

Harnessing technology for strategic HR alignment: Lessons from selected Tanzanian ministries, independent departments and agencies

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<https://doi.org/10.51867/ajernet.6.4.50>

ABSTRACT

This study investigated technology's role in advancing Strategic Human Resource Alignment in Tanzanian Ministries, Independent Departments, and Agencies (MDAs), focusing particularly on emergent Information Systems, Leadership Commitment, and Institutional Readiness. Guided by the Resource-Based View (RBV) and Contingency Theory, the study theorizes these constructs as critical organizational resources and contextual factors influencing the alignment of HR practices and institutional goals. The study adopted a cross-sectional survey design, which was quantitative in nature. HR managers, line managers, and IT managers in selected MDAs constituted the study population. Through the application of purposive sampling, 111 respondents were targeted, and 104 usable responses were obtained, representing a response rate of 93.7%. Data was collected using structured questionnaires, and hypotheses were tested through the application of Structural Equation Modeling (SEM). The findings show that strategic human resource alignment is significantly facilitated by the use of emerging information systems, with leadership commitment and institutional readiness also exerting strong direct effects. The explanatory model demonstrated high variance in strategic human resource alignment and confirmed its predictive validity. These findings confirm RBV's contention that human capital and technology are strategic resources, while contingency theory emphasizes organizational fit as a condition for alignment effectiveness. Theoretically, the study adds to digital HR transformation knowledge by illustrating how new information systems, leadership, and institutional readiness together enhance alignment in the public sector. Practically, it offers lessons for MDAs: technological investments must be followed up with leadership commitment and organizational preparedness so that HRIS implementation can contribute to strategic results and national development agendas. The results emphasize the need to adopt a synergistic strategy: technological implementation should be followed by aggressive leadership backing and good organizational preparedness. Managers and policymakers need to accord topmost priority to creating capacity, training leaders, and infrastructure so that HRIS could make a stronger strategic impact. On theoretical contributions, this study adds to theoretical understanding by resolving the conflict between the Resource-Based View (RBV) and Contingency Theory, demonstrating that new information systems as strategic assets appreciate only when supported by leadership and institutional readiness. In showing how alignment comes out of the interaction between resources within the organization and conditions within the context.

Keywords: Emerging Information Systems, Leadership Commitment, Institutional Readiness, Public Sector, Strategic Human Resource Alignment

I. INTRODUCTION

Worldwide, the Human Resource [HR] practices' alignment with organizational goals is increasingly seen as a key institutional performance and sustainable improvement driver (García-Cruz *et al.*, 2024; Martins & Moreira, 2025). In the African public sector, alignment of such HR functions has been found to enhance organizational performance and employee retention (Gandi & Saurombe, 2025). Carrying this focus to Tanzania, Ministries, Independent Departments, and Agencies (MDAs) are under pressure to align HR plans with national development plans on such platforms as technological systems such as Human Resource Information Systems (Matimbwa & Olatokun, 2024). Digitalization, when applied to bring together via information systems into the management of human resources, has revolutionized the process by which organizations hire, administer, and retain personnel and align workforce abilities and strategic aims (Adias, 2025; Arora *et al.*, 2024). It is not a phenomenon in developed

economies alone; developing nations also go for digital platforms to enhance public services and increase accountability (Djatkiko *et al.*, 2025; Latupeirissa *et al.*, 2024).

In Africa, technological intervention has been at the center of public sector reforms in redefining HR functions in response to increasing demands for efficiency, transparency, and service delivery. Some countries have also adopted HR information systems, e-governance platforms, and decision-support software to reverse structural inefficiencies and gaps in staff administration (Sharmin & Chowdhury, 2025; Udoh, 2024). Even so, although the momentum is picking up, the progress is uneven, and institutions find it challenging to incorporate the technologies into strategic planning and organizational transformation (Udoh, 2024). Tanzania is a case in point.

Ministries, Independent Departments, and Agencies (MDAs) shall harmonize HR plans with national development objectives to improve service delivery and accountability (Tandika, 2024). The Public Sector Reform Programme and national e-Government strategies have made tremendous strides by the government in encouraging the utilization of Human Resource Information Systems (HRIS) and other related digital tools for boosting workforce management. These reforms seek to reorient HR functions from administrative to strategic partners in institutional performance. However, ground reality outlines persistent issues: weak digital infrastructure, fragmented platforms, lack of integration of HR systems with strategic planning, and bureaucratic opposition curtail the maximum potential of HRIS adoption (Gange & Barongo, 2024; Matimbwa & Olatokun, 2024). Such challenges hinder the contribution of HR to organizational change, hence inefficiencies in talent management and accountability lapses (Otoo *et al.*, 2022). This study is based on the Resource-Based View (RBV) where technological infrastructure and human capital are recognized as strategic resources that generate institutional benefit when they are adequately leveraged (Tandika, 2024; Willie, 2025).

Backed by this, Contingency Theory posits organizational performance is dependent on alignment or fit between internal capacity and environmental requirements (Chourasia & Bahuguna, 2024; Hentati *et al.*, 2025). Guided by these perspectives, the research explores how HRIS adoption, leadership commitment, and institutional Readiness influence strategic HR alignment in Tanzanian MDAs. By this, the study contributes to the understanding of what digital transformation can contribute to public sector human resource management and offers valuable lessons for policy and reform.

1.1 Statement of the Problem

Though Human Resource Information Systems (HRIS) and other electronic platforms have been installed in Tanzania's Ministries, Independent Departments, and Agencies to increase efficiency, responsibility, and harmonization of human resources with national development priorities, their strategic contributions are minimal. Unplowed issues such as lack of proper technological infrastructure, fragmented systems, lack of alignment with strategic planning, and resistance to change have made HR functions largely administrative rather than strategic, thus limiting talent management, transparency, and organizational performance. Drawing on the Resource-Based View and Contingency Theory, this study bridges the significant knowledge gap of understanding how emerging information systems, leadership commitment, and institutional readiness influence strategic HR alignment in Tanzanian MDAs that is relevant to sustainable public sector reforms and improved service delivery.

1.2 Research Objectives

- i. To determine the effect of emerging information systems on strategic HR alignment in Tanzanian MDAs.
- ii. To assess the influence of leadership commitment on strategic HR alignment in Tanzanian MDAs.
- iii. To evaluate how institutional readiness shapes strategic HR alignment in Tanzanian MDAs.

1.3 Research Hypotheses

H_{o1} : Emerging Information Systems positively influence strategic HR alignment in Tanzanian MDAs.

H_{o2} : Leadership commitment positively influences strategic HR alignment in Tanzanian MDAs.

H_{o3} : Institutional readiness positively influences strategic HR alignment in Tanzanian MDAs

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Resource-Based View

The Resource-Based View (RBV) foresees the long-term success of an organization depending on its ability to obtain and utilize valuable, rare, difficult to imitate, and non-substitutable resources (Barney, 1991). In human resource management, this perspective emphasizes that technological equipment, skilled employees, and well-aligned processes are strategic resources that can improve organizational performance (Terfa *et al.*, 2025) Emerging digital HR systems, such as Human Resource Information Systems (HRIS) and predictive analytics software, are prime examples of such strategic assets because they enable HR departments to integrate workforce planning, monitor

performance, and support data-driven decision-making (Okon *et al.*, 2024). For Tanzanian Ministries, Independent Departments, and Agencies (MDAs), effective adoption and adaptation of such systems permit HR to transition from predominantly administrative functions to a strategic role in direct support of organizational objectives.

RBV also demands complementary assets that enhance the value of the technological assets. Leadership commitment ensures HR initiatives clear direction, adequate resources, and sustained support, while institutional Readiness comprising infrastructure, workforce skills, and change management capability enables effective use of digital systems. In this case, HRIS and related tools are not just operational systems but strategic capabilities that, under leadership commitment and Readiness, can achieve substantial alignment between HR practices and organizational goals. This perspective provides theoretical support to the study hypotheses that argue that new information systems, leadership commitment, and institutional Readiness will positively impact strategic HR alignment.

2.2 Contingency Theory

Contingency Theory (Fiedler, 1967) argues that organizational effectiveness is a function of the fit between internal practices and external or contextual variables, rather than the application of a single best practice (Fiedler, 1967). In HR management, it therefore suggests that the impact of digital HR technologies, leadership practices, and organizational Readiness is a function of the degree to which they fit the structure, culture, and environment of the organization (Amoako *et al.*, 2021). Successful implementation of emerging HR systems for Tanzanian MDAs depends on their compatibility with national policies, organizational frameworks, and employee capacities. This perspective partially accounts for the argument that technology alone is not automatically going to improve HR alignment; its success depends on the broad organizational environment.

Theory also brings out the combined impact of leadership and institutional Readiness in achieving strategic outcomes. Leaders play an important part in charting HR strategies to organizational realities and creating a culture that can sustain the adoption of technology (Bozkus, 2023). On the other hand, institutional Readiness ensures the organization has the infrastructure, competencies, and processes required to successfully utilize digital systems. Contingency Theory thus confirms the study's hypotheses by highlighting that the effectiveness of emerging information systems, leadership commitment, and institutional Readiness in enabling strategic HR alignment depends on their alignment with organizational and contextual factors (Siddique *et al.*, 2025).

2.3 Empirical Review

2.3.1 Global context of Technology for Strategic HR Alignment

Recent empirical work highlights the transformative capability of emerging digital HR technologies to drive strategic HR alignment and overall HR effectiveness. Savitri *et al.* (2024) state that Human Resource Information Systems (HRIS) are imperative tools to deal with employee performance. Their evaluation shows that HRIS increases the quality and effectiveness of performance appraisals, offers formal and regular feedback, supports career planning, and supports increasing employee satisfaction and retention. By automating administrative activities while directly contributing to performance management, HRIS enables HR functions to be more tightly coupled with overall organizational objectives, situating technology as a strategic enabler and not merely an administrative vehicle.

To complement these results, Obeta and Edwin (2025) provide insight into the function of digital governance in public sector organizations and demonstrate that digital platforms significantly introduce transparency, accountability, and operating efficiency into HRM practices. Their findings reveal that the integration of digital governance devices increases the credibility and responsiveness of HR processes and supports building a culture of accountability along with making HR functions respond more effectively to organizational strategic priorities. Collectively, the studies indicate that when properly rolled out and positioned, digital HR technologies support usual HR activities as well as support strategic alignment by linking HR practice to organizational performance, institutional accountability, and workforce development objectives.

Hossain *et al.* (2025) bring to light the role shift potential of predictive analytics in Human Resource Information Systems (HRIS) to strategic HR management innovation. Their overview demonstrates that predictive HRIS transforms HR planning from static, reactive systems to proactive, evidence-driven decision-making, enabling more accurate talent forecasting, workforce optimization, and succession planning. Organizations that leverage such tools realize measurable improvements in internal mobility, attrition control, and building leadership pipelines.

The study also highlights the point that predictive HRIS effectiveness depends heavily on robust technological foundation, including cloud-based technology, middleware, and integration. Technical proficiency being aside, successful rollout requires consideration for ethics and law, e.g., data privacy, surveillance of employees, and algorithmic fairness. Hossain *et al.* (2025) further state that adoption and influence vary geographically and by industry depending on variations in regulatory climates, organizational culture, and endowments of resources. The review shows predictive HRIS to be a viable strategic enabler. However, its worth depends on appropriate

technological Readiness, ethical governance, and contextual adaptation to make the broader relevance of connecting emergent information systems with organisational strategy worthwhile.

While such findings form the basis of the positive influence of emergent information systems, some scholars present a more cautious perspective. López-Cabarcos *et al.* (2022) note that off-the-shelf HRIS, if not adapted to the organizational context, may hinder strategic alignment, particularly in complex public sector settings. Thomas (2024) also points out that socio-technical forces such as power relations and informal networks decisively influence technology adoption performance and suggests that alignment can't be helped by technology. Together, these results form the basis of H1, which states that developing information systems positively affect strategic HR alignment in Tanzanian MDAs.

Leadership Commitment and Institutional Readiness have remained major determinants that shape the success of e-HR programs. Studies by Siddique *et al.* (2025), Sofi *et al.* (2025) and Chathuranga (2024) assert that committed leadership amplifies the positive effect of HRIS implementation by fostering a supportive culture, putting resource prioritization at the helm, and ensuring technology-driven HR process accountability. Conversely, Omowole *et al.* (2024) and Tjorko and Tan (2025) argue that digitally well-funded projects will fail if leaders do not become actively involved in advocating for change, adding the proactive dimension. With respect to institutional Readiness, Ogbe and Uchekukwu (2024) and Tayade (2025) illustrate that infrastructure, HR digital capability, and organizational change management are crucial towards the success of HRIS benefits. In contrast, Musungwini *et al.* (2025) state that legacy systems, scattered platforms, and capability gaps typically impede fruitful adoption. Gange and Barongo (2024) further contend that technology-supported reforms in Tanzanian MDAs sometimes are more enacted to address compliance requirements than strategic intentions, hindering concrete HR correspondence improvements. These findings confirm H₂ and H₃, indicating that leadership commitment and institutional Readiness positively influence the relationship between HRIS adoption and strategic HR alignment. By integrating these constructs, the research highlights the interdependence of technology, leadership, and institutional context toward achieving sustainable HR transformation.

This convergence suggests that the success of e-HR interventions depends on context adaptation, organizational dedication, and alignment with strategic priorities. As a result, the review highlights the importance of emergent information systems, leadership commitment, and institutional Readiness as factors associated with determining how technology is equalled to advanced strategic HR performance in public sector settings, like Tanzanian MDAs.

2.3.2 Technology for Strategic HR Alignment in Tanzania

Tanzania's public sector has increasingly spearheaded its digital transformation agenda through initiatives such as the Public Sector Reform Programme (PSRP) and national e-Government plans intended to transform service delivery as well as increase accountability (Chewe *et al.*, 2025; Kibira, 2024). Of these reforms, Human Resource Information Systems (HRIS) and other new information systems have led the way in changing HR management practices. These technologies are not only intended to drive administrative inefficiencies away but also to enhance data integrity, build workforce transparency, and provide evidence for strategic decision-making (Mdhlalose, 2025; Otoo *et al.*, 2022; Wang, 2024). The shift from paper-based disintegrated and fragmented records to integrated digital platforms reflects an expanded appreciation of HR's evolving role from transactional facilitation to a strategic partner in institutional achievement (Bahari, 2025).

Nevertheless, Tanzanian MDAs continue to face considerable challenges in unlocking the revolutionary potential of such systems. Shoddy digital infrastructure, low interoperability of platforms, and lacking ICT skills among HR personnel are the persistent barriers (Mwakwabe, 2023; Mwogosi, 2023). Furthermore, the strategic value of HRIS is often compromised by inadequate technology adoption aligning with organizational planning procedures. In other MDAs, investment in HR technology has not been followed by matching efforts to integrate HR information into strategic decision-making, undermining the ability of HR to shape workforce development and performance results (Dominic & Rutenge, 2024).

Digital HR transformation is also highly reliant on leadership support (Febrianti & Jufri, 2022; Purwanto *et al.*, 2023). Leadership facilitates technology change through investing, raising capital, and establishing the type of culture that fosters innovation (Awashreh, 2025). Without overt and sustained leadership involvement, HRIS adoption may just turn out to be a compliance exercise rather than a driver of strategic alignment. Similarly, institutional Readiness in terms of digital literacy, organizational culture, regulatory framework, and change management capability is critical in assuring technology initiatives yield long-term outcomes (Tasleem *et al.*, 2023). Institutions with a deficiency in appropriate digital change readiness find themselves facing resistance, talent shortages, and disintegrated implementation that all limit the potential for HR systems to contribute meaningfully to strategic objectives.

From the Resource-Based View (RBV) point of view, HR competencies and information systems may be treated as rare and inimitable skills that, if utilized effectively, generate long-term competitive advantage (Assensoh-

Kodua, 2019; Willie, 2025). Technology, however, is insufficient as per Contingency Theory. Its success depends upon compatibility with organizational culture, leadership vision, and external institutional forces (Issah *et al.*, 2024; Müller *et al.*, 2024). To Tanzanian MDAs, this implies that technological capacity building must go hand in hand with leadership commitment development and institutional Readiness. Digital HR tools will only shift from administrative tools to strategic public sector performance enablers and national development goal drivers (Agwoje & Okeleke, 2023).

III. METHODOLOGY

3.1 Research Design and Procedures

The present study applied a quantitative research approach to examine how technology facilitates strategic HR practices alignment within the selected Tanzanian MDAs. The approach enabled quantifying relationships between significant variables, i.e., the influences of emerging Information Systems (IS), leadership commitment (LC), and institutional Readiness (IR) on strategic HR alignment.

Independent variables are Human Resource Information Systems (IS), Institutional Readiness (IR), and Leadership commitment (LC). Strategic HR alignment (HA) is the dependent variable that is realized by embedding HR practices within organizational planning, HR decisions supported by data, and aligning with institutional performance targets. Leadership commitment and institutional Readiness are also included in the research to reflect the complex dynamics that influence technology adoption and impact.

Drawing on Contingency Theory and the RBV, study design informed the development of a formal questionnaire among HR managers, IT officials, and strategic planners in selected MDAs. Data collection involved disseminating the closed-ended questionnaire survey electronically and hard copy and capturing perception regarding technological sufficiency, leadership support, institutional Readiness, and HR strategic outcomes.

3.2 Data and Sample and Research Instruments

The targeted population comprised personnel in HR management, IT administration, and strategic planning across selected Tanzanian MDAs with active digital transformation initiatives. A purposive sampling technique identified relevant MDAs to ensure the sample's relevance to the research objectives. In these organizations, stratified sampling was thereafter used to ensure diverse representation across HR, IT, and planning functions. One hundred four (104) completed questionnaires were obtained, representing a response rate exceeding 93.7%, which is considered strong for public sector organizational research. In terms of data and instruments, data were collected through a structured questionnaire developed from established literature on HRIS adoption, leadership influence, institutional Readiness, and strategic HR alignment the instrument comprised sections on demographics, Human Resource Information Systems, leadership commitment, institutional Readiness, and strategic HR outcomes.

Items were measured on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree) to capture detailed respondent perceptions. The questionnaire was piloted with a small group of public sector HR professionals to assess clarity, relevance, and validity. Feedback from the pilot was used to refine wording and improve measurement precision.

3.3 Techniques of Data Analysis

Data were processed using SPSS Version 27 for preliminary screening, including checks for missing data, outliers, and normality. Missing values were handled using linear interpolation, while outliers were examined via boxplots and addressed appropriately to maintain data integrity. Given multiple latent constructs and complex relationships, Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed using SmartPLS software. This technique supports simultaneous evaluation of the measurement and structural models, suitable for theory testing and prediction in social science research (Hair *et al.*, 2021).

3.4 Outer Model Evaluation

The outer model evaluation assesses the relationship between each indicator and its corresponding latent construct, ensuring the measurement model's validity and reliability. In Partial Least Squares Structural Equation Modeling (PLS-SEM), two types of measurement models exist: reflective and formative indicators, each requiring specific evaluation criteria (Hair *et al.*, 2021).

Reflective indicators were assessed based on convergent validity and internal consistency reliability. Convergent validity is confirmed when indicator factor loadings exceed 0.70 (Cheung *et al.*, 2024) indicating that the indicators adequately represent the underlying latent construct. Additionally, discriminant validity is assessed through the Average Variance Extracted (AVE) (Rönkkö & Cho, 2022) with values greater than 0.50 demonstrating that a construct explains more than half of the variance of its indicators. Internal consistency reliability is evaluated using

Cronbach's alpha and composite reliability, both of which should surpass the threshold of 0.70 to confirm that the indicators consistently measure the construct.

In contrast, formative indicators are examined for multicollinearity among indicators to ensure they provide unique information to the construct. This is evaluated using the Variance Inflation Factor (VIF), where values below 5 indicate an absence of problematic multicollinearity. Should high multicollinearity be detected ($VIF > 5$), remedial actions, such as removing or combining indicators with low VIF, are recommended to improve measurement quality. This comprehensive evaluation ensures that each latent construct is accurately and reliably measured, providing a solid foundation for subsequent structural model analysis.

3.5 Inner Model Evaluation

The inner model evaluation examines the hypothesized relationships among the latent constructs within the structural model. This assessment determines how well the independent variables, such as HR Information Systems, leadership commitment, and institutional Readiness, explain variations in the dependent variable, strategic HR alignment.

A key metric for evaluating the inner model's predictive accuracy is the coefficient of determination (R^2), which indicates the proportion of variance in the endogenous construct explained by the exogenous variables. Following Purwanto *et al.* (2021), R^2 values are interpreted as follows: An R^2 of 0.19 signifies a weak explanatory effect, an R^2 of 0.33 indicates a moderate impact, and an R^2 of 0.67 or higher reflects a substantial effect on the endogenous variable. In addition to R^2 , path coefficients were analyzed to determine the direction (positive or negative) and strength of the relationships between constructs (Ahmed, 2024). These coefficients represent standardized regression weights that reflect the magnitude of influence that predictors (HR Information Systems, leadership commitment, institutional Readiness) exert on strategic HR alignment. The significance of these paths is tested to confirm or reject the proposed hypotheses, providing insights into the direct, moderating, and mediating effects within the model. This comprehensive evaluation of the inner model ensures that the theoretical framework's explanatory power and relational assumptions are empirically supported.

3.6 Hypothesis Testing

Hypothesis testing was conducted to determine whether to accept or reject the proposed hypotheses based on statistical evidence. Using a 5% significance level ($p < 0.05$), the study employed bootstrapping procedures with 5,000 resamples in SmartPLS to assess path coefficients and their significance within the structural model. A hypothesis was accepted if the path coefficient was positive (greater than zero) and the corresponding p-value was less than 0.05, indicating a statistically significant positive relationship. Conversely, hypotheses could have been rejected if the path coefficient was negative or the p-value exceeded 0.05, reflecting a lack of substantial or adverse effect. The tested hypotheses included the direct influence of emerging Information systems on strategic HR alignment (H1), the influence of leadership commitment on strategic HR alignment (H2), and the influence of institutional Readiness on strategic HR alignment (H3). This rigorous testing approach enabled a thorough evaluation of direct influences, providing deeper insight into how technology, leadership, and organizational Readiness affect strategic HR alignment.

IV. FINDINGS & DISCUSSION

4.1 Measurement Model Assessment Factor Loadings

The measurement model was tested for convergent validity to determine whether each indicator adequately captures its respective specified latent construct. This was crucial in confirming that Emerging Information Systems (IS), Leadership Commitment (LC), Institutional Readiness (IR), and Strategic HR Alignment (HR) dimensions were accurately measured before hypothesis testing. To achieve this, the study applied Partial Least Squares Structural Equation Modeling (PLS-SEM), which can manage complex relations with multiple constructs and indicators. In particular, PLS-SEM infers outer loadings for reflective indicators to confirm their effect on the measured constructs. The cutoff level set for indicator loading is 0.50, whereby each item loading above this value makes an important contribution in explaining its associated construct's variance.

The results showed that all the indicators in the study had loadings ranging from 0.614 to 0.884, which was beyond the minimum threshold. This finding substantiated that each of the indicators had a strong correlation with its respective construct, thereby indicating convergent validity. For instance, HA3, an indicator of the contribution of HR initiatives to the organizational mission, had the greatest loading of 0.884, showing the strong connection of HR initiatives to strategic organizational goals. Similarly, IS2, measuring resource sufficiency to deploy HRIS, stood at 0.855, indicating the importance of resource distribution to enable information system success. On the other hand, such measures as HA2 (0.614) and IR1 (0.614) can be lower but still above 0.50, implying satisfactory though comparatively weaker contributions to their corresponding constructs. In addition to factor loadings, VIF values were computed to verify multicollinearity among the indicators. The findings revealed that all the values of VIF were less

than the cut-off value of 5, thus confirming that there was no problem of multicollinearity in this dataset. This supports the strength of the measurement model because it shows that the indicators were not too highly correlated with each other, and that all explained independent variance in its construct.

Table 1*Factor Loadings and VIF*

Indicator	Statement	Loading	VIF
Strategic HR Alignment (HR)			
HA1	HR practices consistently align with strategic goals	0.855	2.532
HA2	HR policies support long-term objectives	0.614	1.621
HA3	HR initiatives contribute to achieving mission	0.884	2.823
HA4	HR planning integrated with strategic planning	0.686	1.769
HA5	HR activities consistently support priorities	0.858	2.393
HA6	HR processes improve service delivery quality	0.796	1.994
Emerging Information Systems (IS)			
IS1	Confident using HRIS effectively	0.836	3.125
IS2	Adequate resources for HRIS	0.855	3.556
IS3	HRIS easily accessible	0.843	2.734
IS4	HRIS implementation costs affordable	0.736	1.758
IS5	Capable of learning HRIS effectively	0.795	2.458
IS6	Using HRIS not too complicated	0.819	2.389
IS7	HRIS improves HR service delivery	0.793	2.241
Institutional Readiness (IR)			
IR1	Prepared to adopt digital HR tech	0.614	1.419
IR2	Plans to implement new HR technologies	0.711	1.608
IR3	Ready to integrate HRIS into daily operations	0.712	1.555
IR4	Started evaluating HR technology options	0.820	1.956
IR5	Plan to expand HR digital capabilities	0.779	1.709
IR6	Staff open to adopting new HR technologies	0.706	1.589
Leadership Commitment (LC)			
LC1	Leaders actively support HRIS	0.842	2.415
LC2	Top management allocates resources for HR digital transformation	0.874	2.739
LC3	Leaders communicate importance of HR alignment	0.815	2.322
LC4	Senior management participates in HR planning	0.861	2.589
LC5	Leadership provides guidance for HR digital initiatives	0.827	2.478
LC6	Leaders monitor HRIS adoption progress	0.801	2.156
LC7	Top management champions HR transformation	0.869	2.662

4.1.1 Reliability and Convergent Validity

This sub-section attempted to assess the internal consistency and the convergent validity of the measures employed in the study. To this end, three statistical measures were applied: Cronbach's alpha, composite reliability (ρ_c), and Average Variance Extracted (AVE). The Cronbach's alpha values ranged from 0.820 for HR Alignment to 0.913 for Leadership Commitment, all of which are higher than the largely accepted threshold of 0.70. This means that the practices utilized under each construct always measure the same construct and, therefore, guarantee internal consistency. Similarly, composite reliability estimates also ranged from 0.869 to 0.931, further indicating high reliability for the constructs.

Furthermore, Average Variance Extracted (AVE) estimates ranged between 0.528 and 0.659, which is much greater than the minimum requirement of 0.50. This indicates that over half of the variance for each construct was accounted for by its respective indicators, validating convergent validity. Combined, these results indicate that the constructs employed in the study are reliable and valid, lending confidence in the truthfulness of the measurement model. This validity and reliability are critical for guaranteeing that follow-up hypothesis testing is based on strong and credible measurement instruments.

Table 2
Reliability and Validity Statistics

Construct	Cronbach's Alpha	Composite Reliability (ρ_a)	Composite Reliability (ρ_c)	AVE
Emerging Information Systems (IS)	0.878	0.913	0.907	0.622
Leadership Commitment (LC)	0.913	0.917	0.931	0.659
Institutional Readiness (IR)	0.846	0.872	0.889	0.541
Strategic HR Alignment (HR)	0.820	0.839	0.869	0.528

4.1.2 Discriminant Validity

Discriminant validity was tested to ensure that each construct is capturing a distinct concept. Fornell–Larcker criterion was employed, whereby the square root of the AVE of each construct has to be greater than its correlations with the other constructs. The analysis confirmed that all constructs met this criterion. Further results are presented in the following sections. For example, the square root of AVE for HR Alignment was 0.727, which was greater than its correlations with IS (0.588), LC (0.521), and IR (0.496). This confirms that the constructs are distinct, minimizing multicollinearity and ensuring the structural model is a good fit to the hypothesized relationships.

Table 3
Discriminant Validity (Fornell–Larcker Criterion)

Construct	HR	LC	IR	IS
HR	0.727			
LC	0.521	0.812		
IR	0.496	0.543	0.736	
IS	0.588	0.512	0.468	0.788

4.1.3 Structural Model: Hypotheses Testing

The initial hypothesis (H1) examined the impact of Emerging Information Systems (IS) on strategic HR alignment. The PLS-SEM path analysis provided a significant positive impact ($\beta = 0.474$, $T = 8.076$, $p < 0.001$, $f^2 = 0.244$). The findings validate that the greater the adoption and effective deployment of Human Resource Information Systems (HRIS), the more aligned are the HR practices with the overall organizational strategy. In practice, this means that information systems are a key enabler of HR alignment in the sense that they enable data-driven decision-making, reduce HR complexities, and enhance strategic contributions. The implications accord with the Resource-Based View (RBV), which places technological resources as strategic assets that can produce sustained competitive advantage when leveraged in the right way.

The second hypothesis (H2) tested the effect of leadership commitment to aligning HR strategically. Findings indicated an extremely high positive effect ($\beta = 0.230$, $T = 4.116$, $p < 0.001$, $f^2 = 0.057$). Although the smaller size of the effect, as compared to information systems, the effect of leadership remained central. Such leaders, by their demonstration of dedication in providing direction that is unambiguous, directing resources, and advocating for digital transformation projects, enable an environment for HR alignment. This means that technology is the prime mover, but leadership is also a catalyst for sustaining the process of implementation and maintaining efforts strategically aligned.

The third hypothesis (H3) tested the role of institutional preparedness in affecting HR alignment. Results established the presence of a positive and significant relationship ($\beta = 0.284$, $T = 4.656$, $p < 0.001$, $f^2 = 0.198$), pointing towards organizational preparedness as a deciding factor in paving the way for alignment. Institutional preparedness, which takes the form of sufficient technical capacity, facilitative infrastructure, and skilled workforce, increases the ability of HR departments to translate IS adoption into actual strategic deliverables. This indicates that preparedness is not just an enabler but also a major driver that causes IS implementation to lead to successful HR alignment. Together, these findings indicate that successful HR alignment is driven by a combination of technological, leadership, and institutional drivers.

Table 4
SEM Path Coefficients (Direct Effects)

Hypothesis	Path	β	Sample Mean	Std. Deviation	T Statistics	P Values
H1	IS \rightarrow HR	0.474	0.474	0.059	8.076	0.000
H2	LC \rightarrow HR	0.230	0.232	0.056	4.116	0.000
H3	IR \rightarrow HR	0.284	0.285	0.061	4.656	0.000

4.1.4 Model Explanatory Power and Predictive Relevance

The explanatory power of the model was assessed using R^2 and Stone-Geisser Q^2 . Strategic HR Alignment had an R^2 of 0.407, indicating that IS, LC, and IR collectively explain 40.7% of the variance in HR alignment. The

predictive relevance Q^2 was 0.234, demonstrating moderate predictive capability. This indicates that while these three constructs are significant, additional factors such as organizational culture, external policy frameworks, and workforce competencies may also influence HR alignment outcomes.

Table 5

Model Summary (R^2 , Q^2 , f^2)

Variable	R^2	Q^2	f^2
HR	0.407	0.234	
LC		0	0.057
IS		0	0.244
IR		0	0.198

4.2 Discussion

The findings of this study validate that new information systems bring a big positive effect to strategic HR alignment, reinforcing their role as a key facilitator of evidence-led decisions and effective HR processes. This result concurs with previous studies such as Adias (2025), which determined that converged HRIS platforms enhance organizational responsiveness and the implementation of HR strategy. Similarly, Elugbaju *et al.* (2024) argue that digital HR solutions drive alignment by way of real-time analytics to inform workforce planning and decision-making. In the Tanzanian public sector, this represents the transition from paper-based HR management to data-driven systems with transparency, accountability, and strategic relevance. Through the removal of administrative bottlenecks, new systems allow HR departments to focus on higher-order strategic activities that have a direct contribution to institutional and national development plans.

Leadership commitment was also found to have a strong and positive correlation with HR alignment. Amoah *et al.* (2022), attest to this by pointing out that leadership is the prime catalyst for organizational readiness for digital transformation. Leaders not only spend resources but are champions of change as well, creating an innovative climate and eradicating bureaucratic impediments that often hinder strategic alignment. In Tanzanian ministries and agencies, organizational culture is established by leadership, secures staff buy-in, and ensures long-term investment in digital HR initiatives. By vision, accountability, and leadership, HR alignment is a long-term organizational priority, rather than an ad-hoc reform agenda.

Readiness at an institutional level was also a determinant of HR alignment, showing readiness in digital transformation activities. This is in accord with Vong *et al.* (2025) who present that readiness, as measured by infrastructure, human capital, and procedural arrangements, is a condition precedent for HR technologies to be profitable. In the setting of this research, readiness is a proxy for the ability of public institutions to absorb new technologies without service disruption. Ministries that undertake digital literacy, training, and change management initiatives realize smoother HR–technology interface, avoiding system underutilization or resistance. Furthermore, effective preparation ensures supporting policy, workflow, and technical support structures are available to ensure the alignment process is sustained.

Regardless of these positive implications, literature and studies also indicate noteworthy contextual constraints. Deger (2025) and Sithole *et al.* (2024) warn that IS adoption would not be sufficient to achieve alignment if resistance exists in the organization or there is a mismatch between system capability and strategic requirements. In the same way, Wallace (2022) note that commitment from leadership is not necessarily going to yield tangible outcomes in public institutions due to entrenched bureaucratic norms as well as immovable governance systems. The findings suggest that environmental factors such as institutional culture, governance systems, and environmental policy pressures can act to mediate the extent to which IS, leadership, and readiness make their way into meaningful HR alignment outcomes.

The explanatory power of the model, reflected by R^2 measure 0.407, is moderate, which reveals that IS, leadership commitment, and institutional readiness as a bundle of factors explain 40.7% of variance in HR alignment. While strong, the finding also suggests that other variables such as HR analytics capacity, change management practices, political variables, or organisational learning capacity can explain alignment outcomes more. This aligns with Hair *et al.*'s (2021) recommendations that moderate explanatory power supports the significance of investigating mediating and moderating variables in more depth. Such future research would therefore be capable of extending the model to encompass the dynamic dynamics among external institutional pressures, organizational culture, and technological adoption.

In general, the study highlights that new digital systems, leadership acceptance, and organizational preparedness all together form the foundation for achieving strategic HR alignment in Tanzanian government organizations. New digital systems provide the technical foundation, leadership offers vision and guidance, and organizational preparedness provides absorptive capability and sustainability. However, effectiveness is relative and not absolute and is situational dependent on bureaucratic culture, governance structures, and political will. Henceforth,

Tanzanian ministries and agencies must properly utilize technology in the service of strategic HR alignment through a more comprehensive approach that harmonizes technology, leadership, and preparedness as part of overall organizational reform.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

This study provides empirical evidence that emerging Information Systems, Leadership Commitment, and Institutional Readiness are all critical drivers of Strategic HR Alignment in Tanzanian MDAs. Information Systems adoption strengthens HR integration into organizational planning and supports data-driven decision-making. Leadership commitment fosters an enabling environment for transformation, and Institutional Readiness ensures that the necessary capacity and infrastructure are in place to capitalize on technological investments. The results emphasize that there is a need for balanced strategy: technology adoption needs to be balanced with leadership support and general organization readiness. Policymakers and managers should accord high priority to building capacities, leadership training, and infrastructural development for optimizing HRIS strategic contribution.

This paper therefore has several implications. Methodologically, the use of SEM in this study presents its application in evaluating complex interrelations among technological, leadership, and institutional variables in public sector HR alignment. Adherence to strict construct validity and reliability measurement provides a sound methodological framework for future studies in developing-country contexts. On practical grounds for practitioners, findings point to the fact that investments in HRIS must be supported by efforts to improve leadership commitment and institutional Readiness. Awareness programs, leadership capacity development, and infrastructure construction can make the strategic worth of HR technology more effective. Lastly, on theoretical contributions wherein this study adds to theoretical knowledge by bridging the Resource-Based View (RBV) and Contingency Theory, demonstrating that new information systems as strategic assets will only create value if they are supported with leadership sponsorship and institutional Readiness. By illustrating that alignment is a product of the interaction between internal resources and context conditions, the findings validate that neither technology nor leadership alone can guarantee strategic HR alignment. Instead, long-term alignment requires an active interaction where resources get mobilized in the right manner in the right kind of organizational context, contributing to theoretical deliberations on how digital transformation reengineers HR strategy in the public sector.

5.2 Recommendations

The current study offers empirical evidence that emerging Information Systems, Leadership Commitment, and Institutional Readiness are all predictors of Strategic HR Alignment of Tanzanian MDAs. Information Systems adoption anchors HR integration into organizational strategies and supports data-informed decision-making. Leadership commitment fosters a good climate for change, while Institutional Readiness ensures the readiness of capacity and infrastructure to reap technological investments. The results emphasize the need to adopt a synergistic strategy: technological implementation should be followed by aggressive leadership backing and good organizational preparedness. Managers and policymakers need to give topmost priority in creating capacity, training leaders, and infrastructure so that HRIS could make a stronger strategic impact. Thus, this paper has a number of implications.

Methodologically, the employment of SEM in the research demonstrates its application in evaluating complex interrelating of technological, leadership, and institutional variables in public sector HR alignment. The stringent test of construct validity and reliability provides a robust methodological model for future research in developing-country contexts. On practical grounds for practitioners, the findings suggest that investments in HRIS must be matched by initiatives to strengthen leadership commitment and institutional Readiness. Awareness programs, leadership training, and investments in infrastructure can maximize the strategic contribution of HR technology. Lastly, on theoretical contributions whereby this study adds to theoretical understanding by resolving the conflict between the Resource-Based View (RBV) and Contingency Theory, demonstrating that new information systems as strategic assets appreciate only when supported by leadership and institutional Readiness. In showing how alignment comes out of the interaction between resources within the organization and conditions within the context, the outcomes reinforce the contention that technology or leadership alone is not sufficient to guarantee strategic HR alignment. Instead, alignment must come out of a dynamic interaction where resources are mobilized efficiently in the appropriate organizational context, advancing the theoretical debate on how digital transformation reshapes HR strategy in the public sector.

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