Human Resource Information System Social-Technical Aspects and Organizational Performance: The Role of Management Support in Tanzanian Universities

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Abstract

This study examined the impact of Human Resource Information Systems (HRIS) on organizational performance at the University of Dar es Salaam (UDSM) and Mbeya University of Science and Technology (MUST) in TanzaniaThe research adopted a quantitative approach, collecting data from 260 supervisors across various departments. Using surveys and statistical analyses, the study investigated how HRIS's social and technical aspects, coupled with management support, influenced institutional performance. The findings underscored the critical role of HRIS in enhancing efficiency, with management support significantly strengthening its effectiveness. Leadership engagement, continuous training, resource allocation, and improved communication emerged as essential factors in optimizing HRIS utilization. Additionally, findings showed that ensuring system accessibility and establishing regular evaluation mechanisms could enhance HRIS alignment with institutional goals. By addressing these areas, public universities in Tanzania can maximize the benefits of HRIS, ultimately improving operational efficiency and overall organizational performance.

Keywords: Human Resource Information System, Management Support, Tanzania Public Universities, Organizational Performance.

INTRODUCTION

In this contemporary era in administrative landscape, Human Resource Information Systems (HRIS) have become essential tools for managing human resources and enhancing organizational performance (Sadiq et al., 2022; Abuhantash, 2023). HRIS integrates both social and technical dimensions to streamline operations and improve efficiency. The social dimension encompasses employee interactions, organizational culture alignment, and communication channels that facilitate system utilization (Mutua et al., 2022). In contrast, the technical dimension encompasses system design, functionality, and the supporting technological infrastructure (Alboloushi, 2020). When effectively integrated, these components play a crucial role in optimizing operational efficiency and strengthening institutional performance (Khan *et al.*, 2023).

Managing a diverse workforce of academic, administrative, and support staff in Tanzanian universities presents unique challenges (Mgaiwa, 2021a). These institutions must balance operational efficiency with maintaining high educational standards (Mgaiwa, 2021b). The complexity of human resource management (HRM) in universities is further heightened by the need for accurate personnel records, streamlined recruitment processes, efficient payroll management, and compliance with regulatory requirements. Traditional HRM approaches, which rely heavily on manual processes, often lead to inefficiencies, delays, and inconsistencies in HR operations. As a result, many higher learning institutions are adopting Human Resource Information Systems (HRIS) as a strategic solution to enhance workforce planning, improve data management, and facilitate informed decision-making (Bilgic, 2020).

HRIS integrates both social and technical dimensions, enabling institutions to optimize their human resource functions. The social aspects of HRIS focus employee interactions, aligning fostering HR processes organizational culture, and enhancing communication channels for system adoption and utilization (Mutua et al., 2022). Effective user engagement and collaboration among employees contribute to the successful implementation of HRIS by ensuring that staff members are well-equipped to navigate the system and leverage its capabilities. On the other hand, the technical aspects of HRIS encompass system design, functionality, and the supporting required technological infrastructure to ensure smooth operations (Alboloushi, 2020). When these components are well-integrated, HRIS has the potential to significantly improve operational efficiency, streamline administrative processes, and enhance institutional performance (Khan et al., 2023).

However, the success of HRIS in public universities is not solely dependent on system design and user engagement; rather, it also hinges on the level of management support. Leadership commitment is a crucial factor in facilitating HRIS implementation, as it ensures that adequate resources are allocated, necessary policies are put in place, and employees receive sufficient training and motivation to use the system effectively (Kumar & Jagadeesan, 2024). Management support encompasses multiple roles, including overseeing system adoption, addressing implementation challenges, and fostering a culture of technological acceptance within the institution

(Ibrahim & Ali, 2023). When leadership actively supports HRIS integration, the likelihood of achieving successful implementation increases significantly. Conversely, a lack of managerial involvement can lead to system inefficiencies, resistance to change, and ultimately, underutilization of HRIS (Panjaitan, 2023). Therefore, understanding how management support moderates the relationship between HRIS's social and technical aspects and overall organizational performance is essential for maximizing its effectiveness (Luseno, 2023).

Despite the transformative potential of HRIS in public universities, there remains a gap in research regarding its effectiveness, particularly in the Tanzanian context. While existing studies have examined the impact of HRIS on organizational performance, they have largely focused on system adoption, leaving the role of management support underexplored (Sadiq et al., 2022; Abuhantash, 2023). Previous research has shown that HRIS enhances HR functions by reducing administrative workload, improving decision-making, and increasing overall efficiency (Mutua et al., 2022; Ibrahim & Ali, 2023). However, these studies have not sufficiently examined how leadership engagement, resource allocation, and active facilitation shape HRIS success in public universities. Given that public institutions often with operate under bureaucratic structures resource constraints, understanding the extent to which management support influences HRIS implementation is crucial for optimizing its impact (Kumar & Jagadeesan, 2024).

Furthermore, research on HRIS in Tanzania has predominantly focused on local government institutions and the healthcare sector, with limited attention to higher learning institutions (Ngulugulu *et al.*, 2023; Lukumay, 2023; Matimbwa, 2023; Luseno, 2023). While HRIS adoption in universities has increased, the effectiveness of these systems in improving institutional performance remains an area of interest for further study. Without strong managerial commitment, universities may face challenges in fully realizing the potential benefits of HRIS, leading to inefficiencies and resistance among staff. Understanding how leadership involvement moderates the impact of HRIS social and technical aspects on organizational performance is, therefore, a key research priority.

Therefore, this study sought to bridge this knowledge gap by examining the role of management support in enhancing HRIS effectiveness within public universities in Tanzania. By investigating how leadership engagement, resource allocation, and continuous system evaluation influence HRIS success, this research aims to provide insights that can help higher learning

institutions optimize their HR management practices. Furthermore, findings from this study will contribute to existing literature on technology adoption in public institutions, offering practical recommendations for universities seeking to improve operational efficiency and performance through HRIS. Addressing these aspects is essential for ensuring that public universities in Tanzania harness the full potential of HRIS to meet their strategic and operational goals (Jayadeva *et al.*, 2022; Panjaitan, 2023; Luseno, 2023).

LITERATURE REVIEW

Theoretical Literature Review

The Social Technical System Theory, introduced by Trist and Bamforth in 1951, emphasizes the interplay between social and technical systems within organizations. This theory posits that for an organization to be effective, both its social -human factors, interactions, and cultural elements, and technical processes, technology, and systems aspects must be harmoniously integrated (Sony & Naik, 2020; Abbas & Michael, 2023). Key principles include the idea that changes in one system affect the other, necessitating a holistic approach to organizational design and implementation (Trist, 1981). Strengths of this social technical theory include its ability to foster employee engagement and improve performance by recognizing the importance of social dynamics alongside technical functionality (Geels, 2020; Bednar & Welch, 2020). However, critics argue that it may oversimplify complex organizational interactions and can be challenging to implement in practice due to varying levels of organizational readiness and culture (Panjaitan, 2023). Utilizing social technical theory in this study allows for a comprehensive analysis of how management support influences the effectiveness of Human Resource Information Systems (HRIS) by addressing both social and technical components, thereby contributing to better organizational performance in public universities in Tanzania.

Empirical Literature Review

Luseno (2023) investigated the effect of Human Resource Management Information System (HRMIS) practices on employee performance in Kenya's civil service, with a focus on the moderating role of top-level management support. The study aimed to determine how HRMIS design, integration, operation, and planning influence employee performance. Using a descriptive research design and a positivist philosophy, Luseno (2023) targeted 1,384 HR personnel across National Government Ministries and drew a sample size of 549 respondents. Primary data was collected through questionnaires, and the data was analyzed using descriptive and inferential statistics with the assistance of SPSS. Regression analysis was employed to explore relationships between variables. The findings indicated that HRMIS design,

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integration, operation, and planning significantly affect employee performance. Moreover, top-level management support played a crucial moderating role, enhancing the influence of HRMIS practices on employee performance. The study recommended optimizing HRMIS usage and enhancing management efforts to support employees, provide necessary tools, and foster a sense of involvement.

Lukumay (2023) investigated the impact of the Human Resource Information System (HRIS) on organizational performance. The research focused on HRIS's role in recruitment, control, and job monitoring, using a sample of 150 respondents. Data analysis showed that HRIS significantly enhances recruitment by streamlining resume tracking, matching job candidates, and scheduling interviews. It also improves human resource control through better security, payroll management, and succession planning, while facilitating job monitoring tasks like performance appraisals and attendance tracking. The study concluded that HRIS positively influences organizational performance, accounting for 55% of its variance. Recommendations included aligning HRIS with company policies to maximize its benefits, particularly in areas like payroll and training management.

The study by Ngulugulu *et al* (2023) investigates the adoption of Human Resource Information Systems (HRIS) in Tanzania's public sectors, driven by the growing use of Information and Communication Technology (ICT) over the last fifteen years. The study, engaged eight Districts in the Mwanza region, employed a mixed-methods case study design. A total of 63 employees were purposively selected from various Human Resources (HR) and Information and Communication Technology (ICT) departments to ensure the inclusion of relevant expertise and perspectives. Data collection employed self-administered questionnaires featuring closed-ended Likert scale items, alongside semi-structured interviews. The study findings were analyzed using SPSS for quantitative data and Atlas.ti for qualitative data to ensure a comprehensive interpretation of the results therefore the findings indicated that HRIS significantly enhances the management of HR functions, leading to recommendations for broader adoption across public sectors in Tanzania to reduce operational costs.

The study by Matimbwa (2023) examines the applications and extent of Human Resource Information Systems (HRIS) within selected Local Government Authorities (LGAs) in Tanzania. Utilizing a mixed research approach, data were collected through structured questionnaires and in-depth interviews with 201 Human Resources Officers from 39 LGAs across six regions. The analysis revealed a high extent of HRIS use for tasks such as

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storing records of new recruits and facilitating strategic decision-making and human resource planning. However, the application of HRIS for employee promotions was found to be low, indicating significant variations among LGAs in HRIS utilization. The study recommends that enhancing IT training for employees, fostering HR officer commitment, and improving technological support and expertise in ICT personnel.

Mbamba and Sanga (2024) conducted a study examining the impact of Human Resource Information Systems (HRIS) on the competitiveness of higher learning institutions (HLIs) in Tanzania. The research employed a quantitative survey approach, collecting data from HR managers and heads of academic and administrative departments responsible for HR activities in the selected HLIs. Utilizing a purposive sampling technique, the study focused on HR and administrative officers from both public and private institutions. Data analysis was performed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The findings indicated that HRIS implementation plays a pivotal role in reducing administrative costs, enhancing service delivery, and fostering HR innovation, thereby strengthening organizational competitiveness, particularly in low-technology environments.

In developed and developing countries HRIS is regarded as strategic instruments for improving the performance of many public and private organizations including public universities as it promotes efficiency and effectiveness in achieving the organization's goal and objectives. Previous studies on Human Resource Information Systems (HRIS) in Tanzania have primarily focused on local government institutions, with a few examining the health sector, particularly in the context of HRIS adoption (e.g., Ngulugulu et al., 2023; Lukumay, 2023; Matimbwa, 2023; Luseno, 2023). Despite the recognized potential of HRIS, most existing empirical studies provide limited insights into its impact on public organizational performance, particularly in relation to the moderating role of management support. This gap is especially evident in the context of public universities, where the influence of HRIS on organizational performance remains underexplored. Recognizing this research gap, the present study seeks to assess the effect of HRIS on organizational performance, with a specific focus on the moderating role of management support in public universities in Tanzania. In line with these objectives, the study proposes the following hypothesis for empirical validation:

H₁: Management support significantly moderates the relationship between the social and technical aspects of Human Resource Information Systems (HRIS) and organizational performance in public universities in Tanzania.

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Conceptual Framework

Based on the literature review and the formulated hypotheses, a conceptual framework has been developed to guide the testing of these hypotheses. Figure 1 illustrates the proposed relationships that will be examined in this study.

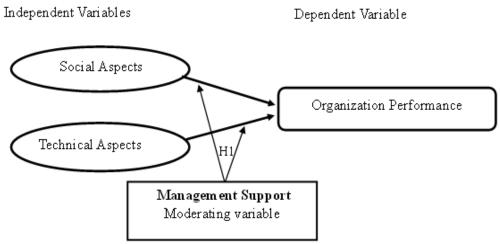


Figure 1: Conceptual Framework **Source:** Authors Construct (2024)

METHODS

Sampling and Data Collection

This study employed a quantitative research design to examine the relationship between the social and technical aspects of Human Resource Information Systems (HRIS) and organizational performance at the University of Dar es Salaam (UDSM) and Mbeya University of Science and Technology (MUST). A census approach was utilized, targeting a minimum sample size of 260 respondents, comprising of supervisors from both institutions. The study engaged key respondents, including academic staff, administrative personnel, and HR managers who oversee and interact with HRIS. Data were collected over a one-month period using a structured questionnaire designed to evaluate the integration of HRIS social and technical aspects, as well as the perceived level of management support.

DATA ANALYSIS

The data were analyzed using IBM SPSS Statistics version 20. Descriptive statistics were employed to summarize the demographic information of the respondents. Subsequently, Pearson's correlation analysis was conducted to assess the relationships between the variables, followed by regression analysis to explore the nature of the relationships between the dependent and

independent variables. F-statistics was also used as a measure of the model's goodness of fit.

A pilot study was conducted prior to the main data collection to ensure the validity and clarity of the questionnaire. Feedback from the pilot study led to necessary adjustments in the survey instruments, which were then refined for the final data collection phase.

RESULTS FINDINGS AND DISCUSSION Participants Profile

The study involved a total of 260 respondents from the University of Dar es Salaam (UDSM) and Mbeya University of Science and Technology (MUST). Of the participants, 70.3% were male and 29.7% were female, indicating a higher proportion of male respondents in the study. This disparity can be attributed to the higher number of educated men compared to women in Tanzania. This imbalance is largely influenced by sociocultural norms prevalent in many Tanzanian and African societies, where male education is often prioritized over female education. These findings align with the study by Opoku *et al.* (2024), which highlights that woman are less likely to participate in the workforce. Similarly, Ngowi, and Mafwolo (2020) emphasize the importance of affirmative action to promote equal opportunities for both men and women in organizational leadership and decision-making roles.

The age distribution of respondents was categorized into four groups: 40-49 years (47.3%), 30-39 years (42.5%), 20-29 years (9.9%), and below 20 years (0.3%). The majority of respondents fell within the 40-49 age group, indicating that senior staff members were more actively engaged in the study. This trend can be attributed to the fact that individuals within this age bracket are more likely to hold managerial, supervisory, or administrative positions, which directly influence the adoption, implementation, and effectiveness of HRIS within the institution. Their roles typically involve decision-making, policy formulation, and oversight of human resource functions, making them key stakeholders in understanding and evaluating HRIS applications.

Regarding educational qualifications, the majority of respondents (58.4%) held a PhD, followed by those with a Master's degree (16.9%), Postgraduate Diploma (16.7%), Bachelor's degree (7.1%), and Advanced Diploma (0.8%). This distribution indicates that individuals with higher academic qualifications, particularly PhD and Master's degree holders, were more actively engaged in the study. Their prominent participation can be attributed

to their supervisory and decision-making roles within the institution, which position them as key stakeholders in HRIS implementation and management The respondents' experience levels varied. Majority (48.2%) had 11 to 20 years of experience, followed by 42.2% with 6 to 10 years, and a smaller proportion (9.6%) with 0 to 5 years. This distribution reflects a workforce with substantial professional expertise, suggesting that most participants had extensive exposure to HRIS and its application within their institutions. Such experience diversity enhances the study's reliability, as it captures insights from both seasoned professionals who have witnessed HRIS evolution and those with relatively recent engagement, offering a balanced perspective on its effectiveness and challenges

The demographic information incorporated in this study is essential in ensuring the relevance and reliability of the selected respondents, as it reflects their familiarity with and involvement in the implementation of Human Resource Information Systems (HRIS). By capturing key attributes such as educational background, professional experience, and leadership roles, the study effectively identifies individuals who are directly engaged in HRIS operations and management support within public universities in Tanzania. This alignment strengthens the study's validity by ensuring that the perspectives gathered are from those with the requisite expertise to assess the applicability and impact of HRIS in the public sector

Descriptive Statistics for HRIS Social Aspects

The descriptive statistics for HRIS social aspects revealed generally positive perceptions of employee interactions, collaboration, and communication within the organization. A significant portion of respondents agreed that employees interact well (mean = 2.07), with 57.7% that agreed and 19.2% who strongly agreed. Organizational structure supports collaboration, as reflected by a lower mean of 1.85, with 65.4% of respondents who either agreed or strongly agreed. Open communication between management and staff received a strong endorsement (mean = 1.72), with 42.3% that agreed and 30.4% who strongly agreed. Employees are motivated to work together (mean = 1.90), supported by 61.5% that agreed. Additionally, teamwork is actively encouraged, reflected by a mean score of 1.84 and 62.3% of respondents that agreed or strongly agreed. Overall, the data suggests a collaborative work environment with room for improvement in certain areas as per Table 1 below:

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Table 1: Descriptive Statistics for HRIS Social Aspects

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Statement	SD	D	N	A	SA	Total	Mean
Employees in the organization are interacting well with each other	5	15	40	150	50	260	2.07
The organizational structure supports employee's collaboration	4	10	30	170	46	260	1.85
There is open communication between management and staff	6	20	45	110	79	260	1.72
Employees are motivated to work together	3	15	28	160	54	260	1.90
Team work is encouraged in our organization	2	18	35	150	55	260	1.84

Source: Field Data (2024) **Key**: SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, Total (Frequency) and mean.

Descriptive Statistics for HRIS Technical Aspects

The descriptive statistics for HRIS technical aspects indicate overall positive feedback regarding the system's usability, updates, and impact on efficiency. A substantial number of respondents agreed that the HRIS technology is user-friendly (mean = 1.80), with 53.8% that agreed and 28.5% who strongly agreed. Regular updates of the system are acknowledged, as indicated by a mean of 1.87, with 50% that agreed and 28.8% who strongly agreed. The system's ability to enhance data accuracy is well-regarded (mean = 1.78), with 55.8% of respondents that agreed and 25.8% that strongly agreed. Efficient data processes are supported by the technology (mean = 1.91), with 59.6% of respondents in agreement. Moreover, employees feel adequately trained on using the HRIS (mean = 1.89), supported by 55.8% agreement. Overall, the data reflects a generally favorable view of the HRIS technical aspects, particularly in its usability and effectiveness in handling data as per Table 2 below:

Table 2: Descriptive Statistics for HRIS Technical Aspects

Statement		D	N	A	SA	Total	Mean
The HRIS technology is user friendly		12	30	140	74	260	1.80
The systems used are regularly updated		15	35	130	75	260	1.87
The HRIS enhances data accuracy		14	28	145	67	260	1.78
The technology supports efficient data	3	16	30	155	56	260	1.91
processes							
Employees are adequately trained on	2	20	38	145	55	260	1.89
HRIS usage							

Source: Field Data (2024) **Key**: SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, Total (Frequency) and mean.

Descriptive Statistics for Organizational Performance

The descriptive statistics for organizational performance reveal a positive impact of HRIS on various performance indicators. A significant proportion

of respondents agree that employee efficiency has improved (mean = 1.64), with 50% that agreed and 38.8% who strongly agreed. In terms of user satisfaction with the HRIS, the majority express satisfaction, with a mean score of 1.98, indicating that 53.8% of respondents agreed, and 26.2% strongly agreed. Additionally, the data reflects agreement regarding overall operational effectiveness, as evidenced by a mean of 2.08, with 57.7% of respondents that agreed and 18.1% who strongly agreed. These findings suggest that HRIS implementation has positively influenced employee efficiency, user satisfaction, and the organization's operational effectiveness as per Table 3 below.

Table 3: Descriptive Statistics for Organizational Performance

Statement	SD	D	N	A	SA	Total	Mean
Improvements in employee efficiency	2	2	25	130	101	260	1.6374
User satisfaction with HRIS	0	12	40	140	68	260	1.9802
Overall operational effectiveness	3	10	50	150	47	260	2.0765

Source: Field Data (2024)

Key: SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree, Total (Frequency) and mean.

Correlation Analysis Results

The correlation analysis shows a significant positive relationship between HRIS social aspects (r = 0.673, p < 0.01) and organizational performance. A similar positive correlation was found between HRIS technical aspects and organizational performance (r = 0.680, p < 0.01).

Table 4: Correlation Analysis Results

Variables	HRIS Aspects	Social	HRIS Aspects	Technical
HRIS Social Aspects	1		0.673**	
HRIS Technical Aspects	0.673**		1	
Organizational Performance	0.680**		0.685**	

Source: Field Data (2024) **Key**: ** Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis Model Summary

Hypothesis: Management support significantly moderates the relationship between the social and technical aspects of Human Resource Information Systems (HRIS) and organizational performance in public universities in Tanzania.

Model Summary for HRIS Aspects and Organizational Performance

 $R^2 = 0.482$ indicates that 48.2% of the variance in organizational performance can be explained by HRIS social and technical aspects.

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Table 5: Regression Analysis Model Summary

Model	R	R square	Adjusted	R	Std. Error of
			square		estimate
1	0.693	0.482	0.478		1.095

Source: Field Data (2024)

Key: Predictors: (Constant), HRIS Social and Technical Aspects; Dependent Variable: Organizational Performance.

ANOVA for HRIS Aspects

The F statistic (F = 315.876, p < 0.000) shows a significant relationship between HRIS aspects and organizational performance.

Table 6: ANOVA for HRIS Aspects

Model	Sum of	Df	Mean	f	Sig.
	squares		Square		
Regression	292.934	2	146.467	315.876	.000
Residual	320.568	257	1.600		
Total	613.502	259			

Source: Field Data (2024)

Regression Weights for HRIS Aspects

The results indicate that both HRIS social and technical aspects significantly impact organizational performance, with coefficients (β) of 0.473 and 0.521, respectively.

Table 7: Regression Weights for HRIS Aspects

Table 7. Regression Weights	Tot Titals Aspects			
Model	Unstandardized coefficients	Standardized coefficients	t	Sig.
(Constant)	0.542		2.221	.027
HRIS Social Aspects	0.473	0.573	12.354	.000
HRIS Technical Aspects	0.521	0.589	14.908	.000

Source: Field Data (2024)

DISCUSSION OF FINDINGS

The findings of this study reveal a clear and significant relationship between the social and technical aspects of Human Resource Information Systems (HRIS) and organizational performance. The integration of these two components plays a pivotal role in driving improvements in organizational outcomes, as supported by several empirical studies. The social aspects of HRIS, which include employee interaction, communication channels, and the organizational culture's alignment with the system, are critical for fostering collaboration and enhancing system adoption. On the other hand, the technical aspects, which encompass the design, functionality, and technological infrastructure of HRIS, provide the foundation for efficient system operation and user engagement. Both these aspects are found to be

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positively correlated with performance, aligning with previous research that emphasizes the importance of both the social and technical elements of HRIS in achieving desired organizational outcomes.

The findings of this study are consistent with those of Matimbwa and Masue (2021), who explored HRIS adoption within Tanzanian local government authorities. Their research highlighted that key factor such as organizational support, user characteristics, and the technological features of HRIS were essential in determining the extent to which HRIS would contribute to the success of the organization. Similarly, the current study underlines the need for active organizational support, particularly from management, to ensure the successful integration of HRIS. As Matimbwa and Masue (2021) suggest, the provision of appropriate training and engagement by management fosters a culture of collaboration and competence within the organization, ensuring that HRIS technology is leveraged effectively to improve overall performance.

Furthermore, the technical aspects of HRIS, such as system usability and functionality, play an equally crucial role in organizational performance. This aligns with the findings of Abbas and Michael (2023), who argue that technological features are critical in determining the practicality and overall success of HRIS in organizations. The seamless integration of technology into the HR function, when properly executed, results in increased efficiency, streamlined processes, and better use of organizational resources. In the context of Tanzanian public universities, where HR functions often face challenges related to manual processes, the integration of advanced HRIS technology can significantly improve operational efficiency and enhance performance.

A key aspect of this study is the role of management support in moderating the relationship between HRIS and organizational performance. The hypothesis that management support amplifies the positive effects of HRIS on performance aligns with previous research findings. When leadership is actively involved in HRIS implementation, the positive impacts on organizational performance are intensified. This is because management support provides the necessary resources, sets the strategic direction for the system's integration, and ensures that training and communication channels are well-established to support staff in adapting to the new system. The ANOVA results from this study support this notion, as the significant relationship between management support and performance was confirmed. Studies by Lesono (2023), Sadiq *et al.* (2022), and Panjaitan (2023) have also established that the role of top-level management is critical in the successful

implementation of HRIS. These researchers emphasize that the involvement of management in system integration, despite the costs involved, is fundamental to enhancing organizational performance.

The study's findings suggest that management support fosters a culture of collaboration and communication, both of which are crucial for the successful adoption and utilization of HRIS. By ensuring the availability of training, allocating the necessary resources, and promoting employee engagement with the system, management can create an environment where HRIS is fully integrated into organizational processes. This, in turn, enhances employee efficiency, leading to improvements in overall organizational effectiveness.

This discussion highlights the importance of system integration and management engagement in maximizing the benefits of HRIS. Although the cost of implementing HRIS may pose challenges, particularly in public sector institutions like universities, the long-term benefits of improved operational efficiency, better decision-making, and enhanced service delivery justify the investment. The findings suggest that HRIS should not only be seen as a technological tool but as part of a broader strategy that includes management involvement, employee engagement, and continuous support. These factors are crucial in ensuring that HRIS delivers the expected benefits and contributes to achieving organizational goals.

CONCLUSION AND RECOMMENDATIONS

This study concludes that the successful integration of Human Resource Information Systems (HRIS) in public universities requires a holistic approach that goes beyond mere technological adoption. Both the social and technical aspects of HRIS play a crucial role in enhancing organizational performance, as effective employee interactions and a robust technological infrastructure contribute to improved efficiency and service delivery. However, the success of HRIS implementation is largely dependent on sustained management support and active involvement. Management plays a moderating role by fostering an environment that encourages collaboration, communication, and technical proficiency, thereby amplifying the system's effectiveness. Only through a coordinated effort between management, and HRIS technology can universities fully optimize organizational performance. The study contributes to the growing body of knowledge on HRIS adoption, particularly in Tanzanian public universities. Therefore, to ensure the effective implementation of HRIS in enhancing organizational performance and driving significant improvements in operational efficiency and overall institutional outcomes, the following key aspects should be carefully considered;

- i. Strengthening Management Support: Public universities should ensure that management actively participates in the HRIS process, providing ongoing support through training programs, resource allocation, and fostering a culture of collaboration. This will help maximize the positive impact of HRIS on organizational performance.
- ii. Improving HRIS Social Aspects: Efforts should be made to enhance communication and collaboration between employees by implementing policies that encourage teamwork and interaction. This could include workshops or team-building initiatives that focus on improving employee engagement with the HRIS.
- iii. Optimizing HRIS Technical Aspects: Universities should prioritize regular updates to the HRIS system and ensure employees are well-trained in its use. Enhancing the user-friendliness of the system and ensuring the accuracy of data will contribute to better organizational outcomes.
- iv. Continued Evaluation and Feedback: Establishing mechanisms for continual evaluation and feedback regarding HRIS usage can help universities identify areas for improvement, ensuring the system remains effective and aligned with organizational goals.

By addressing these key areas, public universities in Tanzania can improve the overall performance of their HRIS and, consequently, their organizational effectiveness.

LIMITATIONS OF THE STUDY

This study is limited in scope as it focuses on only two public universities (UDSM & MUST) in Tanzania, which may not fully represent the broader context of all higher education institutions in the country. As a result, the findings on the influence of HRIS social and technical aspects, along with the moderating role of management support in enhancing organizational performance, may not be entirely generalizable to all public universities in Tanzania. To strengthen the validity and applicability of these findings, further research should be conducted across a wider range of both public and private universities to provide a more comprehensive understanding of HRIS effectiveness in the higher education sector.

REFERENCES

Abbas, R.& Michael, K. (2023) Socio-Technical Theory: A review. In S. Papagiannidis (Ed), TheoryHub Book. Available at https://open.ncl.ac.uk / ISBN: 9781739604400

- Abuhantash, A. (2023). The impact of human resource information systems on organizational performance: A systematic literature review. *European Journal of Business and Management Research*, 8(3), 239-245.
- Alboloushi, B. (2020). Exploring HRIS post-adoption: A grounded theory of employee-driven administrative innovation in the context of Kuwait's public sector (Master's thesis, University of Sheffield).
- Bednar, P. M., & Welch, C. (2020). Socio-technical perspectives on smart working: Creating meaningful and sustainable systems. *Information Systems Frontiers*, 22(2), 281-298.
- Bilgic, E. (2020), "Human Resources Information Systems: A Recent Literature Survey", Turkmenoglu, M.A. and Cicek. B. (Ed.) *Contemporary* Global Issues Resource inHuman Limited, Management, Emerald **Publishing** Leeds. 73pp. 87. https://doi.org/10.1108/978-1-80043-392-220201008
- Geels, F. W. (2020). Micro-foundations of the multi-level perspective on socio-technical transitions: Developing a multi-dimensional model of agency through crossovers between social constructivism. *Technological Forecasting and Social Change*, 152(1), 119-125.
- Ibrahim, A. M., & Ali, H. (2023). Factors affecting human resource information system: IT infrastructure, management support, and market competition. Dinasti International *Journal of Management Science*, 5(1), 136-141.
- Jayadeva, S. M., Shikhare, R. R., & Verma, S. (2022). Factors affecting the effectiveness of HRIS (Human Resource Information System) - An empirical study. *Journal of Positive School Psychology*, 6(5), 5795-5802.
- Khan, F. H., Akhter, F., & Sohaib, S. (2023). Human resource in the digital era. *Pakistan Journal of Media Sciences*, 4(1), 46-59.
- Kumar, G. P., & Jagadeesan, D. (2024). Effectiveness of HRIS practices in the IT sector: A study. *Educational Administration: Theory and Practice*, 30(5), 5942-5848
- Luseno, E. A. (2023). Effect of human resource management information system practices on employee performance in the civil service of Kenya: Moderating role of top-level management support (Master's thesis, Kisii University). Kisii University.
- Makarius, E. E., Mukherjee, D., Fox, J. D., & Fox, A. K. (2020). Rising with the machines: A sociotechnical framework for bringing artificial intelligence into the organization. *Journal of Business Research*, 120, 262-273.

- Mgaiwa, S. J. (2021b). Academics' job satisfaction in Tanzania's higher education: The role of perceived work environment. *Social Sciences & Humanities Open*, 4(1), 100-113.
- Mgaiwa, S. J. (2021a). Leadership initiatives in response to institutional quality assurance challenges in Tanzania's private universities. *Journal of Further and Higher Education*, 45(9), 1206-1223.
- Mutua, K. M., Mokaya, S., & Wamwayi, S. (2022). Impact of workforce planning HRIS on employee performance at the National Social Security Fund in Kenya. *African Journal of Emerging Issues*, 4(11), 99-110.
- Ngowi, N., & Mafwolo, P. C. (2020) Assessment of the Effectiveness of School Management Committees Performance in Tanzania: Evidence from Selected Public Primary Schools from Ilemela Municipality. *Planning and Development Initiative Journal*, 5(2), 1821-8806.
- Opoku, A., Frimpong, E. T., Ekung, S., & Etokakpan, R. (2024). Gender equality in the built environment towards the 2030 agenda for sustainable development. In *The Elgar Companion to the Built Environment and the Sustainable Development Goals*, 158-177. Edward Elgar Publishing.
- Panjaitan, E. H. H. (2023). Implementing human resource information system (HRIS) for efficient human resource management. *International Journal of Science and Society*, 5(2), 128-139.
- Sadiq, U., Khan, A. F., Ikhlaq, K., & Mujtaba, B. G. (2022). The impact of information systems on the performance of human resources department. *In Strategic Human Resource Management at Tertiary Level*, 31-47.
- Sikira, R., & Mishael, A. (2024). Effectiveness of HRIS personnel records management on performance of higher learning institutions: A case of Tengeru Institute of Community Development. *Valley International Journal Digital Library*,6(1), 6045-6058.
- Sony, M., & Naik, S. (2020). Industry 4.0 integration with socio-technical systems theory: A systematic review and proposed theoretical model. *Technology in Society*, 61(1), 101-118.
- Trist, E.L. (1981). The evolution of socio-technical systems. Ontario Quality of Working Life Centre. Ontario Quality of working life Centre. Faculty of Environmental Studies -York University -Toronto
- Udekwe, E. (2022). Effective utilisation of human resource information systems in the South African health sector (PhD thesis,) CPUT Library Portal. Cape Peninsula University of Technology. South Africa

Influence of Participatory Project Practices on Ruwasa Project's Performance: The Case of Ushetu District, Tanzania

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Abstract

The study investigated the influence of participatory project practices (PPP) on performance of rural water projects carried out by Rural Water Supply and Sanitation Agency (RUWASA) in Ushetu district, Tanzania. It specifically looked at the influence of participatory project planning and implementation, monitoring, and communication on project performance. Using a casual research design and a Likert rated questionnaire, the study collected quantitative primary data from 171 respondents, including 143 water users and 28 RUWASA staff. Both descriptive and inferential statistics such as Pearson correlation and multiple linear regression were used to analyse the data. The results showed a positive relationship between project performance and participatory project planning, implementation, monitoring, communication. The multiple linear regression analysis revealed that participatory project planning and implementation had a significant positive impact on project performance. Similarly, a participatory project monitoring and communication were also found to have a positive effect on project performance. The study concluded that involving the community in project planning, implementation, monitoring, and communication can enhance the performance of RUWASA projects in terms of cost-effectiveness and sustainable clean water supply. It was recommended that community members participate in all aspects of project planning, implementation, and monitoring, and that participatory communication be prioritized to facilitate knowledge-sharing and informed decision-making.

Keywords: Project performance, participatory project practices, project planning project implementation, project monitoring, project communication

INTRODUCTION

Water is crucial for the socio-economic development and healthy ecosystems of the global population including Tanzania (Beard & Mitlin, 2021). It is utilized for various purposes such as domestic use, irrigation, transportation, livestock, fishing, wildlife, hydroelectric power generation, environmental flow, and recreation to mention a few. Despite the goals outlined in