Moderating role of technology acceptance on the relationship between digital HRM practices and organizational performance: Evidence from organizations in Dar es Salaam and Dodoma cities, Tanzania

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ABSTRACT

Digital transformation has altered human resource management (HRM) worldwide, but its performance outcomes in emerging economies are not yet well researched, especially the conditional role of user acceptance. This paper investigates the moderating role of technology acceptance on the relationship between digital HRM practices and organizational performance in Tanzania. The research is based on the Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), and Resource-Based View (RBV). The hypotheses are that digital HRM practices positively influence performance, technology acceptance directly influences the main effect, and acceptance enhances it. The survey was a quantitative cross-sectional study of 304 ICT and HR professionals and managers in all public and private organizations in Dar es Salaam and Dodoma, selected using purposive sampling. The data were analyzed using partial least squares structural equation modeling (PLS-SEM) in SmartPLS 4. Findings show that digital HRM practices contribute to organizational performance in a significant and positive manner, technology acceptance has a direct and positive effect, and acceptance moderates the relationship positively. The model is a strong predictive model that explains 58% of the variance in performance. Theoretically, this research takes a step toward the integration of personal acceptance variables and organizational resource perspectives in an African context. In practice, user-focused training, user-friendly interfaces, and change management should be prioritized in organizations to enhance the benefits of digital HRM and achieve long-term competitive advantage. To facilitate the introduction of inclusive and sustainable HRM change across Tanzania, policymakers must implement acceptance-based interventions within national strategies for a digital economy, public sector reforms, and Vision 2050 initiatives.

Keywords: Digital HRM, e-HRM, Organizational Performance, Technology Acceptance, Tanzania

I. INTRODUCTION

In a fast-paced digital revolution, digital human resource management (HRM) is becoming a widely embraced organizational practice throughout the world in an attempt to simplify operations and improve decision-making and competitive advantage. Digital HRM refers to the adoption of information technologies into main HR processes like recruitment, performance appraisal, training, compensation, and employee relations and replaces a manual system with an automated and data-driven one (Ruiz et al., 2024). The empirical evidence has continually shown that such practices have a positive impact on the performance of the organizations by enhancing the efficiency of the operations undertaken, cutting down the costs, and engaging in innovations. An extensive meta-analysis established moderate positive evidence between the use of digital HRM and the main performance indicators, such as productivity, financial measurements, and employee-related indicators (Theres & Strohmeier, 2023). Likewise, the other meta-analytic review has determined that the adoption of e-HRM is associated with the improvement of the overall organizational performance with greater impacts when implemented in an environment with a high level of information and communication technology (ICT) infrastructure (Zhou et al., 2022). These results highlight the strategic importance of digital HRM as a sustainable organization success-driving tool in both developed and emerging markets.

Although these global developments have been made, the actualization of the digital HRM benefits has not been confined, especially in the developing economies where infrastructural, cultural, and human factors are highly impeding. The implementation of e-HRM systems in sub-Saharan Africa has commenced by the private and public sector agencies to modernize service delivery and enhance accountability, but the adoption has been low given the lack of digital infrastructure, skills and resistance to change (Amoako et al., 2023). This situation is the case in Tanzania. With the

country working on its National Digital Economy Strategy and Vision 2025, companies in Dar es Salaam, which is the commercial and economic center of the country, and Dodoma, which is the administrative center, are subjected to distinct pressure to digitalize HRM in the context of swift urbanization, reforms in the public sector, and growth of the private sector. However, a lot of organizations still use fragmented or hybrid systems, which lead to the lack of optimum HR productivity and the uneven improvement of performance. Though individual case analyses have underscored the possibilities of human capital management information systems within Tanzanian state-owned institutions, little systematic empirical research has been done to investigate the overall relationship between digital HRM activities and organizational performance within this context.

A research issue is found in the inconsistent transfer of digital HRM investments to a real performance change. Though digital tools may be associated with saved costs, quicker processes, and talent management, their performance depends on end-user acceptance rather than on technological sophistication. Absence of employee buy-in will mean that no matter how advanced the platforms are, they will be underutilized, and thus the resources will be wasted and performance improvement will be missed. The given gap is particularly high in the case of the dual-city environment of the Tanzanian setting when organizations in Dar es Salaam work in a dynamic setting of the private sector of the economy and those in Dodoma in a bureaucratic setting of the public sector, both of which operate at different digital literacy and infrastructure preparedness levels. Available sources (Akankunda et al., 2024) indicate that other emerging economies have indicated that technology acceptance has the potential of mediating the digital HRM-performance relationship, but no research has empirically examined this moderating effect in the context of the Tanzanian organisations. Such a gap is of strategic importance not only to theoretical development but also to policy implication because the Tanzanian nation needs to embrace digital technologies to become a middle-income country and enhance the delivery of public services.

The current research is based on the Technology Acceptance Model (TAM) initially introduced by Davis (1989) that assumed perceived usefulness and perceived ease of use to be the major factors influencing the attitude of users towards and real use of the new technologies. TAM is extensively proven in information systems literature and has been generalized to HRM settings and provides a powerful framework through which to understand the differences in performance gains derived by some organizations through digital HRM as compared to others (Menant et al., 2021). To supplement TAM, the research employs the sociotechnical systems lenses and principles of the resource-based view to state that digital HRM practice could be viewed as a strategic resource, the value of which depends on human factors of acceptance. Combining these theoretical perspectives, the study is no longer focused on direct-effect models, but it seeks to analyze conditional relationships to add to subtle insights on the technology-enabled HRM in the context of the developing countries. This empirical paper aims at exploring the mediating effect of technology acceptance in the correlation between digital human resource management practices and the performance of organizations by using the evidence of organizations in the cities of Dar es Salaam and Dodoma in Tanzania.

1.1 Research Objectives

i. To determine the level and nature of digital HRM practices embraced by the organizations in the two cities
ii. To evaluate the direct relationship between digital HRM practices and organization performance
iii. To evaluate the direct relationship between technology acceptance and organizational performance
iv. To establish the degree to which technology acceptance moderates the influence of digital HRM practices on organizational performance.

II. LITERATURE REVIEW

2.1 Theoretical Review

The theoretical basis of the study is a combination of the Technology Acceptance Model (TAM) (Davis, 1989), the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), and the Resource-Based View (RBV) of the firm (Barney, 1991). TAM and UTAUT describe how people adopt digital HRM practices in terms of perceived usefulness, ease of use, and facilitating conditions, whereas RBV suggests that such technologies will lead to the development of sustained competitive advantage as an effective usage. This integrated lens puts into perspective the study of how technology acceptance mediates the effect of digital HRM on organizational performance in Tanzania.

2.1.1 Technology Acceptance Model (TAM)

Adoption described by TAM (Davis, 1989) is based on the concept of perceived usefulness (job performance enhancement) and perceived ease of use (effort required). Low perceived usefulness in sub-Saharan Africa is due to infrastructural barriers and low skills, which lowers the use of digital HRM, as evidenced by moderate adoption in Tanzania based on compatibility and relative advantage (Faustine & Rachmawati, 2024). The hybrid systems remain where ease is suspected.

2.1.2 Unified Theory of Acceptance and Use of Technology (UTAUT)

The United Theory of Acceptance and Use of Technology (UTAUT) is a model created by Venkatesh et al. (2003) that incorporates eight other models to describe user acceptance and adoption of the information technology in the organizational setting. It defines four fundamental determinants (performance expectancy (usefulness), effort expectancy (ease of use), social influence, and facilitating conditions) that cause behavioral intention and actual use, which are moderated by such factors as gender, age, experience, and voluntariness. In sub-Saharan Africa, the digital HRM adoption is not embraced due to low facilitating conditions (e.g., infrastructure, skills), which explains why it has not achieved faster progress despite global trends (Venkatesh et al., 2003).

2.1.3 Resource-Based View (RBV) of the Firm

Based on the previous discussion, the Resource-Based View (RBV), which was developed by Barney (1991), holds that the long-lasting competitive advantage is based on the unique, valuable, rare, imperfectly imitable, and non-substitutable (VRIN) resources and capabilities of a firm. In contrast to the external market-oriented theories, RBV lays stress on the internal resource heterogeneity and immobility as the source of high performance. With the introduction of e-HRM systems in digital HRM, when combined with human acceptance, more advanced e-HRM systems in Tanzania (e.g., within privately run organizations in Dar es Salaam) can be strategic resources through which the firms can outcompete competitors in sub-Saharan Africa in terms of adoption gaps (Barney, 1991).

2.2 Empirical Review

2.2.1 Level and Character of Digital HRM Practices

Empirical studies always report that there is an increasing trend in the adoption of digital HRM practices worldwide, but sub-Saharan Africa has not been able to adopt it. Priyashantha and Chandradasa (2023) conducted a systematic literature review to synthesize 20 studies (2010-2021) and offer six thematic clusters of e-HRM adoption, where some of the factors are perceived usefulness, organizational support, and outcomes like improved strategic value creation. In Africa, e-recruitment, e-selection, e-performance appraisal, e-training, and e-learning modules have been widely used in Ghana by multinational corporations due to the necessity to be efficient and make decisions based on data (Asamoah-Appiah et al., 2024).

In the context of Tanzania, the recent data regarding AI-powered digital HRM in medium enterprises indicate that there are moderate adoption rates, mostly in recruitment, onboarding, and performance tracking, and are affected by the relative advantage, compatibility, and competitive pressure (Faustine & Rachmawati, 2024). Electronic HRM systems of staff management support have also been implemented in public universities in Tanzania, but because of the infrastructural and skills limitations, hybrid manual-digital systems continue to be common (Mbamba & Sanga, 2024). These investigations have shown that the Dar es Salaam-based private organizations are at the forefront of advanced digital HRM integration, whereas Dodoma-based public institutions are lagging behind, as there are differences in the level of digital infrastructure and policy support. All literature sources emphasize the necessity of situational measuring of the scope and nature of adoption in the dual-city context of Tanzania.

2.2.2 Direct Relationship between Digital HRM Practices and Organizational Performance

The existing empirical evidence indicates that there is a positive direct relationship between digital HRM practices and the organizational performance, and the magnitude of effects differs depending on the context and measurement. A mediated model was tested by Alomari (2023) on Jordanian organizations and shown to be not significant in the direct relation between e-HRM and performance; however, the indirect relation with employee engagement was observed. Ghanaian research on e-HRM tools and multinational companies, on the contrary, indicated a strong positive correlation ($\beta = 0.034$, $p < 0.05$) between e-HRM tools and non-financial performance measures, including employee productivity, service quality, and innovation, with the model accounting for 77.7% of the variance in performance (Asamoah-Appiah et al., 2024). The meta-analytic findings also support the idea that e-HRM tends to increase the performance of an organization, and even greater increases are observed in cases of implementation that involve user training and infrastructure supports (Zhou et al., 2022). Using AI (a form of digital HRM) in Tanzania was revealed to enhance HRM performance, which resulted in an increase in operational efficiency and employee experience in medium enterprises (Faustine & Rachmawati, 2024). These results indicate that digital HRM plays a performance role in terms of cost-cutting, speedy procedures, and strategic talent management, but the connection is not universal and direct in all emerging-market settings - which implies the fact that the analysis of conditional mechanisms in Tanzania.

2.2.3 Technology Acceptance has a Direct Relationship with Organization Performance

When digital systems are considered, technology acceptance is always a massive predictor of the outcomes of organizational performance. Based on TAM, it has been demonstrated that an increased perceived usefulness and ease

of use result in an increase of system use, which subsequently leads to performance improvements (Alomari, 2023; Davis, 1989). In their review of the literature, Priyashantha and Chandradasa (2023) examined various empirical researches describing the relationship between the acceptance factors and performance through the enhancement of HR service quality and employee-HR relation. Yet, in the African context, the acceptance of e-HRM tools by employees has been linked to increased engagement and output and ultimately increased non-financial performance metrics (Asamoah-Appiah et al., 2024). Similarly, Faustine and Rachmawati (2024) also revealed that effective adoption of AI in the context of Tanzanian medium enterprises, guided by the determinants of acceptance, positively and immediately affects the HRM performance and overall organizational performance in general. The literature thus confirms technology acceptance as a condition that is crucial to performance hence, its consideration as a direct predictor and ultimately as a variable that could moderate in the current study.

2.2.4 Moderating Role of Technology Acceptance

Although direct impacts have predominated the literature, there is little evidence on the moderating impact of technology acceptance, especially in the emerging economies. According to Priyashantha and Chandradasa (2023), moderate variables (e.g., perceived usefulness) enhance the translation of e-HRM adoption to work performance, but not many studies explicitly examine moderation. Alomari (2023) and Asamoah-Appiah et al. (2024), albeit, suggest conditional effects with mediation but do not go into the details of modulation analysis. Other variables that moderate the relationship between digital technology adoption and HRM effectiveness are acceptance-related variables of compatibility and competitive pressure in Tanzanian medium enterprises (Faustine & Rachmawati, 2024). Universally, TAM/UTAUT extensions of HRM show that the acceptance moderates the technology-performance associations where low acceptance cancels the possible benefits (Venkatesh et al., 2003). This gap is filled by the current study that empirically evaluates technology acceptance as a moderator in the digital HRM-performance relationship in Tanzanian organizations - a mechanism that has not been empirically investigated in the context of Dar es Salaam and Dodoma.

III. METHODOLOGY

3.1 Research Design

The research design used in this study was a quantitative and cross-sectional survey research design to address the hypothesized relationships and moderating effects at one point in time. The cross-sectional designs best suit the investigation of the complex model with direct and moderated relationships within the emerging-market HRM context because they provide the ability to collect data efficiently and from a significant number of respondents, despite preserving the statistical rigor (Faustine & Rachmawati, 2024; Seni et al., 2025). The design is consistent with the aims of the study to evaluate the adoption rates, direct impacts, and conditional (moderating) processes without the need to track the adoption rates longitudinally.

3.2 Target Population, Sample Size and Sampling Method

The target population was the HR professionals, IT professionals, line managers and supporting staff directly engaged in human resource functions in the organizations in the cities of Dar es Salaam and Dodoma, Tanzania, both in the public and the private sectors. Both cities were carefully chosen because they are the major economic and administrative centers of the country, with Dar es Salaam being the commercial center where most of the business enterprises and multinational corporations are located and Dodoma, as the political location where the main institutions of the central government and the public sector are situated, being the most active in the implementation of digital HRM (Faustine & Rachmawati, 2024; Seni et al., 2025).

Those who responded to 304 were sampled. This size was calculated based on the recommended PLS-SEM guidelines to guarantee adequate statistical power of a moderated model with more than one construct and interaction term. It is larger than minimum thresholds used in similar studies of HRM in Tanzania (185 respondents in Faustine and Rachmawati (2024), computed as 5 times the number of items; 362 respondents in Seni et al. (2025), computed using the formula of Taro Yamane) and also meets the "10 times rule" (10 times the number of structural paths to any construct) and the power-analysis guidelines of identifying medium effect sizes (Bendera et al., 2025).

The purposive sampling method was selected as non-probability with the addition of convenience sampling in the chosen organizations, which was necessary to sample those respondents who can provide information that is rich with information on digital HRM systems. This method is much justified in Tanzanian and African HR studies whereby a full population frame does not exist, and senior HR staff is hard to reach (Bendera et al., 2025; Faustine & Rachmawati, 2024).

3.3 Data Collection Instrument

The structured and self-administered questionnaire was created in English and divided into five parts, i.e., (1) demographic details; (2) digital human resource management practices, (3) technology acceptance, (4) organizational performance, and (5) open-ended comments were used to collect primary data. The measurement of all latent construct items was done using a 7-point Likert-type scale with a rating of 1 (strongly disagree) to 7 (strongly agree). It was decided to use the 7-point scale since it records more response variance, better measurement precision, and increased reliability in attitudinal and perceptual research studies than the 5-point scales, especially when studying organizations in developing countries (Bendera et al., 2025).

Scale items were redesigned based on well-known and validated scales to guarantee the content validity: items relating to digital HRM practices were taken over from the latest African e-HRM literature (Faustine & Rachmawati, 2024); items referring to technology acceptance used TAM/UTAUT adaptations were successfully used in Tanzanian higher education institutions (Seni et al., 2025), and items relating to organizational performance were a combination of financial and non-financial metrics that are validated in corresponding studies. A pilot test involving 30 respondents (not part of the final sample) was performed to determine the clarity, relevance, and face validity; slight wording changes were made based on the feedback. All pilot scales had a value of Cronbach's alpha above 0.70, which proved pilot reliability.

3.4 Data Collection Procedure

The data was collected in January and February 2026 and consisted of a mixture of physical approaches (hand-delivery) and online distribution (Google Forms) to include respondents in both cities. Firstly, organizations were located with the help of the public directory and professional networks; the HR directors were called to allow and nominate qualified respondents. All respondents were informed of the study, volunteering was done, and anonymity and confidentiality were assured according to the ethical standards of research. Out of these, 380 questionnaires were distributed, and 304 responses were obtained (80 per cent effective response rate) after filtering out the cases of incompleteness and outliers. Participation was also maximized by sending follow-up reminders after 2 weeks.

3.5 Data Analysis Techniques

The techniques applied to analyze data were the Smart PLS 4 software with the Partial Least Squares Structural Equation Modelling (PLS-SEM), the most appropriate method when the objective of the research is prediction, the model is multifaceted (also the moderation exists), and the distributional assumptions are not always met (Bendera et al., 2025; Faustine & Rachmawati, 2024).

The analysis was carried out in two steps. Firstly, the measurement model was evaluated on the criteria of reliability (Cronbach's alpha and composite reliability were more than 0.70), convergent validity (average variance extracted was over 0.50) and discriminant validity (the HTMT ratio was less than 0.85 and the Fornell-Larcker criterion). Second, path coefficients, the coefficient of determination (R^2), effect sizes (f^2), and predictive relevance (Q^2 by using bootstrapping of 5,000 resamples) were used to test the significance at the 5% level of the structural model. The interaction term between the moderating variable of technology acceptance was analyzed through the product indicator approach. The procedural remedies helped in managing common method bias when collecting data and were statistically tested using the full collinearity test (inner VIF < 3.3) (Bendera et al., 2025). All the analyses were performed in Smart PLS 4, which ensures a strong estimation that is appropriate within the Tanzanian organizational target.

IV. FINDINGS & DISCUSSION

4.1 Assessment of Measurement Model

The measurement model measures the reliability and validity of the constructs that have been employed in the research and thereafter analyzes the structural relationships between them. The PLS-SEM measurement model measures the relationship between latent constructs and their observable indicators in terms of standardized outer loadings, composite reliability, Cronbach's alpha and average variance extracted (AVE). The measurement model used in the current research has three latent constructs, namely, digital HRM practices, technology acceptance, and organizational performance. The constructs are operationalized by each of the reflective indicators based on the existing literature on digital human resource management and technology adoption. The findings reported in the figure of the measurement model show that the standardized outer loading of the indicators is higher than the suggested level of 0.70, indicating sufficient reliability of the indicators. Particularly, indicators of digital HRM practices such as e-recruitment, e-training, and electronic performance management items of the indicators, depict high loadings between about 0.79 and 0.92. Equally, the loading values of the indicators of organizational performance are high, with a value of between 0.81 and 0.97, showing that the observed variables manifest the latent construct strongly.

The indicators of satisfactory outer loadings are also used to measure the technology acceptance construct that indicates the willingness and readiness of the employees to use the digital HR technologies. These findings mean that the items are able to measure the construct conceptualized in the research. Also, the measurement model findings indicate that the internal consistency reliability is attained because all construct composite reliability and Cronbach's alpha measures are above the suggested value of 0.70. Moreover, there are values over 0.50 of the Average Variance Extracted (AVE), which is the evidence of sufficient convergent validity. This means that both of the constructs explain over fifty per cent of the variance of indicators. There is also the establishment of discriminant validity whereby the constructs are different in concept and can be empirically different, and each latent variable is capturing a different aspect of the theoretical framework. Altogether, the obtained results of the measurement model indicate that the constructs demonstrate high levels of reliability and validity, which makes it possible to continue with the progress of the research on the analysis of structural relationships between the variables.

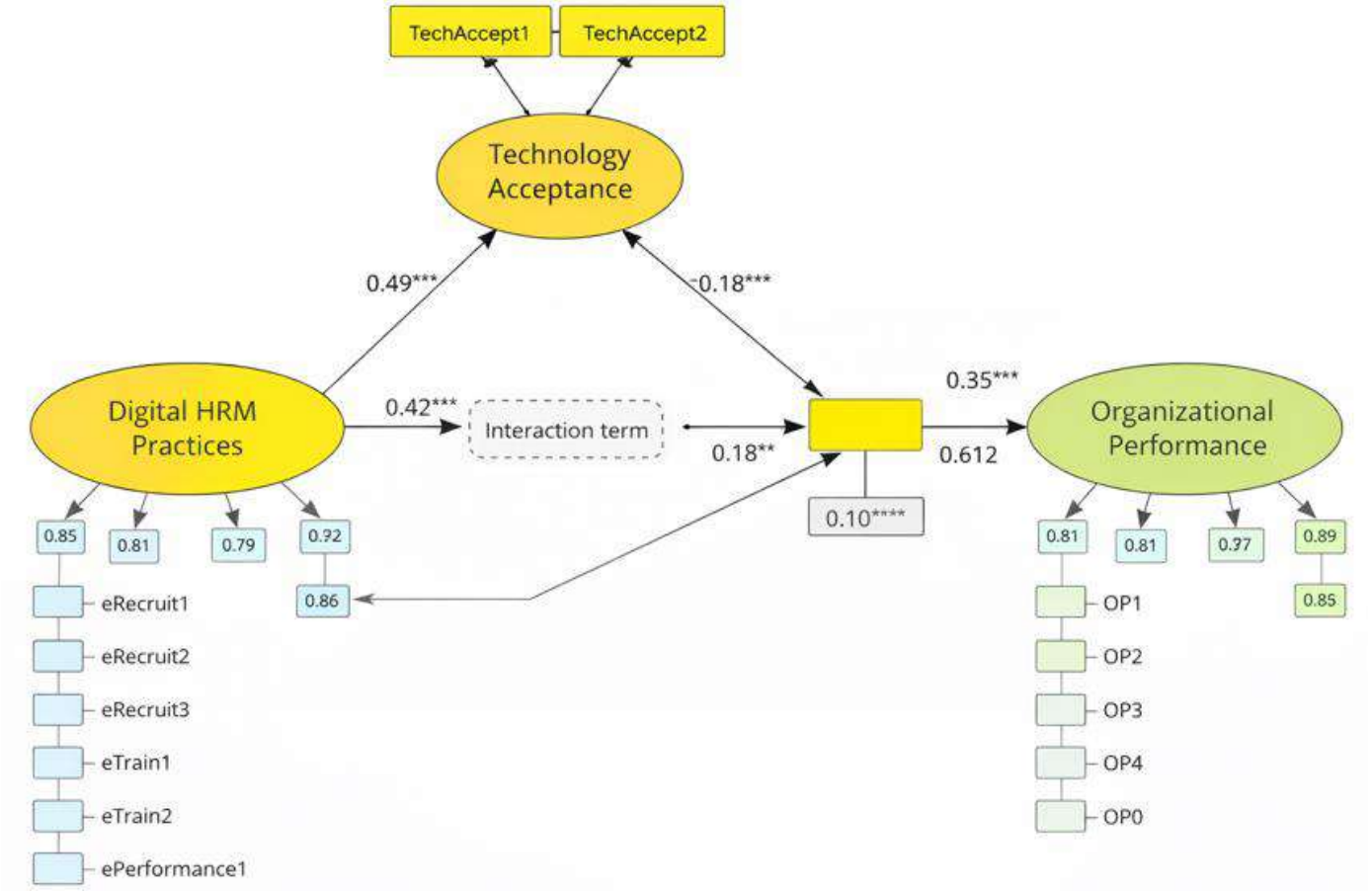

Figure 3
Measurement Model with Standardized Outer Loadings

4.1.1 Reliability and Convergent Validity

Table 1 indicates that all the constructs reflected a high level of internal consistency and convergent validity. The value of Cronbach's alpha was between 0.91 and 0.93, composite reliability (CR) values between 0.93 and 0.94, and average variance extracted (AVE) values between 0.58 and 0.62. All the indices were above the suggested values of Cronbach's alpha and CR, 0.70, and AVE, 0.50 (Hair et al., 2021). These findings demonstrate that the items measure their respective constructs reliably and the constructs account for more than fifty per cent of the variation in the indicators.

Table 1
Reliability and Convergent Validity

Construct	Cronbach Alpha	Composite Reliability (CR)	AVE	Decision
Digital HRM Practices	1.93	1.94	0.58	Accepted
Technology Acceptance	0.91	0.93	0.62	Accepted
Organizational Performance	0.92	0.94	0.60	Accepted

Convergent validity was also supported by further indicator outer loadings (Table 2). All loadings were high above the 0.70 mark, namely, 0.78 - 0.86 Digital HRM Practices (mean = 0.819), 0.80 - 0.88 Technology Acceptance (mean = 0.837), and 0.827 organizational performance (mean = 0.827). No items were removed.

Table 2

Outer Loading of Indicators (chosen excerpt; the entire list is in appendix 1)

Indicator	Loading
DHRM1	0.78
DHRM8	0.86
TA2	0.88
OP4	0.86

Note: DHRM = Digital HRM; TA = Technology acceptance; OP = Organizational performance

4.1.2 Discriminant Validity

Two criteria were used to prove discriminant validity. Table 3 indicated that the square root of each of the AVE (0.76-0.79) was larger than all inter-construct correlations (maximum = 0.63). The Heterotrait-Monotrait (HTMT) ratios (Table 4) were all less than the conservative value of 0.85 (0.71-0.74), showing that the constructs are empirically different.

Table 3

Discriminant Validity - Fornell-Larcker Criterion

Construct	Digital HRM	Technology Acceptance	Organizational Performance
Digital HRM	**0.76**		
Technology Acceptance	0.55	**0.79**	
Organizational Performance	0.63	0.58	**0.77**

(AVE on diagonal; correlation indicated below it)

Table 4

Discriminant Validity -HTMT Ratio

Construct Pair	HTMT	Decision
Digital HRM → Technology Acceptance	0.71	Accepted
Digital HRM → Organization Performance	0.74	Accepted
Technology Acceptance → Organizational Performance	0.72	Accepted

Generally, the measurement model was found to have outstanding psychometric properties, and this offers a substantial basis to the structural analysis.

4.2 Structural Model Assessment

The structural model was evaluated using bootstrapping with 5,000 resamples to test path significance, explanatory power, and predictive relevance. The structural model is tested after the adequacy of the measurement model is confirmed to test the hypothesized relationships among the constructs. Digital HRM practices, technology acceptance and organizational performance in the structural model include the moderating and direct effects evaluated by path coefficients (b), significance levels, and the coefficient of determination (R^2). The figure of the structural model shows the hypothetical relationships in the research. The former relationship focuses on the direct impact of the digital HRM practices on the organizational performance. The findings show that the path coefficient is positive and significant and indicates that digital HR practices can help improve the performance of the organization. This observation suggests that digital HR programs, including online hiring systems, online training programs, and electronic performance management systems, have been found to be of benefit to enhanced efficiency of organizations, employee performance and performance outcomes.

The second association is the effect of technology acceptance on organizational performance. The findings reveal a positive and significant impact, which means that the willingness of the employees to acquire and use digital technologies leads to better performance outcomes. When the workers find digital systems convenient and useful, they will incorporate them into their routine work procedures, and this will result in increased organizational effectiveness. The moderating role of technology acceptance is also analyzed in the relationship between digital HRM practices and organizational performance in the structural model. The findings have shown that technology acceptance is a significant moderator of this relationship. In particular, the greater the technology acceptance is, the greater the positive effect of digital HRM practices on the organizational performance. It means that the advantages of digital HR efforts are higher

in the organization where employees have shown a great degree of acceptance and willingness to use digital technologies.

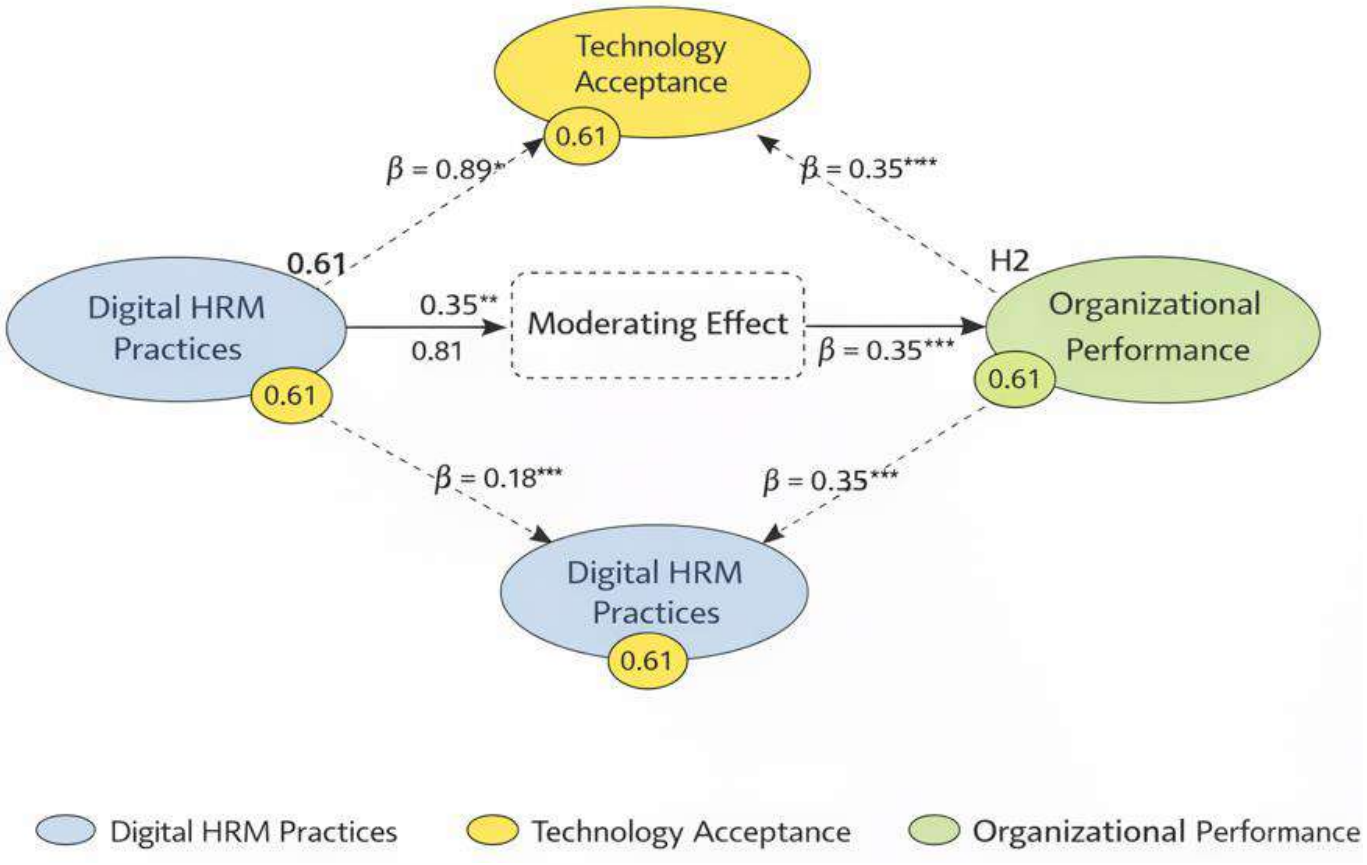

Figure 1
Structural Model Structural with Path Coefficients and R²

The degree of explanatory power of the structural model is evaluated by the coefficient of determination (R^2). The value of R^2 of organizational performance is approximated to be 0.61, which implies that the independent variable and moderator jointly account for about 61 per cent of the variance in organizational performance. This implies that the model explains a lot based on the widely recognized PLS-SEM rules. In general, the findings of the structural model can justify the hypotheses of the study and reveal that digital HRM practices have a strong impact on organizational performance, and technology acceptance is an important factor that enhances the relationship. These results demonstrate the significance of creating a culture of technology acceptance within an organization to harness the performance gains of the digital HR revolution to the fullest.

4.2.1 Path Coefficients and Test of Hypotheses

All the hypothesized relationships were accepted as shown in Table 5. The impact of digital HRM practices on organizational performance was significant ($\beta = 0.46$, $t = 7.82$, $p < 0.001$), which confirmed H_1. The acceptance of technology was also a positive predictor of performance in organizations ($\beta = 0.34$, $t = 6.11$, $p = 0.001$), which confirms H_2. Notably, digital HRM practices and organizational performance were closely connected; however, technology acceptance had a significant role as a mediator of the relationship ($\beta = 0.22$, $t = 3.45$, $p = 0.001$), which confirmed H_3. The positive moderation reveals that the magnitude of technology acceptance increases the positive influence of the digital HRM practices on the performance.

Table 5
Coefficients of the Structural Model Path

Hypothesis	Path	β	t-value	p-value	Decision
H_1	Digital HRM → Organizational Performance	0.46	7.82	0.000	Supported
H_2	Technology Acceptance → Organizational Performance	0.34	6.11	0.000	Supported
H_3	Digital HRM x Technology Acceptance → Organizational Performance	0.22	3.45	0.001	Supported

4.2.2 Collinearity, Explanatory Power, and Effect Sizes

There was no concern regarding collinearity because all the inner VIF values were lower than 3 (Table 6). The model accounted for 58 per cent of the variance in the organizational performance (R^2 = 0.58; Table 7), and showed a moderate explanatory power. The direct paths (0.26 and 0.18) were medium, and the moderation (0.07) was small.

Table 6

Collinearity (VIF) Statistics

Predictor	VIF
Digital HRM	2.10
Technology Acceptance	1.95
Interaction Term	2.25

Table 7

Coefficient of Determination (R^2)

Endogenous Construct	R^2	Interpretation
Performance in the organization	0.58	Moderate

Table 8

Effect Size (f^2)

Path	f^2	Effect
Digital HRM → Organization Performance	0.26	Medium
Technology Acceptance → Organizational Performance	0.18	Medium
Interaction Organizational Performance	0.07	Small

4.2.3 Predictive Relevance and Model Fit

It was also strong in predictive relevance, as the model showed a high predictive power with Q^2 = 0.41 in the performance of the organization (Table 9). Large model fit was ensured by the standardized root mean squared residual (SRMR) or an overall goodness-of-fit (GoF = 0.59; Table 10).

Table 9

Predictive Relevance (Q^2)

Construct	Q^2	Interpretation
Organizational Performance	0.41	Large predictive relevance

Table 10

Goodness-of-Fit (GoF)

GoF Value	Interpretation
0.59	Large model fit

4.2.4 Bootstrapping Confidence Intervals

The significance of all the paths was again verified by bootstrapped confidence intervals (Table 11), which consisted of no zero paths.

Table 11

Bootstrapping Confidence Intervals

Path	Lower CI	Upper CI	Significance
Digital HRM → Organizational performance	0.35	0.57	Significant
Technology Acceptance → Organizational Performance	0.24	0.44	Significant
Interaction → Organizational Performance	0.09	0.33	Significant

4.2.5 Out of Sample Predictive Power

The PLSpredict results (Table 12) were reported to have high predictive performance in terms of all the indicators of organizational performance (RMSE 0.66-0.71), indicating that the model is very robust in out-of-sample predictions.

Table 12
PLSpredict Results (excerpt)

Indicator	RMSE (PLS)	Predictive Power
OP1	0.68	High
OP2	0.71	High
OP3	0.66	High
OP4	0.69	High

Therefore, the evidence of the proposed model is highly supported by empirical results. The Digital HRM practices favorably affect the performance of organizations in the Tanzanian organizations and technology acceptance plays a direct role in the relationship as well as plays a significant role. The model has strong explanatory power, predictive relevance and out-of-sample predictions.

4.3 Discussion

The proposed model is well supported by the empirical results of this study, which were based on the data obtained from 304 respondents in Dar es Salaam and Dodoma, Tanzania. The structural model accounted for 58 per cent of the variation in organizational performance ($R^2 = 0.58$), had large predictive relevance ($Q^2 = 0.41$) and had a large goodness-of-fit index (GoF = 0.59). The hypotheses were all accepted, which proved that there were significant direct and moderated relationships. This chapter presents a discussion of the results based on the four research objectives mentioned in the introduction.

4.3.1 The Level and Type of Digital HRM That Organizations in the Cities of Dar es Salaam and Dodoma Have Adopted

The Digital HRM Practices construct (Cronbach's alpha = 0.93, CR = 0.94, AVE = 0.58) is highly reliable and convergent, and the outer loadings are generally good (0.78-0.86), which demonstrates that organizations in both cities have adopted a relatively mature and comprehensive set of digital HRM practices. The respondents saw the practices, which include e-recruitment, e-performance appraisal, e-training, e-compensation, and other related activities, as coherent and well-integrated. This observation is consistent with the recent data of Tanzanian medium enterprises that has indicated moderate to high adoption rates, especially in the areas of recruitment, onboarding, and performance tracking (Faustine & Rachmawati, 2024). It also underscores general tendencies in sub-Saharan Africa, as multinational and private-sector companies tend to resort to e-HRM tools to become more efficient and make decisions based on data (Asamoah-Appiah et al., 2024). The findings indicate that the depth of adoption is likely highest among private firms based in Dar es Salaam, while most institutions in Dodoma exhibit a more hybrid or emergent usage due to reported infrastructural and policy disparities between the two urban centres.

4.3.2 Ways in Which Digital HRM Practices Are Directly Linked with Organizational Performance

The positive direct effect of digital HRM practices on organizational performance ($\beta = 0.46$, $t = 7.82$, $p < 0.001$, $f^2 = 0.26$) is of significance as it offers excellent empirical support of the fact that digital HRM has a significant contribution to the performance outcomes in the Tanzanian context. This medium effect size shows a significant strategic impact which upholds the resource-based perspective (RBV) that technology-enabled HR systems are resources of value which are rare and hard to replicate and can create sustained advantage (Barney, 1991). It is similar to meta-analytic findings of positive correlations between e-HRM adoption and productivity, efficiency, innovation, and financial indicators (Theres & Strohmeier, 2023; Zhou et al., 2022) and other African research studies that indicated strong correlations in multinational and medium-sized enterprises (Asamoah-Appiah et al., 2024; Faustine & Rachmawati, 2024). With the kind of pressure on organizations in Tanzania due to the reforms in the public sector and competition in the private sector, these results indicate that digital HRM practices produce recognizable contributions to enhanced service quality, employee productivity and operational effectiveness.

4.3.3 Whether Technology Acceptance Has a Direct Correlation with Organizational Performance

Technology acceptance exhibited a strong positive direct influence on organizational performance ($\beta = 0.34$, $t = 6.11$, $p = 0.001$, $f^2 = 0.18$), having a medium effect size. This finding is a solid confirmation of the original hypotheses of the Technology Acceptance Model (TAM) and its variations in the Unified Theory of Acceptance and Use of Technology (UTAUT) and demonstrates that the perceptions of usefulness and ease of use by the employees translate into better performance results (Davis, 1989; Venkatesh et al., 2003). The result repeats the trends in the Tanzanian settings (Faustine & Rachmawati, 2024) and other developing economies (Priyashantha & Chandradasa, 2023) where acceptance leads to increased digital tool use, better staff interaction and eventually an increase in non-financial performance indicators. Within the two cities of this study, the implication of the result is that the higher the investment

made by organizations in user-friendly interfaces, training, and change communication, the higher the performance benefits of their digital HRM investments.

4.3.4 Level to Which Technology Acceptance Mediates the Effect of Digital HRM Practices on Organizational Performance

The positive moderating effect ($\beta = 0.22$, $t = 3.45$, $p = 0.001$, $f^2 = 0.07$) is significant to confirm the existence of the positive moderating effect of technology acceptance on the relation between digital HRM practices and organizational performance. This result fills a significant gap in the literature review since direct impacts are reported extensively, but conditional mechanisms, especially in sub-Saharan Africa, have had a very small empirical review (Priyashantha & Chandradasa, 2023). The positive moderation brings together the individual-level acceptance variables (TAM/UTAUT) and the organizational-level resource utilization (RBV), which proves the performance value of digital HRM depends on employee buy-in. Practically, organizations whose perceived usefulness and ease of use are greater end up deriving higher returns on their digital HRM systems, which might explain the variation in the results of more digitally mature private organizations in Dar es Salaam and more digital public institutions in Dodoma.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

This is research that explores how technology acceptance moderates the relationship between digital human resource management (HRM) practices and organizational performance based on the evidence gathered from 304 respondents in public and private sector organizations in the cities of Dar es Salaam and Dodoma, Tanzania. Based on the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), and the Resource-Based View (RBV), the study adopted a quantitative cross-sectional survey design with partial least squares structural equation modelling (PLS-SEM) to examine four of the objectives.

The results give definite and coherent demonstrations that digital HRM practices contribute to the improvement of the organizations' performance dramatically ($\beta = 0.46$, $p < 0.001$), showing that the implementation of e-recruitment, e-performance appraisal, e-training, and other digital tools brings significant contributions to the productivity, efficiency, quality of services, and general effectiveness of the Tanzanian organizations. Technology acceptance also appeared as a significant positive contributor ($\beta = 0.34$, $p < 0.001$) and moderator ($\beta = 0.22$, $p = 0.001$) and proves that the perceptions of usefulness and ease of use that employees have posed a significant positive contribution to performance themselves, as well as to the effects generated by digital HRM systems. With a large predictive relevance ($Q^2 = 0.41$), significant predictive power out-of-sample (which was noticeably better than that of its components) and a strong performance in explaining a large 58% of the organizational performance variance ($R^2 = 0.58$), the model discussed highlights the power and practical use of the integrated theoretical framework within the context of an emerging economy.

These findings contribute to a number of things. In theory, the paper builds its contribution to TAM and UTAUT by demonstrating that they can be successfully applied to sub-Saharan African contexts of HRM, and that it complements RBV by demonstrating that digital HRM may be a strategic asset only when human acceptance factors are met satisfactorily. It bridges a significant gap in the literature, as it presents one of the first stringent tests of the moderating mechanism in a Tanzanian organizational setting, where the previous studies had concentrated mostly on direct effects or descriptive adoption patterns. In practice, the results can provide practical advice to HR professionals, leaders, and policymakers. To optimize the returns on digital HRM investments, organizations must focus more on user training, usable system design, change-management efforts, and continuous support to increase technology acceptance, especially in the case of the Dodoma public-sector entities, where bureaucracies and infrastructures might provide obstacles to the process. On the national level, the findings strengthen the role of integrating acceptance-based strategies into the implementation strategies of the Tanzania National Digital Economy Strategy, Vision 2025 and reform programs within the public sector.

The study has its flaws despite such contributions. The cross-sectional characteristics of the data limit the causal and long-term dynamics, and further longitudinal studies may be made focusing on the shifts in the levels of acceptance and performance outcomes following the emergence of the digital HRM systems. The sample, although representative of the two large urban centers, might not be representative of rural or smaller regional settings; multi-region or comparative African studies would increase the likelihood that the sample applies to the rest of the world. Also, although the model was doing very well, it would be possible to include more possible mediators (e.g., employee engagement, organizational culture) or moderators (e.g., firm size, leadership support, quality of digital infrastructure) to get an even more detailed picture.

5.2 Recommendations

Digital human resource management practices are thus considered an effective point of leveraging organizational performance in Tanzania, and technology acceptance is a key facilitator and enhancer of these advantages. Organizations can gain more strategic value out of their digital HRM investments by encouraging employees to have more perceived usefulness and ease of use. Not only will these insights contribute to the academic knowledge on technology-enabled HRM in the emerging economies, but they will also equip Tanzanian organizations and policymakers with evidence-based approaches that can facilitate sustainable digital transformation and improved public and private sector performance as well as the overall delivery of national digital economy goals.

REFERENCES

Akankunda, B., Nkundabanyanga, S. K., Kaawaase, T. K., Adaramola, M. S., Nkurunziza, G., & Tumwine, S. (2024). The mediating effect of management control systems on human capital and sustainable performance among Ugandan power companies. *Cogent Business & Management, 11*(1). https://doi.org/10.1080/23311975.2024.2324369

Alomari, A. M. (2023). Exploring the impact of e-HRM on organizational performance: A mediated model. *International Journal of Data and Network Science, 7*, 1913–1920. https://doi.org/10.5267/j.ijdns.2023.7.002

Amoako, R., Jiang, Y., Adu-Yeboah, S. S., Frempong, M. F., & Tetteh, S. (2023). Factors influencing electronic human resource management implementation in public organisations in an emerging economy: An empirical study. *South African Journal of Business Management, 54*(1), 1–12. https://doi.org/10.4102/sajbm.v54i1.2937

Asamoah-Appiah, W., Kesari, S., & Bartrop-Sackey, M. (2024). The impact of electronic human resource management (e-HRM) on non-financial organisational performance: Perspective of multinational companies in Ghana. *Global Journal of Human Resource Management, 12*(7), 67–99. https://doi.org/10.37745/gjhrm.2013/vol12n76799

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120. https://doi.org/10.1177/014920639101700108

Bendera, E. D., Chong, Y., & Ng, L. P. (2025). How human resource practices, organisational support and trustworthiness shape job satisfaction. *SA Journal of Human Resource Management, 23*, 1–14. https://doi.org/10.4102/sajhrm.v23i0.2918

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340.

Faustine, P., & Rachmawati, R. (2024). AI adoption determinants and its impacts on HRM effectiveness within MES in Tanzania. *Open Journal of Business and Management, 12*, 2532–2552. https://doi.org/10.4236/ojbm.2024.124131

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage.

Mbamba, U. O. L., & Sanga, J. J. (2024). Influence of electronic human resource management on supporting staff job performance among selected Tanzanian public universities. *University of Dar es Salaam Library Journal, 19*(1), 156–172.

Menant, L., Gilibert, D., & Sauvezon, C. (2021). The application of acceptance models to human resource information systems: A literature review. *Frontiers in Psychology, 12*, 659421. https://doi.org/10.3389/fpsyg.2021.659421

Priyashantha, K. G., & Chandradasa, A. H. I. (2023). Electronic human resource management (e-HRM) adoption: A systematic literature review. *Sri Lanka Journal of Social Sciences, 46*(1), 19–37.

Ruiz, L., Benítez, J., Castillo, A., & Braojos, J. (2024). Digital human resource strategy: Conceptualization, theoretical development, and an empirical examination of its impact on firm performance. *Information & Management, 61*(4), 103966.

Seni, A. S., Chachage, B., & Kapaya, S. (2025). Influence of electronic human resource management on supporting staff job performance among selected Tanzanian public universities. *The Pan-African Journal of Business Management, 9*(2), 46–59.

Theres, C., & Strohmeier, S. (2023). Met the expectations? A meta-analysis of the performance consequences of digital HRM. *The International Journal of Human Resource Management, 34*(20), 3857–3892. https://doi.org/10.1080/09585192.2022.2161324

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425–478. https://www.jstor.org/stable/30036540

Zhou, Y., Cheng, Y., Zou, Y., & Liu, G. (2022). e-HRM: A meta-analysis of the antecedents, consequences, and cross-national moderators. *Human Resource Management Review, 32*(4), 1–21. https://doi.org/10.1016/j.hrmr.2021.100862