

## The Impact of Human Resource Information System Automation on Efficiency and Performance in Tanzania's Public Universities

<sup>1</sup>Willy Innocent\*, <sup>2</sup>Chacha Matoka, <sup>3</sup>Charles Ngirwa

<sup>1</sup>The Open University of Tanzania, P.O. Box 13224, Dar es Salaam, Tanzania

<sup>2</sup>Mbeya University of Science and Technology, P.O. Box 131 Mbeya, Tanzania

<sup>3</sup>Institute of Social Work Tanzania P.O. Box 3375, Dar es Salaam, Tanzania

DOI: <https://doi.org/10.62277/mjrd2025v6i10003>

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### ARTICLE INFORMATION

#### Article History

*Received:* 13<sup>th</sup> December 2024

*Revised:* 15<sup>th</sup> February 2025

*Accepted:* 20<sup>th</sup> February 2025

*Published:* 10<sup>th</sup> March 2025

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#### Keywords

Human Resource Information Systems (HRIS)

Organizational Performance

Public Universities Tanzania

### ABSTRACT

This study assessed the impact of the Human Resource Information System in enhancing organisational performance at the University of Dar es Salaam and Mbeya University of Science and Technology in Tanzania. Adopting a quantitative research design, the study employed a census approach to collect data from 204 purposively selected supervisors in both universities. Descriptive analysis and partial least squares structural equation modeling (PLS-SEM) were utilized for the data analysis. The findings revealed a positive and significant relationship between HRIS automation services and organisational performance, with a regression coefficient of 0.220 and a p-value of 0.000, signifying that increased HRIS automation services enhance performance. The study concludes that HRIS automation is integral to organisational performance and recommends strengthening ICT infrastructure, fostering employee engagement through training and resource allocation, and implementing evaluation mechanisms to align HRIS with institutional objectives. These measures will enhance HRIS efficiency and contribute to improved institutional effectiveness.

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\*Corresponding author's e-mail address: [mhemawilly@gmail.com](mailto:mhemawilly@gmail.com) (Innocent, W.)

## 1.0 Introduction

The concept of human resource information systems (HRIS) has a long history in developed nations, like the United States of America, where the majority of large organisations began using HR-relevant data systems in the 1970s to enhance organisational performance (Bilgic, 2020). To keep up with the needs of today's job market, companies are combining information technology and communication with human resource management in all areas of business (Sadiq *et al.*, 2023). Any organization's ability to achieve its goals and objectives depends on how they integrate human resources into their organisational strategies. As a result, people and information are the most formidable resources that may help an organisation achieve its objectives (Kiruja, 2021). Public universities are like any other organisation; they require highly committed manpower with innovative minds to improve performance and ensure better service delivery. According to Valcik *et al.* (2021), the survival of any organisation depends on its flexibility and ability to adapt to positive changes to ensure better sustainable service delivery that complies with technological advancements.

Human Resource Information System (HRIS) is a software package that supports a wide range of activities, including those related to human resources such as e-selection and e-recruitment, e-communication, e-training, e-payroll, e-record, e-appraisal, and management. HRIS is regarded as a crucial aspect of organisational performance since it provides paramount advantages, such as faster information processing, greater accuracy, improved planning and control, and improved internal communications. HRIS has resulted in increased efficiency, high levels of job satisfaction, and enhanced communication feedback; hence, the performance of the organisation has improved (Khan *et al.*, 2023). The important thing is that HRIS can provide faster decision-making, development, design, and data administration because it is easier to store, classify, analyse, and update through its applicability, so the organisation can accommodate its human resources in a cost-

effective manner without requiring too many resources (Sony & Naik, 2020).

Research and scholarly works indicate that human resource information systems (HRIS) are universally regarded as essential components of every organisational function (Luseno, 2023). The integration of information systems in human resources has provided viable opportunities to many organisations since information systems combine multiple human resource functions into a single package, such as e-recruitment selection, e-communication, e-records, e-performance analysis, and payroll management (Prahl *et al.*, 2021). Also, many recent studies show that many organisations, both public and private, around the world use HRIS to improve their overall performance. Adding ICT to human resource management has made many organisations more efficient, mostly in developed countries rather than developing ones (Ngulugulu *et al.*, 202~). Also, the fact that HRIS can be used by organisations has made it possible for more reliable data, and the fact that data is easy to access and less paperwork needs to be done by hand has made it easier for many organisations to make decisions. Linking the social-technical theory to the applicability of HRIS automation services on organisational performance, the theory assumes that the use of technology in human resources has substantial value in fostering the management of human resources and financial resources, which contributes to an organisation's performance (Khashman & Al-Ryalat, 2015). This idea is related to the current study because it suggests that HRIS should be used more effectively to boost company performance by introducing the right strategies that can help the company use new technology in a way that boosts performance.

In the United States, organisations in the public and private sectors have a high level of compliance with Human Resource Information Systems (HRIS). This is because they are increasingly seeing these systems as being of "strategic importance," writes Koury in the HRIS Review. Notably, the HRIS review complies with the rules and regulations governing system design and display of HRIS systems. This is very important because this review serves as a model for what a compliant system

should look like. Of course, these systems must also be usable, which is where good design comes into play. Additionally, Human Resource Information System (HRIS) compliance has advanced significantly in Asia and is becoming more and more associated with improved organisational performance in a variety of industries (Haider *et al.*, 2021). According to recent studies (Abuhantash, 2023; Hameed *et al.*, 2020; Kushwaha and Sing, 2021), nations like China, Japan, and India are at the forefront of implementing HRIS systems due to the requirement to assist recruitment procedures, optimise the payroll, and enhance people management. Given the significance of HRIS in managing sizable workforces and fostering efficiency in diverse organisations, particularly in the IT and financial services sectors, where performance metrics are closely monitored and regulated, the Asia Pacific HR technology market is strong, especially in the talent and performance management sectors. In the Asia-Pacific area, calculated workforce management is helped, decision-making is streamlined, employee engagement is improved, and a more alert HR department is promoted by HRIS. The importance of the concept of HRIS is amplified by empirical literature (Sutrisno 2023; Das & Saha, 2019; Prah *et al.*, 2021).

Moreover, the study by Mbaoso (2020) witnessed that the integration of HRIS had enhanced the organisation's performance through easing tracking of employee attendance, salary management, online recruitment, performance appraisal, and other functions. Moreover, the study by Nurlina *et al.* (2020) revealed that many companies in Indonesia implemented an HRIS to reduce paperwork and provide accurate and timely data about the health workforce in Asia. HRIS also allowed HR managers to identify vacancies and ensure the hiring process was efficient and transparent. Haziazi (2020) confirmed in Oman that HRIS allows for storing, processing, and sharing information between employees and managers. This increases productivity, job satisfaction, and organisational commitment. In Malaysia, Tong (2018) believes that HRIS provides quality

information to management, allowing them to make informed decisions on recruitment, performance appraisals, remuneration, and regulatory communications to improve organisational performance. The study conducted by Quaosar *et al.* (2021) in Bangladesh found that despite the promising viable benefits of HRIS in improving organisational performance, only a few corporate organisations in developing countries such as Bangladesh have begun to adopt and use HRIS since this decade, so the pace of HRIS adoption is limited to a few mid-sized and large organisations.

Although many developing countries in Africa have embraced the potentiality of using HRIS in public and private organisations to enhance organisational performance, its level of compliance varies from one nation to another (Kiruja, 2021; Udekwe *et al.*, 2021; Kamar *et al.*, 2024; Nthiga & Nyang'au, 2021). Therefore, Human Resource Information Systems are prevalent in this contemporary era where many organisations are used worldwide, both in the public and private sectors. The integration of HRIS in the organisation, particularly in this era, is regarded as a strategic tool for ensuring that the organisation attains its intended objective. However, this can be achieved by having an innovative workforce equipped with appropriate knowledge and skills (Kumar & Jagadeesan, 2024; Mbaoso, 2020).

In Tanzania, the government proposed implementing a computerised personnel management information system in response to economic factors in the late 1980s. Before implementing the computer-assisted personnel information system "HRIS," the Tanzanian government maintained records manually, which increased the number of ghost employees, incomplete records, and delayed disclosure. However, Tanzania has taken initiatives to promote HRIS by complying with the requirement of the national ICT policy of 2003, which enforces the uptake of e-government to ensure that public services are delivered appropriately in government as well as to the private sector. The government introduced the Human Resource Information System (HRIS) in its ministries, departments,

agencies, authorities, and local government authorities to address the limitations of the handbook's inclusion system for staff training and development plans (Matimbwa, 2023; URT, 2010; Mathew *et al.*, 2023; Tesha, 2020). Apart from adopting HRIS due to its advantage, Tanzania has taken initiatives to enact ICT policy 2003 and enhance ICT infrastructure to ensure that there is crucial integration of HRIS in the public sector to ensure better performance in service delivery to its institutions (Kiwelu & Ngonzi, 2022).

HRIS in developing countries, including Tanzania, has been adopted, while there is limited knowledge and infrastructure toward enhancing the organisation's use of that technology. According to Matimbwa & Masue (2020), the pace of adoption of HRIS in the private and public sectors in developing countries, including Tanzania, has been received positively. Despite the limited knowledge and infrastructure, HRIS has continued to receive special attention and careful consideration in Tanzania from both private and public sector organisations. In line with that, the Tanzania Vision 2025, the key national development strategy, acknowledges ICT's role in managing human resource management. The innovation of the ICT field has prompted the government to improve the efficiency and effectiveness of internal business operations while also relocating public services from government offices as well as ensuring better automation services for its citizens (Lukumay, 2023). Although HRIS has been adopted globally, on the implementation side, applicability coverage remains partial in some functions of human resources and, to a greater extent, in large organisations. However, its adoption is witnessed as marginal in the case of Tanzania (Mwaipyana, 2020; Mohamoud, 2021; Kiwelu & Ngonzi, 2022; Matimbwa, 2023; Udekwe *et al.*, 2021). The available empirical studies are insufficient in determining the applicability of HRIS automation services on organisational performance rather than mostly sticking to the adoption of HRIS only. The current local literature still portrays scarcity in determining the applicability of HRIS automation services in promoting organisational performance, particularly in public universities. That juncture is

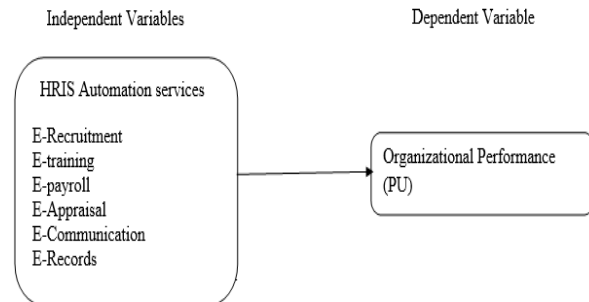
the ground that fostered the researcher to conduct a study on the effects of HRIS automation services on organisational performance in public universities in Tanzania.

Therefore, based on these findings, it is reasonable to propose this hypothesis:

**H1:** *There is no significant influence of HRIS automation services, on organizational performance in public universities in Tanzania*

### 1.1 Conceptual Framework

Based on the literature review and the formulated hypotheses, a conceptual framework has been developed to guide the testing of these hypotheses. The automation variables derived from Figure 1 do not comprehensively represent all automation services. Instead, the six selected variables were chosen based on their application and current adoption trends in Tanzania, as highlighted by Mahamoud (2021), Mathew *et al.* (2023), and Tesha (2020). Therefore, figure 1 illustrates the proposed relationships that will be examined in this study.



## 2.0 Materials and Methods

### 2.1 Study Area

The study was carried out at two public universities, namely, the University of Dar es Salaam and Mbeya University of Science and Technology in Tanzania. The study focused on determining the importance of the human resource information system on organisational performance based on determining the importance of automation services under HRIS. The choice of these two case studies is further supported by the enactment of the ICT policy of 2003, which

dictates that all government sectors adopt e-government in service delivery.

### *2.2 Research Approach and Design*

The existing study is deeply entrenched in the philosophy of positivism, which serves as a robust framework for understanding the effects of HRIS on organisational performance (Matimbwa and Masue, 2020; Matimbwa and Saunder *et al.*, 2018). Positivism is based on the idea that reality exists apart from our ability to understand it. It says that we can understand reality through specific observation and experimentation instead of our own interpretation.

To observe these dynamics, the study employed a quantitative research approach precisely designed to scrutinise how HRIS automation services promote organisational performance, specifically in public universities, based on UDSM and MUST in Tanzania. The quantitative method involved the systematic collection of numerical data obtained through structured surveys, ensuring reliability and consistency in the information gathered, and the questionnaire was paper-based and structured in a Likert scale. After the data was gathered, statistical analysis and PLS SEM were used to find out how the different variables studied were related. This rigorous tactic facilitated the drawing of tangible conclusions and aimed to produce findings that could be generalised across similar settings in the applicability of HRIS in organisational performance.

### *2.3 Population and Sampling*

The study employed a sample size of 204 respondents, comprising supervisors from two public universities, Mbeya University of Science and Technology (MUST) and the University of Dar es Salaam (UDSM). A census approach was used to include all supervisors, as they are key implementers of HRIS automation services within their respective institutions. Additionally, a simple random sampling technique was applied to select key informants from both academic and administrative staff, ensuring a representative and unbiased selection of participants for the study.

### *2.4 Data Analysis*

In this study, SPSS descriptive analysis and PLS-SEM were employed to systematically capture and interpret respondents' attitudes and perceptions regarding the significance of HRIS automation services for enhancing organisational performance. The PLS-SEM approach was used to assess the impact of HRIS automation on performance by analysing regression coefficients and p-values and providing statistical validation for relationships. Data were collected using a structured questionnaire designed to evaluate the applicability of HRIS automation services in public universities in Tanzania. The collected data were analysed and presented in tables, frequencies, and percentages to provide a clear, structured interpretation. Using a structured scale, the study quantified respondents' levels of agreement or disagreement with key statements addressing the role of HRIS automation in organisational performance. By integrating both methods, SPSS offered an initial descriptive overview, while PLS-SEM provided statistical rigour for hypothesis testing, ensuring a comprehensive and data-driven conclusion.

### *2.5 Ethical Consideration*

Ethical considerations were meticulously observed throughout the study to ensure compliance with established research standards. Formal approval to conduct field research was obtained from the University of Dar es Salaam and Mbeya University of Science and Technology, adhering to institutional and ethical guidelines. Participants were thoroughly informed about the study's purpose, the voluntary nature of their participation, and the measures taken to ensure confidentiality before providing informed consent. Strict protocols were implemented to safeguard participant anonymity, and all personal information was handled with the highest level of security and integrity to uphold ethical research principles.

## **3.0 Results and Discussion**

### *3.1 Demographic Information of Respondents*

The characteristics of 204 respondents who participated in the study are summarised and presented in bar charts and pie charts. Specifically,

the study considered respondents' gender, age distribution, highest education level, working institution, occupation (academic or supporting staff), and working experience in the current university. The findings are presented in the following subsections.

Table 1  
*Demography Information of Respondents*

| Respondents' characteristics         | Frequency  | Per cent   |
|--------------------------------------|------------|------------|
| <b>Gender</b>                        |            |            |
| Male                                 | 150        | 74         |
| Female                               | 27         | 26         |
| <b>Total</b>                         | <b>204</b> | <b>100</b> |
| <b>Age</b>                           |            |            |
| 18-35 years                          | 22         | 11         |
| 36-59 years                          | 172        | 84         |
| 60years and above                    | 10         | 5          |
| <b>Total</b>                         | <b>204</b> | <b>100</b> |
| <b>Education Level</b>               |            |            |
| Adv Diploma/Bachelor Degree          | 3          | 2          |
| Post Graduate Diploma/ Master Degree | 42         | 20         |
| PhD and above                        | 159        | 78         |
| <b>Total</b>                         | <b>204</b> | <b>100</b> |
| <b>Working Institution</b>           |            |            |
| MUST                                 | 63         | 31         |
| UDSM                                 | 141        | 69         |
| <b>Total</b>                         | <b>204</b> | <b>100</b> |
| <b>Occupation</b>                    |            |            |
| Academicians                         | 168        | 82         |
| Supporting Staffs                    | 36         | 18         |
| <b>Total</b>                         | <b>204</b> | <b>100</b> |
| <b>Working Experience</b>            |            |            |
| 1-5 years                            | 3          | 2          |
| 6-10 years                           | 12         | 6          |
| 11-15 years                          | 100        | 49         |
| 16-20 years                          | 78         | 38         |
| 21 years and above                   | 11         | 5          |
| <b>Total</b>                         | <b>204</b> | <b>100</b> |

Source; Filed Data (2024)

### 3.1.1 Gender

The results show that most respondents integrated into the study sample comprised both males and females. Table 1 presents that out of 204 respondents who integrated with the study, 73.5% were male, and the rest, 26.5%, were female. The results indicate that more men participated in the survey than their female counterparts. This

variation can be described by the fact that the number of educated men is higher than that of women in Tanzania. Such a state could be because of the sociocultural setting of most societies in Tanzania or even in most African states that prefer to educate a male child as compared to a female child. The findings concur with Opuku et al. (2024), who discovered that women are less likely to enter the workforce. According to Masue and Kiwango (2020), the findings also support the need for affirmative action to ensure equal opportunity for women and men handling positions in the organisation.

### 3.1.2 Age of Respondents

The study findings reveal that the age of respondents who were integrated into the study was classified into three parts, as indicated in Table 1 above. Firstly, the conclusions showed that youth aged 18-35 contributed 10.8% of the employed respondents. Secondly, the findings revealed that adults aged 36-59 constituted 84.3% of the total respondents, implying that the majority of the respondents were adults. This further means that the majority involved were senior and well-experienced respondents, which captured potential information about this study. Lastly, respondents aged 60 years and above constituted 4.9% of the employed respondents.

### 3.1.3 Education Level

The education level of the respondents is shown in Table 1. According to the study findings, 77.9% of respondents held a PhD or higher, 20.6% had a postgraduate diploma or master's degree, and 1.5% held an advanced diploma or bachelor's degree. According to the findings, two-thirds of the participants held a PhD or above and were qualified to supervise various positions at the two public universities (MUST & UDSM). The minority, mainly those holding bachelor's and advanced diploma degrees, were found to be supervisors to the supporting staff.

### 3.1.4 Working Institution

The respondents who were integrated into the study were from the University of Dar es Salaam and Mbeya University of Science and Technology.

The study employed the census to reach the respondents to both public universities. As presented in Table 1, the study findings indicated that 69.1% of the employees engaged in the study were from UDSM. On the other hand, 30.9% of the employees integrated into the study to provide critical information on the application and usage of HRIS, management support, and organisational performance were from MUST. This implies that the employed research tool somewhat reached out to the two institutions. Simply put, the census method employed was adequate in collecting helpful information regarding the study subject lines of research.

### *3.1.5 Working Occupation*

Furthermore, Table 1 presents the respondents' current occupation. A total of two designations were identified at the university. These include academicians and supporting staff. Of the 204 respondents, the majority (87.3%) were academicians, followed by helping staff of 12.7% from UDSM & MUST. The response signifies that academicians who studied at different universities worldwide are leading to supervision positions; hence, they can propagate effective utilisation of HRIS toward promoting organisational performance.

### *3.1.6 Working Experience*

The work experience of the respondents was also assessed, and the findings are presented in Table 1. This study defines work experience as the duration an employee has served in the institutions. This variable was captured based on the employee's years until the interview date. The worker's experience was divided into five sorts, namely, 1-5 years, 6-10 years, 11-15 years, 16-20 years, and more than 21 years. The results in Table 4.1 show that 1.5% of respondents had served in the institution for 1-5 years, while the rest served for 6-10 years (5.9%), 11-15 years (49%), 16-20 years (38.2%) and more than 21 years (5.4%). The result indicates that most respondents have sufficient work experience of 11-15 years in the institutions where they work.

## *3.2 Effect of HRIS Automation services on Organizational Performance*

The study guided by this objective examined the applicability of HRIS automation services (tasks) on organisational performance in public universities. In achieving this objective, the study examined the usage of HRIS technology under the automation services, which promote organisational performance, as stipulated below in each segment in achieving this objective.

### *3.2.1 Tasks (Automation Services of HRIS)*

The findings of the HRIS tasks on the automation aspect in Table 2 pointed out that most respondents (90%) agree that technology has enhanced e-recruitment services, and the majority (94%) agree that technology has improved HRIS e-training services; most (90%) agree that HRIS enhances e-payroll services. Regarding the influence of technology on HRIS e-appraisal, the results revealed that most (90%) respondents agree that technology has enhanced e-appraisal services, and most (92%) of respondents agree that technology has improved HRIS e-communication services. Additionally, the findings indicated that the majority (86%) agree that technology has enhanced HRIS e-records services, and the grand mean of 4.51 and total percent of 90.3 signify that the application of HRIS automation services is potentially toward promoting organisational performance. These findings are also consistent with the findings of other scholars who highlighted the applicability of HRIS in public Tanzania. For instance, Mohamed (2021) concluded that the uptake of HRIS in the public sector had propagated better performance. The study observed that the applicability of e-recruitment, e-training, and e-communication in the human resource field has boosted better service delivery and performance. Furthermore, Mbamba and Sanga (2024) found that the findings revealed that using a human resource information system improves service delivery, fosters HR innovation, and lowers administrative expenses dramatically, all of which help organisations remain competitive in low-tech settings in which the usage of this automation

service promotes the performance of the organisation.

Table 2  
*Tasks (HRIS) Automation Services*

| Test Item             | Mean Response | %           |
|-----------------------|---------------|-------------|
| E-Recruitment         | 4.5           | 90%         |
| E-Training            | 4.7           | 94%         |
| E-Payroll             | 4.5           | 90%         |
| E-Appraisal           | 4.5           | 90%         |
| E-Communication       | 4.6           | 92%         |
| E-Records             | 4.3           | 86%         |
| <b>Grand mean (%)</b> | <b>4.51</b>   | <b>90.3</b> |

Source: Data analysis (2024)

**Response Key:**

5. Strongly Agree (SA) 4. Agree (A), 3. Not Sure (NS), 2. Disagree (D), 1. Strongly Disagree (SD)

The results from Table 2 still stress that the applicability of these automation services had propagated the flexibility of service accessibility to users; however, the initiative of ensuring that the user is well engaged with the technology should not be neglected through frequent training of the user to be well equipped with the regular change in the field of technology and information. Doing so will pave the way for the proper performance of the organisation, particularly in the use of the human resource information system. The application of technology in human resource management fosters organisational performance; the integration of HRIS has motivated employees to put in a lot of effort to maintain a firm's competitiveness (Matimbwa, 2023). In this contemporary era, the adoption of HRIS by many organisations has increased efficiency and effectiveness, enabling them to capture the global market and gain a competitive advantage in terms of organisational performance. Therefore, it is crucial for all organisations, whether public or private, to prioritise the integration of HRIS usage, as it is considered a strategic tool for ensuring sustainable performance.

*3.3 PLS SEM on HRIS Automation Services and Organization Performance*

Furthermore, to validate the findings, this study used PLS-SEM to determine the structural

associations among the variables of HRIS automation services and organisation performance. The results are as stipulated by the table below:

Table 3  
*Coefficients and P-Values*

| Variables | Coefficient | P-value |
|-----------|-------------|---------|
| AS to OP  | 0.220       | 0.000   |

Source: Study Findings (2024)

**Key:**

AS=Automation Services (HRIS), and  
 OP=Organizational Performance

The results indicate that there is a statistically significant link between HRIS automation services and organisational performance, with a regression coefficient of 0.220 and a p-value of 0.000. This means that an increase in HRIS automation had a 22% effect on organisational performance, giving the organisation a competitive edge in this age of technology use.

**4.0 Discussion**

The findings from Table 3, based on HRIS automation services, imply that there is a positive and significant influence on organisational performance with a regression coefficient of 0.220 and a p-value of 0.000; this implies that an increase (applicability) of HRIS tasks and automation services will lead to a rise in organisational performance to the extent of 0.220 in a significant manner. Therefore, the null hypothesis (H1) is rejected. The HRIS automation service has a significant impact on organisational performance. Similar findings were observed in previous studies, such as those of Babelova *et al.* (2023), who conducted a paper-based review study in Slovakia on the integration of HR information system utilisation in industrial enterprises. The review revealed that, in most cases, HRIS are only partially integrated with other corporate information systems. Similarly, Shahreki's study (2024) investigated how HR and IT are strategically aligned from the standpoint of capability-based mediation in Malaysian SMEs. The findings show that SMEs' HRIS potentialities, as a result of



implementing their strategies with their enterprise potentialities, had an impact on HR efficiency.

The findings also align closely with the principles of Socio-Technical Theory. This theory emphasises the interdependence of social and technical systems within an organisation, asserting that optimal performance can only be achieved when both are designed to complement each other effectively. The technical aspect of HRIS, which includes the integration of advanced technologies such as data analytics, automation, and user-friendly interfaces, supports efficient HR processes like recruitment, payroll, and performance management. When these technical tools are aligned with the social aspects of the organisation, such as employee needs, skills, and workplace culture, they create a balanced environment where both human and technical resources are utilised to their fullest potential. The positive and significant effect observed in the findings suggests that the technical aspects of HRIS not only enhance operational efficiency but also foster better decision-making and employee engagement, which are central tenets of the socio-technical approach. Thus, the study reinforces the relevance of socio-technical theory in modern organisational contexts, demonstrating how technology, when thoughtfully integrated with social structures, can drive superior performance outcomes.

## 5.0 Conclusion and Recommendations

Based on findings from the field, this study concludes that the applicability and integration of HRIS in public universities is still not promising because of insufficient HRIS infrastructure, scarcity of power, and insufficient knowledge and skills to users. However, the government should take sustainable initiatives toward ensuring that the public universities are well equipped with HRIS infrastructure, as doing so will enhance effectiveness and efficiency in organisational performance, and it will be a foundation and building block for better sustainable service delivery in Tanzanian public universities. Furthermore, the social technical theory to be in place for applicability of HRIS in an organisation should integrate management support accordingly. Therefore, to ensure effective application of HRIS

automation services in public universities, the following recommendations should be observed:

- i. The university should ensure that efforts are 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.
- ii. Optimising Tasks Automation Services: Universities should prioritise 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 organisational outcomes.
- iii. 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 organisational goals.

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

### 5.1 Limitation of the Study

The study is partial because it is based on the two public universities in Tanzania, so the findings obtained cannot be generalised to the status of the whole context of Tanzania on the applicability of HRIS in public university adoption. Therefore, more research should be conducted in private and public universities to investigate the effect of HRIS automation services on organisational performance in order to be able to validate the results.

## 6.0 Funding Statement

The research was self-funded, with no financial assistance from funding agencies.

## 7.0 Acknowledgement

We sincerely appreciate the management of Mbeya University of Science and Technology (MUST) and the University of Dar es Salaam (UDSM) for their invaluable support and authorisation in facilitating data collection for this study.

## 8.0 References

- 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), pp. 239-245.
- Babelova, Z.G, Natalia, V and Starecek, A (2023) *The Integration of HR Information Systems Utilization in Industrial Enterprises*. Slovak University of Technology in Bratislava. Slovakia
- Bilgic, E. (2020), "Human Resources Information Systems: A Recent Literature Survey", Turkmenoglu, M.A. and Cicek, B. (Ed. ) *Contemporary Global Issues in Human Resource Management*, Emerald Publishing Limited, Bingley, pp. 73-87.
- Chavuya, K. J (2021) Human Resource Management Information Systems and Performance of Selected National Government Ministries in Nairobi City County, Kenyatta University.
- Das, S., & Saha, G. C. (2019). HRIS Practices in Private Universities of Bangladesh. *IOSR Journal of Business and Management*, 20(1), 1-10.
- Haider, N., Riaz, M., and Farooq, M. (2021). The impact of human resource information system on employee performance and organizational performance. *Journal of Business Research*, pp.131, 574-585
- Hameed, Z., Khan, M. I., and Iqbal, A. (2020). *Factors affecting HRIS implementation in Pakistani organizations*: An interpretive structural modeling approach. *Journal of Business Research*, 115, pp. 443-452
- Haziazi, M. A., (2020). Impact of e-HRM System on Organizational Performance in the Sultanate of Oman, *International Journal of Management*, 11(8), 2020, pp. 446-458. <http://www.iaeme.com/IJM/issues.asp?JType=IJM&VType=11&IType=8>
- Khan, F. H., Akhter, F., and Sohaib, S. (2023). Human resource in the digital era. *Pakistan Journal of Media Sciences*, 4(1), pp. 46-59.
- Khashman, A. M. & Al-Ryalat, H. (2015). The impact of Electronic Human Resource Management (E-HRM) practices on business performance in Jordanian telecommunications sector: "The employees" perspective". *Journal of Management Research*, 7(3), pp. 115-129.
- Kiruja, E. K. (2021). Influence of Human Resource Information System on the Performance of Oil and Gas Companies in Kenya. *International Journal of Management Studies and Social Science Research*, 31, 23-35
- Kiwelu, V. K., & Ngonzi, T. (2022). Operational challenges in the application of human resource information systems: an investigation in the select Brac Tanzania and CRDB bank PLC private financial institutions. *International Journal of Engineering, Business and Management*, 6 (2).
- Kumar, G. P., and Jagadeesan, D. (2024). Effectiveness of HRIS practices in the IT sector: A study. *Educational Administration: Theory and Practice*, 30(5) pp. 5942-5848
- Kushwaha, G. S., and Singh, P. (2021). *Role of HRIS in supporting talent management practices: A systematic literature review*. *Human Resource Management Review*, 31(2), 100742
- Linus, L. (2022) Adoption of e-records in Local Government Authority. Masters thesis, Mzumbe University Press.
- Lukumay, F. P. (2023) *The Role of Human Resource Information System on Organisational Performance*. Masters thesis, The Open University of Tanzania Press.

- 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.
- Mabaso, T.M. (2020) A Model for Effective Use of Human Resources Information System in South Africa State owned Agencies: University of South Africa.
- Mahamoud, A. (2021). *Impact of Human Capital Management Information System on Organisation Performance in Tanzania*. Doctoral dissertation, The Open University of Tanzania Press.
- Mathew, M. N., Rwela, E. G. and Mkwizu, N. Y. (2023). Adoption of Human Resource Information Systems on Public Sectors in Tanzania. *East African Journal of Information Technology*, 6(1), pp. 66-76.
- Matimbwa, H and Olatukun, W (2023) Determinants of Human Resource Information System (HRIS) Effective in Local Government Authorities in Tanzania. *East African Journal of Management and Business Studies*, 3(3), 79-92
- Mwaipya, H.J (2020). The Role of Human Resource Information System in Private Organization Performance. Mzumbe University Press.
- Ngulugulu, M., Rwela, E., and Mkwizu, N. (2023). Adoption of Human Resource Information Systems on Public Sectors in Tanzania. *East African Journal of Information Technology*, 6 (1), pp.66-76.  
<https://doi.org/10.37284/eajit.6.1.11>
- Nthiga, W. C and Nyang'au, P.S. (2021). Effect of Human Resource Information Systems on Efficiency of Information Management on Employees' Performance at Muranga Water and Sanitation Companies, Kenya. Jomo Kenyatta University of Agriculture and Technology, Kenya
- Nurlina, N., Situmorang, J., Akob, M., Quilim, C. A., & Arfah, A. (2020). Influence of e-HRM and human resources service quality on employee performance. *The Journal of Asian Finance, Economics and Business*, 7 (10), 391-399.
- Prahl, K. C., Klink, H., Hasler, M., Hagen, S., Verreet, J. A., & Birr, T. (2022). Can decision support systems help improve the sustainable use of fungicides in wheat. *Sustainability*, 14(23), 15599.
- Quaosar, G. M., and Rahman, Md. S. (2021). Human Resource Information Systems (HRIS) of Developing Countries in 21st Century: Review and Prospects. *Journal of Human Resource and Sustainability Studies*, pp. 470-483.
- Sadiq, U., Khan, A. F., Ikhlaiq, 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* (pp. 31-47). River Publishers
- Saunders, M., Lewis, P., and Thornhill, A. (2018). *Research Methods for Business Students*. (6<sup>th</sup> ed.). Harlow, England: Pearson Education
- Shahrek, J (2024) *High-Performance Work System and HR Efficiency the Mediating role of HRIS. Potentialities. International Journal of Management and Decision Making*, 23(3), pp. 290-310
- 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, 101248.
- Sutrisno, S. (2023). The role of information and communication technology in improving the efficiency of human resource management administration. *Jurnal Minfo Polgan*, 12(1), 1315-1324.
- Tandari, M. C. (2004). The Tanzania development vision 2025. *Dear Partners, Friends & Interested Readers*, 63.
- Tesha, I. (2020). Factors Influencing the Adoption of Human Resource Information Systems in Tea Companies in Tanzania: The Case of Afri Tea and Coffee Blenders (1963) Ltd. Mzumbe University Press.
- Trist, E., (1951) The Evolution of Social Technical System: A Conceptual Framework an Action

Research Program. York University Toronto  
*A sourcebook*, pp.43-57.

Udekwe, E., Iwu, C., and Daramola, J.O (2021)  
*Descriptive literature review of human  
resource information systems (HRIS)  
adoption issues in the health sector*, South  
Africa. Cape Peninsula University of  
Technology, South Africa. *International  
Journal of Research in Business and Social  
Science (2147- 4478)*, 10(5), pp.261–275.  
<https://doi.org/10.20525/ijrbs.v10i5.1284>

Valcik, N. A., Sabharwal, M., and Benavides, T. J.  
(2021). *Human Resources Information  
Systems. Management for Professionals*.  
Springer Nature Switzerland.