived usefulness and perceived ease of use. Perceived usefulness reflects the extent to which an individual believes that using a system can improve job performance, while perceived ease of use concerns the degree to which the system is considered simple to operate with little effort. Davis demonstrated that these beliefs are important determinants of technology acceptance. Venkatesh and Davis (2000) subsequently extended TAM by showing that social influence and cognitive instrumental processes can shape perceived usefulness and usage intentions. The model is therefore appropriate for a study of digital performance management because the effectiveness of DPMS depends partly on whether employees perceive the systems as useful, understandable and relevant to their work.

TAM is particularly suited to this study because the independent variable is technology-enabled performance management. Digital goal-setting and appraisal tools, real-time feedback and data analytics and reporting require employees and supervisors to interact with digital systems. When employees perceive digital systems as useful and easy to operate, they are more likely to use them regularly. Conversely, systems that are difficult to navigate or poorly integrated with existing work processes may experience limited utilisation. The model therefore provides a theoretical mechanism through which the characteristics and use of DPMS can influence employees' experiences of performance management and, indirectly, retention-related outcomes.

The model further acknowledges that technology acceptance is influenced by factors beyond the characteristics of the technology itself. Training, organisational support, system quality and task relevance may influence users' perceptions of usefulness and ease of use (Venkatesh & Davis, 2000).

This is important in county health departments because digital performance systems may be affected by digital skills, infrastructure and managerial support. Thus, TAM helps explain not only whether a digital performance system exists, but also why employees may use it differently and why the expected benefits for performance management and retention may vary across workplaces.

In the present study, TAM was used to explain the adoption and utilisation of digital performance management systems in county government health departments. The theory supports the expectation that systems that are useful, easy to use and relevant to employees' work are more likely to be consistently utilised for performance goal setting, appraisal, feedback and reporting. Consistent use can improve the timeliness and transparency of performance management and may strengthen recognition, development and perceived organisational support, which are relevant to employee retention. The theory therefore provides a coherent explanation for examining DPMS as an organisational technology and employee retention as an important workforce outcome.

METHODOLOGY

The study adopted a mixed-methods cross-sectional survey design. The quantitative component assessed employees' perceptions of digital performance management systems (DPMS) and employee retention and examined the statistical relationship between the two variables, while the qualitative component involved interviews with human resource managers to provide contextual explanations of DPMS implementation and its influence on employees' experiences.

The target population comprised 2,480 health workers in the county government health departments of Meru, Tharaka-Nithi, Marsabit, Samburu and Isiolo counties, based on the 2023 county human resource records. The required sample size was determined using Yamane's (1967) simplified formula for finite populations. Proportionate stratified sampling was used, with counties serving as geographical strata and

clinical and non-clinical cadres constituting occupational strata. Respondents were subsequently selected randomly from the relevant county human resource lists.

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = required sample size; N = target population; e = margin of error.

With N = 2,480 and e = 0.05:

$$n = 2,480 / [1 + 2,480(0.05^2)]$$

$$n = 344.44$$

$$n = 344 \text{ (approximately)}$$

Therefore, the final sample size was 344 respondents.

Data were collected using structured closed-ended questionnaires and interview schedules. The questionnaire measured the three dimensions of DPMS, namely digital goal-setting and appraisal tools, real-time system-based feedback, and data analytics and reporting, together with employee retention. The interview schedule contained open-ended questions addressing DPMS implementation, feedback, appraisal, recognition, career development, and barriers to digital system use.

Quantitative data were coded and analysed using SPSS version 31. Descriptive statistics, including means and standard deviations, were used to summarise the data. Pearson's Product-Moment correlation analysis was conducted to determine the direction and strength of the association between DPMS and employee retention, while simple linear regression was used to assess the predictive relationship and test the study hypothesis at the 5 per cent significance level. Qualitative data were transcribed, coded and analysed thematically to complement and contextualise the quantitative findings.

Ethical requirements for research involving human participants were observed. Participation was

voluntary, and respondents were informed about the study's purpose, their right to decline participation or withdraw, and the measures established to maintain confidentiality. The researcher obtained the necessary ethical clearance, research authorisation and county-level permission before data collection.

RESULTS AND DISCUSSION

The following were the results and discussions of the study:

Demographic Characteristics of the Respondents

The study achieved a very high response rate of 96.22 per cent, with 331 of the 344 distributed questionnaires returned and found suitable for analysis. The demographic findings showed a relatively balanced gender distribution, with females constituting 51.4 per cent and males 48.6 per cent of the respondents. Most respondents (50.8%) were aged 30-39 years, followed by those aged 40-49 years (21.8%), 20-29 years (19.9%), and 50 years and above (7.6%). Regarding years of service, the largest proportion (42.6%) had worked in the county government health departments for 6-10 years, followed by 30.2 per cent with 1-5 years and 27.2 per cent with 11 years or more. The respondents represented a relatively experienced workforce, providing an appropriate basis for assessing augmented human resource management practices and employee retention in county government health departments in Upper Eastern, Kenya.

Digital Performance Management Systems and Employee Retention

The study sought to establish the influence of digital performance management systems on employee retention in county government health departments in Upper Eastern, Kenya. Digital performance management systems were analysed according to the level of technology used for setting performance expectations, monitoring employees' performance, giving feedback, and creating performance-related information. Indicators that were used for the construct evaluation were digital goal-setting and appraisal tools, real-time system-based feedback systems and data analytics and reporting.

Participants were asked to rate how much they agree with each of the statements concerning the use and effectiveness of digital performance management systems in the county government health departments. Items were rated on a five-point Likert scale from 1 = Strongly Disagree to 5 = Strongly Agree. The analysis aimed to find out if digital performance management systems improve the work experience with performance management and, in turn, affect the intention to stay in the company.

Descriptive, correlation and regression analyses are used to present the findings under this objective. The implementation of digital performance management systems was evaluated using descriptive statistics to summarise respondents' perceptions. Pearson's correlation analysis was then conducted to establish the strength and direction of the relationship between digital performance management systems and employee retention. Regression analysis was subsequently undertaken to assess the statistical significance of this relationship. The results are interpreted in relation to the second research hypothesis, H_{02} , which states that there is no statistically significant relationship between digital performance management systems and employee retention outcomes among employees in county government health departments in Upper Eastern, Kenya.

Descriptive Statistics on Digital Performance Management Systems and Employee Retention

This section presents the descriptive findings on digital performance management systems and their relevance to employee retention in county government health departments in Upper Eastern, Kenya. The analysis examined respondents' perceptions of the extent to which county health departments have integrated digital technologies into employee performance management processes. The construct was assessed using indicators relating to digital goal-setting and appraisal tools, real-time system-based feedback systems and data analytics and reporting. Respondents rated statements measuring these indicators according to their level of agreement on a five-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The responses were summarised using mean scores and standard

deviations to establish the general level of agreement and variation in respondents' views. Higher mean scores indicate greater agreement that the respective digital performance management practices are implemented within the health departments. The results are presented in Table 1.

Table 1: Descriptive Statistics on Digital Performance Management Systems

Descriptive Statistics	N	Mean	Std. Deviation
Employees are required to record completed tasks (e.g., patient visits, procedures, reports) using mobile devices on a daily basis.	331	3.8036	1.12309
The mobile recording system allows employees to categorize tasks by type, time taken and urgency, providing detailed work activity data.	331	3.7009	1.18499
Supervisors provide immediate, specific feedback through mobile platforms when employees complete critical tasks or report incidents.	331	3.6435	1.11183
Mobile feedback includes both recognition for good performance and constructive suggestions for improvement, rather than generic comments.	331	3.7492	1.00331
Each facility has access to a digital dashboard that displays real-time individual and team performance metrics (e.g., task completion rates, quality indicators).	331	3.5498	1.22589
Employees can use the dashboard to compare their performance against unit averages, personal historical data, or set targets.	331	3.4955	1.17647
Performance data collected from mobile recording and dashboards is formally integrated into annual or quarterly employee appraisal processes.	331	3.6163	1.05640
Appraisal outcomes based on digital performance data directly influence decisions about promotions, training opportunities, or other career development actions.	331	3.5227	1.23163
Average	331	3.6352	1.13920

Source: Survey Data, (2026)

The results in Table 1 show the level and existence of digital performance management systems in county government health departments in Upper Eastern, Kenya. The average item scores ranged from 3.50 to 3.80 (Range = 0.31). The perception that employees are required to record completed tasks, such as patient visits, procedures and reports, using mobile devices on a daily basis had the highest rating (mean score = 3.80 and SD = 1.12), followed by the view that mobile feedback includes recognition for good performance and constructive suggestions for improvement (mean score = 3.75 and SD = 1.00). This was followed by the perception that the mobile recording system enables employees to classify tasks by type, time of task and urgency (mean score = 3.70 and SD = 1.18).

The lowest rated aspect was the perceived ability to compare employee performance with unit averages,

historical performance, or set targets using digital dashboards, with a mean score of 3.50 and SD = 1.18. Next, the digital dashboards that recorded data in real time for individual and team performance measures became available, with a mean score of 3.55 and SD = 1.23. When it comes to the feeling that digital appraisal results affect promotions, training opportunities and other career development activities, the mean score was 3.52 and the SD = 1.23. The overall mean score is 3.6352, which suggests a high level of agreement that digital PM systems have been introduced and applied by county government health departments. The overall standard deviation of 1.1392 suggests that the extent of the implementation of these systems is not very different from one respondent to another. The results suggest that digital performance management is relatively mature, for example, when it comes to activity logging and performance feedback, although stronger linkages between digital appraisal results and

career development, and increased usage of digital dashboards, would improve the effectiveness of digital performance management.

Correlation Analysis between Digital Performance Management Systems and Employee Retention

The study sought to establish the influence of digital performance management systems on employee retention in county government health departments in Upper Eastern, Kenya. As conceptualised in the study, digital performance management systems were measured using three indicators, namely digital goal setting and appraisal tools, real-time system-based feedback systems and data analytics and reporting. Employee retention was assessed using indicators relating to intention to remain in the county health service, willingness to recommend the county as an employer, perceived job security and stability and opportunities for career growth and advancement. Correlation analysis was therefore conducted between

the indicators of digital performance management systems and employee retention.

The study used Pearson Product-Moment correlation to examine the strength and direction of the association between digital performance management systems (independent variable) and employee retention (dependent variable). Values of Pearson's correlation coefficient fall between -1 and $+1$. The upper limit represents a perfect positive linear association, while the lower limit represents a perfect negative linear association. Coefficients near zero indicate little or no linear association. The correlation coefficients were assessed in terms of both magnitude and statistical significance, using a 1 per cent significance level to determine whether the observed relationships were statistically significant. The correlation results provide the basis for assessing whether the use of digital performance management systems is associated with employee retention and subsequently inform the testing of the second research hypothesis.

Table 2: Correlation Analysis between Digital Performance Management Systems and Employee Retention

Correlations		ER	DPMS
ER	Pearson Correlation	1	.758**
	Sig. (2-tailed)		.000
	N	331	331
DPMS	Pearson Correlation	.758**	1
	Sig. (2-tailed)	.000	
	N	331	331

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Survey Data, (2026)

The results in Table 2 show the relationship between digital performance management systems (DPMS) and employee retention (ER) in county government health departments in Upper Eastern, Kenya. Results show that there is a strong positive correlation between DPMS and employee retention ($r = 0.758$) based on the Pearson correlation coefficient. This suggests that increased use and effectiveness of digital performance management systems are linked to increased employee retention. This association was statistically significant ($p=0.000<0.001$). The strong correlation implies that there is a significant relationship between digital performance management systems and

employee turnover. Digital recording of work activities, feedback on performance as necessary, access to performance dashboards and the use of performance data for appraisal and career development may help employees understand performance expectations and provide more transparency in managing their work. Such practices can, in turn, enhance the engagement of employees and their readiness to stay in the county health departments.

Regression Analysis on Digital Performance Management Systems and Employee Retention

The study examined the influence of digital performance management systems on employee retention in county government health departments in Upper Eastern Kenya. Regression analysis was used to assess whether the implementation of digital performance management systems significantly predicts employee retention and to determine the proportion of variation in employee retention explained by the systems. Digital performance management systems were conceptualised using three indicators, namely digital goal setting and appraisal tools, real-time system-based feedback systems and data analytics and reporting, while employee retention constituted the dependent variable.

Simple linear regression was conducted by specifying digital performance management systems as the independent variable and employee retention as the dependent variable. The analysis considered the coefficient of determination (R^2), adjusted R^2 , F-statistic, regression coefficient (β), t-statistic and significance value (p-value). R^2 and adjusted R^2 indicated the extent of variation in employee retention explained by digital performance management systems, while the F-statistic and associated p-value

provided evidence regarding the overall significance of the regression model.

The regression coefficient was further examined to establish the direction and magnitude of the effect of digital performance management systems on employee retention. A positive regression coefficient would indicate that an increase in the adoption and utilisation of digital performance management systems is associated with an increase in employee retention, whereas a negative coefficient would suggest an inverse effect. The coefficient was evaluated for statistical significance at the 5 per cent level. A p-value below 0.05 was considered evidence for rejecting the null hypothesis, whereas a p-value above 0.05 indicated insufficient evidence to reject it.

The regression results were therefore used to test the second hypothesis H_{01} , which states that *there is no statistically significant relationship between digital performance management systems and employee retention outcomes among employees in county government health departments in Upper Eastern, Kenya.*

The model summary, ANOVA, and regression coefficients are presented in the following tables.

Table 3: Model Summary for Digital Performance Management Systems and Employee Retention

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.758 ^a	.574	.573	.29145
a. Predictors: (Constant), Digital Performance Management Systems				

Source: Survey Data, (2026)

The model in Table 3 assesses how digital performance management systems predict employee retention in county government health departments in Upper Eastern, Kenya. The R^2 value of 0.574 indicates that approximately 57.4 per cent of the variation in employee retention can be explained by digital

performance management systems. This suggests that digital performance management practices are important predictors of employee retention. The adjusted R^2 of 0.573 further indicates that the model maintains substantial explanatory power after adjustment for the predictors included.

Table 4: ANOVA^a For Digital Performance Management Systems and Employee Retention

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.649	1	37.649	443.225	.000 ^b
	Residual	27.946	329	.085		
	Total	65.595	330			
a. Dependent Variable: Employee Retention						
b. Predictors: (Constant), Digital Performance Management Systems						

Source: Survey Data, (2026)

The Analysis of Variance (ANOVA) results for the regression model investigating the relationship between digital performance management systems and employee retention are presented in Table 4. The findings indicate that the regression model was statistically significant ($F = 443.225$, $p = 0.000 < 0.05$), demonstrating that digital performance management

systems significantly explain variations in employee retention in county government health departments in Upper Eastern, Kenya. These findings indicate that digital performance management systems significantly predict employee retention, and the regression model meaningfully explains the relationship between the two variables.

Table 5: Coefficients^a for Digital Performance Management Systems and Employee Retention

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.470	.057		8.210	.000
	DPMS	.741	.035	.758	21.053	.000
a. Dependent Variable: Employee Retention						

Source: Survey Data, (2026)

Table 5 reports the regression coefficients examining the effect of digital performance management systems on employee retention in county government health departments in Upper Eastern Kenya. The findings indicate that digital performance management systems have a positive and statistically significant effect on employee retention ($p = 0.000 < 0.05$). The estimated regression model, $Y = 0.470 + 0.741X_2$, suggests that employee retention increases by 0.741 units for every one-unit increase in digital performance management systems, with other factors held constant. The standardised beta coefficient of 0.758 indicates a strong positive effect, demonstrating that digital performance management systems make a substantial contribution to employee retention. The constant value of 0.470 ($p = 0.000 < 0.05$) indicates the expected level of employee retention when digital performance management systems are absent. Both the constant and the regression coefficient were statistically significant, with each yielding a p-value of 0.000, confirming that the observed relationship is

statistically significant. Therefore, the second hypothesis H_{01} , which stated that *there is no statistically significant relationship between digital performance management systems and employee retention outcomes among employees in county government health departments in Upper Eastern, Kenya*, was rejected. The findings therefore confirm that digital performance management systems significantly influence employee retention in county government health departments in Upper Eastern, Kenya.

The regression equation is expressed as:

$$Y = 0.470 + 0.741X_2$$

Where:

Y = Employee retention

X_2 = Digital performance management systems

0.470 = Y-intercept (constant), representing the estimated level of employee retention when digital performance management systems are zero.

0.741 = Regression coefficient, representing the estimated increase in employee retention resulting from a one-unit increase in digital performance management systems, holding other factors constant.

The findings were supported by the Resource-Based View (RBV) theory, which argues that organisations can achieve sustained competitive advantage by developing, managing and effectively utilising valuable, rare, inimitable and non-substitutable resources and capabilities. Effective utilisation of these systems can strengthen employees' perceptions of fairness, recognition and organisational support, thereby encouraging them to remain within the organisation. The findings are consistent with Bourne et al. (2024), who found that digital performance management systems enhanced employee trust, professional development and retention by promoting transparent performance management, although excessive monitoring could negatively affect psychological safety. Similarly, Nishimura and Sato (2022) established that digital HR systems, including performance tracking and online feedback, improved job satisfaction and reduced turnover intentions among healthcare workers.

The findings also agree with Akinwale and George (2023), who found that electronic performance management systems improved openness, fairness and employee commitment in public hospitals. However, these studies largely examined general HRIS or eHRM practices rather than isolating digital performance management systems as a distinct predictor of employee retention. Therefore, the findings of the current study extend existing empirical evidence and the RBV perspective by demonstrating that digital performance management systems constitute a valuable organisational capability that can strengthen employee retention in county government health departments in Upper Eastern Kenya.

Qualitative Analysis

Qualitative data was also sought from the human resource managers regarding the influence of digital performance management systems, including online appraisals, performance monitoring and feedback tools, on employee retention in county government health departments in Upper Eastern, Kenya.

In response, one of the HR managers (H5) observed that;

Digital performance management systems have improved the way we monitor and evaluate employee performance in the County. Through online appraisal platforms, supervisors are able to set performance targets, monitor progress and provide timely feedback to employees. The systems also provide reliable records of employee performance, which are useful when identifying training needs, recognising good performance and making decisions on career development. Employees are more likely to remain in the County when they feel that their performance is fairly assessed and that their efforts are recognised.

Another HR manager (H2) added;

The use of digital performance management has enhanced transparency and accountability in the appraisal process. Employees are able to understand their performance expectations and receive feedback on areas where they need to improve. We also use the information generated from these systems to support decisions regarding training, promotions and other development opportunities. However, challenges such as limited digital skills, inadequate technological infrastructure and inconsistent use of the systems by some supervisors can affect their effectiveness. Despite these challenges, digital performance management has contributed to better employee engagement and has the potential to strengthen commitment and retention within the County.

The qualitative findings imply that digital performance management systems contribute positively to employee retention by promoting transparency, accountability, timely feedback and fair performance assessment within county government health departments in Upper Eastern, Kenya. The HR managers indicated that online appraisal platforms enable supervisors to set clear targets, monitor employee progress and provide timely feedback, while the performance records generated by these systems support decisions on training, recognition, promotion

and career development. This suggests that employees are more likely to remain in the County when they understand what is expected of them, receive constructive feedback and perceive that their performance is fairly evaluated and recognised. However, the findings also imply that the effectiveness of digital performance management systems is constrained by limited digital skills, inadequate technological infrastructure and inconsistent utilisation by supervisors. In general, the qualitative evidence reinforces the quantitative findings by suggesting that effective use of digital performance management systems can strengthen employee engagement, commitment and retention, provided that employees and supervisors are adequately supported to use the systems effectively.

CONCLUSION AND RECOMMENDATIONS

Conclusion: The study established that digital performance management systems were significantly associated with employee retention in county government health departments in Upper Eastern Kenya. The systems were most strongly reflected in digital recording of work activities and mobile-based feedback, while the use of dashboards and the linkage of digital appraisal results to career-development

decisions were comparatively less developed. The quantitative findings demonstrated a strong positive relationship, whereas the qualitative evidence identified transparency, timely feedback, recognition, and access to career-development information as key mechanisms through which DPMS may enhance employee retention. The study therefore contributes context-specific evidence on the role of technology-enabled performance management in a devolved public health system. Nevertheless, the cross-sectional design limits causal interpretation, and future research should examine the relationship over time and across additional counties and cadres.

Recommendation: County Public Service Boards should strengthen the use of digital performance management systems in managing and developing healthcare employees. The Boards should ensure that digital performance information is used objectively in employee appraisals, feedback, promotion, training and career progression. Clear performance indicators should be communicated to employees to enhance transparency and confidence in the performance management process.

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