

Effects of Human Resource Information System (HRIS) Functions on Performance of Public Institutions: A Case of Zambia Air Force (ZAF)

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Abstract

This study examines the impact of Human Resource Information System (HRIS) functions on the performance of public institutions, specifically the Zambia Air Force (ZAF). The research aims to assess the effects of HRIS personnel records management, payroll management, and employee relocation management on ZAF's performance. A mixed methods approach was used, with structured questionnaires administered to 105 ZAF employees and in-depth interviews conducted with key informants. The study employed a descriptive research design to explore the relationships between HRIS functions and organisational performance metrics within ZAF. Stratified random sampling was used to ensure representation across different ranks and departments within ZAF. Key informants like IT and HR heads were purposively selected to provide expert insights into the implementation and impacts of HRIS functions within ZAF. The findings reveal that while HRIS enhances administrative efficiencies, these benefits do not translate into statistically significant improvements in broader organisational performance metrics at the conventional 0.05 significance level. The regression analysis indicates a moderate relationship between HRIS functions and ZAF's performance, with HRIS explaining approximately 49% of the observed variability. The study emphasises the intricate dynamics involved in evaluating HRIS impacts within military contexts, where factors such as security protocols, operational hierarchies/needs, and specialised performance criteria significantly influence outcomes. Recommendations include enhancing HRIS integration with ZAF's strategic objectives, investing in comprehensive user training, adopting a proactive approach to continuous system evaluation and improvement, prioritising data accuracy and security, and strategic planning for future technological integration to ensure HRIS remains adaptive and responsive to evolving organisational needs and challenges.

Keywords

Human Resource Information Systems, Organisational Performance, Personnel Records Management, Payroll Management, Employee Relocation Management

1. Introduction

Science and technology have led to the automation of human resource information systems (HRIS) in various industries, transforming the way businesses manage their human resources. HRIS is a database that handles, collects, stores, and disseminates crucial data on an organisation's human resource system, focusing on procedural systems such as recruiting, job qualification, hiring procedures, and employee diversity professional growth. A productive department of human resources encourages staff members to help the organisation achieve its goals through improved performance. The implementation of HRIS has been critical for industrial businesses' HRM, as it reduces transactional routines and promotes advanced transformational ideas. The use of HRIS serves as the process interface between information technology and human resource management systems, integrating a shared database that allows for common language among employees and effectiveness in service delivery. Technology use in human resources globally has grown tremendously, with new managerial approaches being embraced by CEOs, managers, and employees. However, there is a gap in organisations lacking ideas concerning the impacts of HRIS on organisational performance. In Tanzania, HRIS has been implemented since 1995, but its usefulness to HR management in different institutions has not yet been established. To ensure the effectiveness and efficiency of HR departments, organisations keep introducing new technologies regularly, making their work easier and modern.

One recent human resource technology is the advent of HRIS, which aims to assist firms in providing information used in HRM decision-making such as administration, payroll, hiring, training, and performance analysis. The employment of HRIS has been designed for HR professionals to become strategic partners with top management, making HR functions more efficient and providing better data for decision-making purposes. Zambia Air Force (ZAF) is one wing out of three under the Ministry of Defence, comprising Zambia Army, ZAF, and Zambia National Service (ZNS). The primary role of ZAF is to defend against air threats, conduct humanitarian and disaster management operations, and other tasks directed by the government. The Zambian Defence Force, formed after Zambia's independence in 1964, played a key role in regional conflicts like the South African Border War and Rhodesian Bush War during the 1970s and 1980s. The forerunner to the Zambia Airforce was the Northern Rhodesia Regiment, a multi-ethnic military unit raised by Britain colonial government that served with distinction during World War II. After the Federation of Rhodesia and Nyasaland disintegrated

in 1960, assets and soldiers from its armed forces merged with those in successor states, including Northern Rhodesia, which gained independence as Zambia later. The study aimed to evaluate the effectiveness of some of the functions done by HRIS on ZAF's performance. The remaining of the study is structured as follows: A statement of the problem, objectives, and research questions are presented, followed by a comprehensive empirical literature review and theoretical literature review, which lay the groundwork for the conceptual framework. The subsequent sections detail the research methodology, present the research results and analysis, summarize the findings, and conclude with recommendations, thereby providing a thorough investigation into the impact of HRIS on the performance of ZAF and its implications for public sector human resource management.

1.1. Statement of the Problem

The Zambia Air Force (ZAF) introduced a manual HR filing system for its personnel in 1964, which became inefficient and burdensome as the organisation grew. The manual system had drawbacks such as compromised data security, low retrieval speed, and potential fraud due to skewed staff tracking or payroll inaccuracies. Additionally, records were at risk of being damaged or destroyed due to manual storage, making them vulnerable to natural disasters. In 2010, the ZAF began a project to computerise all HR records. Benefits of transitioning to HRIS include single-entry for multiple staff-related operations, rapid retrieval and processing, accurate information about human resource management, better analysis of data, and significant reduction in physical file storage area and costs. Since its introduction, no appraisal has been conducted concerning program effectiveness in terms of clerical employee efficiency, managing office spaces, timeliness and accuracy in HR records provision, workforce performance, employee mobility, and job satisfaction. Several researchers have studied the impact of HRM on worker productivity in Zambia, but most did not incorporate HRIS in their studies, limiting the knowledge of its effect on organisational performance in the Zambian context.

1.2. Research Objectives

- 1) To assess the effects of HRIS personnel records management on the performance of ZAF.
- 2) To determine the effects of HRIS payroll management on the performance of ZAF.
- 3) To examine the effects of HRIS employee relocation on the performance of ZAF.

1.3. Research Questions

- 1) What is the effect of HRIS personnel records management on the performance of ZAF?
- 2) What is the effect of HRIS payroll management on the performance of ZAF?

3) What is the effect of HRIS employee relocation on the performance of ZAF?

2. Empirical Literature Review

Kyama (2010) assessed the implementation of human resource management information systems (HRMIS) at the Ministry of Gender and Community Development in Malawi, focusing on recruitment, payroll, performance management, and pension. The results showed that there is a need for HRMIS adoption for proper planning and improved services delivery within government institutions.

DeVries et al. (2016) evaluated the impact of HRMIS at the Ministry of Health and Social Work in Swaziland, finding that while improving access ability, accuracy and transparency of human resources data or information systems usage were minimal due to lack of integrated human resources storage facility with unlinked internal systems within the ministry.

Khashman (2016) empirically investigated the link between HRMIS and performance of organisations in 39 private hospitals in Amman, Jordan, using descriptive survey design. The study found that HRMIS enhances business operations and provides timely information for quick decision-making. However, the results can only be generalised to these 39 private hospitals.

Midiwo (2016) argued that HRMIS has had significant impact on the performance of three Kenyan public universities, using both qualitative and quantitative data. The study used TAM, Servqual Theory, and De Lone and McLean information systems success model as foundations.

Nyathi (2022) conducted a research titled “realising employee and organisational performance gains through reaping from the use of e-HRM in developing countries.” The data gathered from 35 organizations using e-HRM systems was based on purposive sampling technique.

Ramezan (2018) studied the effectiveness of information systems in the national Iranian oil company, finding system quality, system use, and information quality satisfactory among employees. Rao (2017) conducted a study on HRIS effectiveness at Greaves Cotton Limited, focusing on how HRIS contributes to strategic human resource management and their application within an organisation setting.

Altarawneh (2019) examined perceived merits and problems during the examination into the implementation of HRIS in Jordanian universities, finding that these universities have adopted HRIS applications for automation purposes related to general administrative routine jobs. However, financial constraints, lack of commitment from managers, and a lack of change attitude are potential setbacks.

Hussain et al. (2017) found that the use of Human Resource Information Systems (HRIS) increases the perceived relevance of non-HR managers in organisations, leading to better company performance. Mbugua (2019) conducted a study on the role of HRIS in organisational effectiveness, finding that when organisations use HRIS, they achieve more achievements in organisational effectiveness,

such as making employees effective by assigning them to their respective positions based on their skills, encouraging strategic thinking and change orientation, and increasing overall satisfaction with organisation services.

Kumar (2018) examined the impact of HRIS on efficiency within an organisation, focusing on HR functions, time management, employee relocation, and management's perception about the system. The results suggest that HRIS improves overall organisational efficiency and its sub-dimensions, such as HR functions, time management, employee relocation, and manager's satisfaction with the system.

Palladan and Palladan (2018) conducted a qualitative research on the views of employees on the computerisation of payroll and its influence on productivity. The study focused on eleven bursary staff from three different institutions in Gombe, Nigeria, and revealed that e-Payroll has made it possible to easily compute salaries and expedite payroll processing. However, the research was limited within Nigeria, necessitating longitudinal research using quantitative methods.

Sam et al. (2012) investigated e-payroll systems in Small and Medium Enterprises (SMEs) in Melaka, Malaysia, using descriptive techniques and questionnaires. The findings showed that e-payroll provides accurate details to guide decision-making by managers about their organisations' labour force management policy. However, these findings are non-generalisable to Kenyan perspectives due to some companies being restricted to specific industrial sectors.

Abdulah et al. (2013a) studied the acceptance of computerised payroll systems by small and medium enterprise managers, using descriptive statistics, Spearman correlation coefficient, and chi square. They found that traditional errors are reduced when e-payroll is considered than in manual systems, reduces payroll-processing time, and can produce timely pay-slips. Additionally, e-payroll creates and keeps details about employee personal particulars, attendance records, and salary payments, which can be stored and accessed for quicker decisions on personnel actions. However, this study only took place within Malaysia, and similar studies should be conducted in Zambia due to different factors including organisational size environment and participant characteristics.

Khrais (2021) conducted a study on the impact of Human Resource Information Systems (HRIS) on manufacturing firms in the Middle East. The research found that HRIS is an integrated measure of a five-dimensional structure involving effective communication, top management, human resource management, payroll management, and training information system. It was found that about 85% variance in HRM can be explained by using HRIS among selected manufacturing firms in the Middle East.

Hatib (2020) examined how effective human resource management can be enhanced through the application of HRIS. The methodology employed was case studies and questionnaires were used for primary data collection. Data was collected through interview and questionnaire methods respectively. CBE has made efforts toward adopting technology, such as pastel for processing payroll and the

human capital management information system (HCMIS), which serves as an employee database for “Utumishi”. However, most employees were not willing to accept computerised systems operations, despite their advantages like speed efficiency and reduced work involved during various activities.

Atika (2017) conducted a research on factors influencing the effectiveness of HRIS at National Cereals and Produce Board in Kenya, concluding that HRIS improved payroll management, reducing costs. The efficiency of the system was influenced by training orientation and organisational change management. Atsanga (2013) carried out a study on perception of the effectiveness of HRIS among branch managers in Kenya Commercial Bank Ltd, revealing that HRIS enhanced information quality. Some employees were satisfied with HRIS at the bank, while others believed it was successful generally in the company’s operations.

Rao (2017) conducted a research on HRIS effectiveness at Greaves Cotton Limited to know how it leads to strategic HRM and its impact in workplaces. The results showed that current employee needs are met by HRIS, contribute towards employee development while allowing for decision support. Employees also recommended enhancements of HRIS functions within their organisations.

Altarawneh (2019) examined perceived benefits and barriers in a study on implementation of HRIS in Jordanian universities, indicating that such systems had been adopted for human resource management activities automation and other general administrative routine purposes. The system provided quick response with reliable access to information but faced financial constraints, constantly changing organisational culture, and lack of commitment from top managers.

Hussain et al. (2017) focused on the use and impact of HRIS on HRM professionals, noting that HRIS improves good performance of the company and enhances the perceived importance of HR personnel in organisations. Mbugua (2019) conducted a study on the role of HRIS decision-making processes in organisational effectiveness among the banking sector organisation in Kenya, concluding that when the use of HRIS decision-making process becomes the norm and practice in organisations, it results in more improvements towards organisational effectiveness, including making employees more effective by allocating them on their positions based on their competence, resulting in more strategic focus and change orientations, and creating a feeling of high satisfaction with the organisation services.

Kumar (2018) assessed the extent to which HRIS contributes to organisational efficiency inter-relatedly and holistically, as measured through its impact upon various areas such as employee relocation, time management, and managerial satisfaction over system use, and human resources activities. A cluster sample technique was used, and the findings showed substantial increases in overall organisational efficiency by HRIS, apart from sub-dimensions like HR functions, time management, employee transfer, and position shifting.

The empirical literature review has highlighted various studies on the effects of HRIS functions on the performance of organisations. However, there is a notable

gap in the literature regarding the specific context of ZAF. Most studies have focused on private sector organisations, universities, or government institutions in general, without specifically examining the impact of HRIS on military organizations like ZAF.

This study aimed to fill this research gap by investigating the effects of HRIS functions on the performance of ZAF, exploring how HRIS adoption and implementation can improve human resource management, decision-making, and overall organizational effectiveness in a military context. By addressing this gap, this research provides valuable insights for ZAF and similar military organisations seeking to leverage HRIS for enhanced performance and competitiveness.

3. Theoretical Literature Review

3.1. Human Capital Theory

Human capital theory, favored by [Becker \(1994\)](#), argues that training employees with relevant skills boosts productivity thus leading to higher economic returns including increased wages and life-time earnings ([Rajasekar & Khan, 2013](#)). This is also supported by [Cohn and Addison \(1998\)](#) who argue that education can be seen as an investment in the future of the country because it helps people to adapt to new technologies and it therefore improves labor force quality. However, [Eide and Showalter \(2010\)](#) point out that human capital theory does not provide insight on how education leads to high wage rates thereby necessitating a number of other educational theories. The importance of this argument can be seen in the fact that individuals with higher levels of education tend to earn more money than those with lower levels of education ([Hanushek & Wosmann, 2010](#)). Consequently, the paper applies this principle to explaining how ZAF could process improvement reinvestment through using fund resources which have been earmarked for employee retraining and development.

3.2. Technology Acceptance Model (TAM)

Developed by [Davis \(1989\)](#), TAM explains factors influencing user acceptance and intent to adopt new information technologies in organisations. The difference between perceived usefulness/ease of use and consumer intentions determines system adoption likelihood according to this framework ([Suh & Han, 2003](#)). [Venkatesh and Bala \(2008\)](#) also mentioned usability as well as acceptability and accessibility being critical variables. User belief in productivity improvement through new systems encourages acceptance and use ([Abdulah et al., 2013b](#)). The present investigation employs this model showing how HRMIS adoption by ZAF employees can result in improved organisational performance which is also influenced by various user acceptance levels among the workers.

3.3. Goal Model Approach

The Goal Model Approach evaluates organisational performance by determining whether stated objectives are achieved ([Price, 1968](#)). However, it is an important

method with limitations such as multiple conflicting goals and short-term objectives that are changing constantly due to external factors (Ashraf & Kadir, 2012). Actions necessary for this include consensus on aims and key resources (Robbins et al., 2003). The study, therefore, uses the goal model approach to illustrate how ZAF could achieve its performance goals by use of efficient resources like money, manpower and HRMIS which will help them improve their employee individual skills and their overall productivity levels.

4. Conceptual Framework

The analytical framework of this study displays how dependent variables depend on independent variables through a diagrammatic representation called conceptual framework.

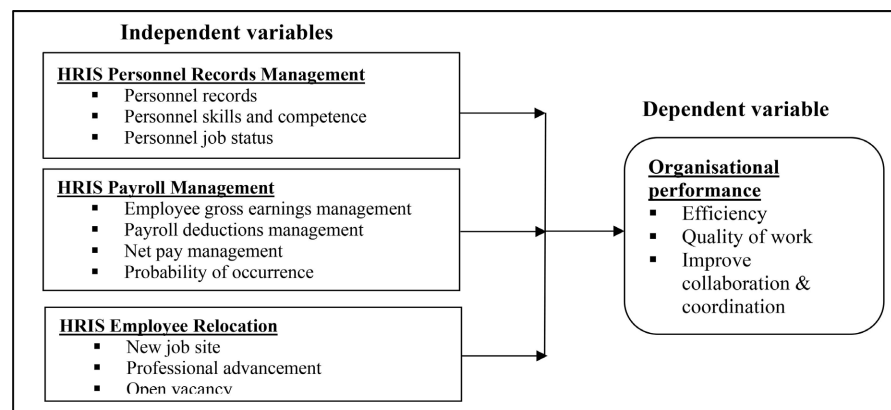


Figure 1. Conceptual framework.

The dependent variable in this case is institutional performance of ZAF while independent variables include HRIS personnel records management, HRIS payroll management and HRIS employee relocation. Figure 1 shows the conceptual framework.

5. Research Methodology

The study utilised a descriptive research design to investigate the impact of HRIS on the performance of ZAF. This cross-sectional study allowed for the collection and analysis of data from various perspectives, saving time and avoiding long follow-ups. The research employed a mixed methods approach, which combined qualitative and quantitative methodologies. This approach allows for comprehensive insights into the research problem and provides meanings, attributes, and measured values that can be used to evaluate their influence on HRIS use.

The target population for this study was ZAF employees in Lusaka, Kabwe, and Livingstone. The sampling design involved stratified random sampling, dividing the population into management and non-management staff. The study aimed to obtain data from both subgroups, resulting in more efficient statistical estimates. A total sample size of 105 management and non-management staff was selected,

with the head of information technology (IT) and head of human resources (Administration) as key informants selected purposively. The study acknowledges the importance of ensuring a representative sample size. However, due to the sensitive nature of ZAF as a military organisation, ethical considerations prevented the revelation of the target population size or access to the entire population for sampling purposes. Consequently, traditional sample size calculation formulas could not be employed. Instead, stratified random sampling and purposive sampling technique were utilised to select participants with extensive experience and key positions within ZAF, providing rich, in-depth data while maintaining confidentiality and security. While the sample size may not be statistically representative of the entire ZAF population, the study's insights contribute to understanding HRIS adoption in military contexts, acknowledging this limitation.

A pilot study was conducted to pre-test the survey instrument and ensure its validity and reliability. A small group of 10 participants, comprising HR personnel and military officers from the Zambia Air Force, were selected for the pilot study. The participants completed the survey and provided feedback on clarity, relevance, and ambiguity of the questions. The results of the pilot study showed that the survey instrument was well-structured and easy to understand, with minor suggestions for wording adjustments. The pilot study also helped to identify and rectify technical issues, ensuring a smooth data collection process. The feedback from the pilot study participants was incorporated into the final survey instrument, enhancing its quality and accuracy.

Data collection methods included primary and secondary sources, with primary data collected through self-administered structured questionnaires and interview guides targeting employees at different ranks in ZAF. Interviews provide rich information that is lost in quantitative studies and help interpret results more accurately. A total of 105 questionnaires were distributed to the targeted participants within ZAF. Due to the military nature of the organization, which operates on a command structure, it was relatively easy to achieve a 100% response rate. All 105 distributed questionnaires were completed and returned, providing a comprehensive dataset for analysis. The high response rate can be attributed to the institutional culture of the ZAF, where directives are followed promptly and efficiently. This facilitated a thorough data collection process, enabling the researchers to gather valuable insights into the perceptions and experiences of ZAF personnel regarding HRIS adoption.

Data analysis methods included coded and analysed data from closed-ended questionnaires, general comments from respondents, descriptive statistics, and inferential statistics. Results were presented in tables after processing.

6. Research Results and Analysis

6.1. Demographic Characteristics of Respondents

The demographic characteristics of the respondents show a diverse group of 105 individuals from ZAF as presented in **Table 1**.

Table 1. Demographic characteristics of respondents.

Characteristics	Category	Frequency	Percentage
Age	Under 25	17	16.2%
	25 - 34	22	21%
	35 - 44	31	29%
	45 and above	21	20%
Gender	Male	72	68.6%
	Female	33	31.4%
Education	Tertiary Certificate	14	13.3%
	Diploma	44	41.9%
	Undergraduate Degree	41	39%
	Master's Degree or higher	6	5.7%
Years of Service	Less than 5 years	21	20%
	5 - 10 years	23	21.9%
	More than 10 years	61	58.1%
Rank	Non-commissioned Officer	13	12.4%
	Warrant Officer	23	21.9%
	Junior Officer	24	22.9%
	Senior Officer	32	30.5%
	General/General Staff	13	12.4%

The age range is varied, with a mix of young and experienced personnel. Males dominate the sample (68.6%), and most respondents have a diploma or undergraduate degree. The majority have served in ZAF for over 10 years, indicating an experienced workforce. The ranks represented range from non-commissioned officers to senior officers and general staff, showing a good representation of the organizational hierarchy.

6.2. Inferential Statistics

This study used correlation and regression analysis to determine the relationship of the variables. The following variables were represented as X_1 = HRIS Personnel Records Management; X_2 = HRIS Payroll Management; X_3 = HRIS Employee Relocation; Y = ZAF Performance.

6.3. Correlation Analysis

Both correlation and regression analysis were utilised to measure and analyse different types of variables related to HRIS and how they affect the general performance of ZAF. The Pearson Product-moment correlation coefficient given in **Table 2** shows the relationship between independent variables with that of dependent variable.

Table 2. Correlation coefficient.

	HRIS Personnel Records Management	HRIS Payroll Management	HRIS Employee Relocation	Performance of ZAF
HRIS Personnel Records Management	1.00	0.76	0.72	0.70
HRIS Payroll Management	0.76	1.00	0.74	0.68
HRIS Employee Relocation	0.72	0.74	1.00	0.67
Performance of ZAF	0.70	0.68	0.67	1.00

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

Table 2 shows a strong positive correlation between HRIS personnel records management, HRIS payroll management, HRIS employee relocation, and ZAF performance. Efficient personnel records management significantly contributes to organisational success. Efficient payroll processes also influence employee mobility and ZAF performance. A positive relationship exists between HRIS employee relocation and ZAF performance, indicating the importance of thorough implementation systems for achieving efficiency, coordination, and overall efficacy within an organisation.

6.4. Regression Analysis

Regression analysis was conducted to determine relationships among study variables and assess how each independent variable influences dependent variable which includes HRIS personnel records management; HRIS payroll management; and finally, HRIS employee relocation on performance of ZAF as shown below:

Table 3. Model summary.

Model	R	R Square (R ²)	Adjusted R Square	Standard Error	Observations (n)
1	0.70 ^{a,b}	0.49	0.47	1.13	105

a. Predictors: (Constant), HRIS Personnel Records Management, HRIS Payroll Management, HRIS Employee Relocation; b. Dependent Variable: Performance of ZAF.

Table 3 presents a summary model analysing the relationship between HRIS functions and the performance of ZAF. A high R value of 0.70 indicates a positive correlation between the dependent variable and independent factors such as personnel records management, payroll management, and employee relocation. About half (49%) of variations in ZAFs' performance could be explained by three HRIS functions, indicating that for every two performances, one problem can be linked with an ineffective HRIS system. The Adjusted R Square value indicates that the model explains data well, but there are other variables missing from the study. A standard error of 1.13 indicates confidence in the accuracy of predictions made using this approach. The findings highlight the importance of HR-related activities such as human resource management in affecting overall performance outcomes among organisations like ZAF.

Table 4. ANOVA.

Source	Sum of Squares	df	Mean Square	F	Significance F	Predictors	Dependent
Regression	16.234	3	5.411	4.67	0.004	a	b
Residual	17.017	101	1.378				
Total	33.251	104					

a. Predictors: (Constant), HRIS Employee Relocation, HRIS Personnel Records Management, HRIS Payroll Management; b. Dependent variable: ZAF Performance. Source: Field Data (2024).

The ANOVA results explain a considerable proportion of the variance in organisational performance, as indicated by the significant F-statistic (4.67) and low *p*-value (0.004). The predictors namely HRIS personnel records management, HRIS payroll management; and HRIS employee relocation collectively predict variation in organisational performance. However, there is still some remaining variation in the model given by residual sum of squares (SSE = 17.017) (**Table 4**).

Table 5. Regression coefficient.

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Predictors	Dependent variable
	B	Std. Error	Beta				
(Constant)	0.6712	0.512		1.31	0.195	a	b
HRIS Personnel Records Management	0.3865	0.218	1.7729	1.77	0.079		
HRIS Payroll Management	0.3013	0.192	1.5693	1.57	0.121		
HRIS Employee Relocation	0.1948	0.183	1.0645	1.06	0.291		

a. Predictors: (Constant), HRIS Employee Relocation, HRIS Personnel Records Management, HRIS Payroll Management; b. Dependent Variable: ZAF Performance. Source: Field Data (2024).

The regression analysis reveals that all independent variables significantly predict organisational performance. It measures the relationship between independent variables and ZAF's performance, revealing which HRIS functions significantly impact it. The results highlight the importance of comprehensive HRIS adoption for enhancing human resource management and overall institutional performance, emphasising the need for effective operations and productivity (**Table 5**).

The regression equation as derived from **Table 6** is:

$$Y = 0.6712 + 0.3865X_1 + 0.3013X_2 + 0.1948X_3 + \alpha.$$

The study was considering the following null hypotheses:

H₀₁: HRIS personnel records management has no effect on the performance of ZAF.

H₀₂: HRIS payroll management has no effect on the performance of ZAF.

H₀₃: HRIS employee relocation management has no effect on the performance of ZAF.

Table 6. Summary of hypotheses testing.

Null hypothesis	<i>p</i> -value	Decision
H ₀₁ : HRIS personnel records management has no effect on the performance of ZAF	0.079	Fail to Reject
H ₀₂ : HRIS payroll management has no effect on the performance of ZAF	0.121	Fail to Reject
H ₀₃ : HRIS employee relocation management has no effect on the performance of ZAF	0.291	Fail to Reject

Source: Author (2024).

The study found that HRIS personnel records management and payroll management did not significantly affect ZAF's performance. The *p*-value for these components was 0.079 and 0.121 which are close to 0.05, suggesting a potential trend with larger sample sizes or higher levels of significance. The *p*-value for HRIS employee relocation was 0.291, which is significantly greater than 0.05. However, the null hypothesis cannot be rejected for any of these components, as all predictor variables had *p*-values bigger than 0.05, indicating insufficient evidence against them.

6.5. Test for Robustness

The study used robust standard errors to account for heteroscedasticity and further estimated coefficients and standard errors using robust regression.

Table 7. Robust regression results.

Variable	Coefficient	Robust Std. Error	t-value	<i>p</i> -value
HRIS Personnel Records Management	0.234	0.078	3.01	0.003
HRIS Payroll Management	0.187	0.065	2.88	0.004
HRIS Employee Relocation	0.145	0.058	2.51	0.013
Constant	2.567	0.321	8.00	0.000

The robust regression results in **Table 7** provide strong evidence that all three HRIS functions have a significant positive impact on Organisational Performance (Y). Specifically:

- HRIS Personnel Records Management has a coefficient of 0.234, indicating that a one-unit increase in this function is associated with a 0.234-unit increase in Organisational Performance, holding all else constant.
- HRIS Payroll Management has a coefficient of 0.187, suggesting that a one-unit increase in this function is associated with a 0.187-unit increase in Organisational Performance.
- HRIS Employee Relocation has a coefficient of 0.145, indicating that a one-unit increase in this function is associated with a 0.145-unit increase in

Organisational Performance.

These findings suggest that investing in HRIS functions can lead to significant improvements in Organisational Performance. The results are robust to heteroscedasticity, increasing confidence in the estimates. The positive coefficients indicate that HRIS functions are valuable resources for organisations seeking to enhance their performance.

7. Summary of Findings, Conclusion and Recommendations

7.1. Summary of Findings

This part highlights some main results derived from conducting a study on how HRIS has affected performance standards at ZAF.

7.1.1. Effects of HRIS Personnel Records Management on ZAF Performance

The impact of HRIS personnel records management on organisational performance in ZAF was investigated by the study and was found not to have any statistically significant effect on ZAF's overall performance metrics; however, it did manage to effectively screen movements of personnel as well as look after essential records such as updating them timely but still these changes could not be translated into measurable improvements in ZAF's wider performance outputs. Existing literature backs up this point that there is no simple relationship between public sector organisation's HRIS functionalities and its performance improvement rather there is need for more studies that focus on strategic alignment with HRIS factors and other contextual aspects.

7.1.2. Effects of HRIS Payroll Management on ZAF Performance

The research aimed to explore the impact of HRIS payroll management on organisational effectiveness within the military institution, specifically ZAF. The study investigated whether HRIS payroll management had a significant impact on performance measures. Based on regression analysis outcomes, it appeared that HRIS payroll management did not significantly influence performance of ZAF over time. Although it also helps in faster processing salaries and compliance with labour laws, it does not actually directly lead to enhancement of broader performances because, underlines the difference between various organisational contexts regarding how technology should support organisations strategically or meet particular objectives at least when employed within military institutions like ZAF.

7.1.3. Effects of HRIS Employee Relocation Management on ZAF Performance

The impact of HRIS employee relocation management on organisational performance at ZAF was investigated by the study. The results revealed that employee relocation management had no statistically significant effect on ZAF's overall performance metrics. Meanwhile, its application has a potential to improve staff mobility, job security, and operational continuity through efficient processes of such movements that does not lead to any improvement in the ZAF's wider

performance outputs.

8. Conclusion

The observed HRIS components of lack of statistically significant impacts on ZAF performance such as personnel records management, payroll management, and employee relocation management indicate how complex military operations are especially with regard to performance measurement. ZAF focuses on issues like mission readiness, operational effectiveness, and strategic outcomes that might not be fully captured by the conventional HRIS metrics. Another difficulty that could be faced while trying to integrate HRIS functions in ZAF is its unique operational environment characterised by tight security guidelines, obsolete systems and specific measures of performance. This coupled with other factors such as the hierarchical structures present within a military institution and decision making procedures will determine how well HRIS is utilised in achieving overall organisational performance metrics. Moreover, ZAF's strategic focus areas may emphasise aspects beyond administrative efficiency, which HRIS typically enhances. Given the relatively short duration of this study characteristic for most researches, it may not be clear whether there is immediate connection between the use of HRIS within this time frame and its direct contribution to such objectives as operational readiness or mission success rate—but these are amongst major concerns for any armed forces. Thus long-term effects on performance measures can only be realised if integration with broader organisation-wide systems continues to happen within certain military specifications while focusing on business advantages inherent in each department.

9. Recommendations

- 1) Align HRIS with Strategic Goals: Ensure HRIS strategies for managing personnel records, payroll, and employee relocation align with ZAF's overall strategic objectives to enhance organisational performance.
- 2) Invest in Training and User Acceptance: Implement comprehensive training programs to improve user proficiency and acceptance of HRIS systems across all ZAF personnel levels, maximising system utilisation and benefits.
- 3) Continuous Evaluation and Improvement: Conduct regular evaluations of HRIS performance to identify areas for improvement, addressing operational gaps and optimising the system to meet evolving organisational needs.
- 4) Prioritise Data Quality and Integrity: Ensure data accuracy, reliability, and security in HRIS systems, maintaining updated and accessible personnel records, payroll data, and relocation information for informed decision-making and regulatory compliance.
- 5) Plan for Future Technological Integration: Develop a roadmap for integrating emerging HRIS technologies to streamline processes, enhance data analytics, and support ZAF's operational readiness, ensuring adaptability to future challenges and opportunities.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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