

# Assessing the Effects of the Human Resource Information System on Work Performance at Zesco Limited

Mwambo Shabongo , Jackson Phiri

Graduate School of Business, University of Zambia, Lusaka, Zambia  
Email: mwamboshabongo@gmail.com

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## Abstract

The study was aimed at Assessing the Effects of the Human Resource Information System (HRIS) on Work Performance at ZESCO Limited. The study was guided by the following research objectives, to assess how the implementation of Human Resource Information System has affected personnel administration at ZESCO Limited; to determine the effects of Human Resource Information System on customer service provision at ZESCO Limited; to propose other effective ways of using Human Resource Information System for optimum work performance at ZESCO Limited. The mixed method approach using Convergent Parallel research design was used, with quantitative data being analyzed using Chi-Square generated through Statistical Package for Scientists (SPSS) version 25 while the qualitative data was analyzed thematically. The sample comprised of one hundred and two (102) respondents. The study comprised of one hundred and two (102) respondents from one hundred and thirty two (132) staff working under Human Resource department using a questionnaire. The respondents comprised of management and non-management staff at ZESCO Limited head office and regional offices who work under the Human Resource Department (HRD) while 20 customers were randomly sampled with 2 from each region for interviews. Based on the findings of the Pearson chi-square test and the descriptive statistics, it has been determined that the HRIS has a positive and statistically significant effect on work performance at ZESCO Limited. These findings are consistent with the findings of the majority of studies that were reviewed for the empirical literature. Findings revealed that HRIS has a statistically significant effect on Personnel Administration, as measured by Performance Measurement, Performance Appraisal, Job Analysis, Recruitment Application, and Selection Application. Findings in line with the second objective which was to determine the effect of Human Resource Information System on customer service provi-

sion at ZESCO Limited, revealed that HRIS does have a statistically significant effect on Customer Service, as measured by Communication Application. The study proposed that in order to ensure continuous improvement, it is imperative to conduct regular evaluations of the system, either on a quarterly or monthly basis. These evaluations will help identify any areas that may require enhancements or improvements. Areas for further research were also identified.

### **Keywords**

Human Resource Information System, Work Performance, Customer Satisfaction, Effectiveness

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## **1. Introduction**

Effective management of human resources in organisations is a key driver to the success and sustainability of organisations (Obeidat, 2012). Human resource management is a strategic and coherent approach to the management of people who either individually or collectively, contribute to the attainment of an organisation's objectives (Armstrong, 2009). Armstrong (2009) further states that the practice of human resource management is concerned with obtaining, analyzing and reporting on data that informs the direction of value-adding people management. There is an emphasis on the use of reliable metrics to guide an approach to managing people that regards them as assets and emphasizes that competitive advantage is achieved through various processes such as employee engagement and retention, learning and development and talent management (Obeidat, 2012). In order to function optimally, the management of human resources must be supported by use of the right tools. Armstrong (2009) defines Human Resource Information System as a computer-based information system for managing various Human Resource processes and procedures. The use of Human Resources Information Systems (HRIS) has become an increasingly important feature in the practice of Human Resource Management.

Globally, information systems have been implemented in a variety of economic areas. In wealthy countries, the trend is more entrenched. Developing countries have been slow to adopt information systems (Bhuiyan, Rahmann, & Gani, 2015). Almost any task may be digitized, making it incredibly simple to complete numerous tasks. Human resource information systems are used to make certain human resource management procedures easier to complete, saving time and money (Obeidat, 2012). To name a few applications, the systems can be utilized in recruiting and selection, training and development, HR planning, reward management, and performance management.

The advancement and usage of technology has transcended all facets of modern livelihood including how organisations conduct business. The rapid pace at

which these technological changes have been happening has placed a huge burden on organisations to stay abreast with the trends especially that organisations are continually seeking to use technology to gain competitive advantage. According to Lema (2013), Information Technology is having a major impact on the structure of organisations and these software systems have been integrated into the major areas of business which has enabled organisations to gain numerous advantages such as efficiency, quicker response times and enhanced decision-making.

Human Resource Information Systems enhance organisational decision-making processes through fast, accurate and complete information processing which ultimately improves productivity. In general, HRIS's major objectives in almost all organizations include facilitating access to information, reduction of operational costs by ensuring a higher speed and accuracy in the processing of information (Rosemond & Ernesticia, 2011). In view of the fact that information is a vital aspect of management, it is not helpful if employees had incomplete and inaccurate information (Obeidat, 2012). Information technologies have brought about extensive changes for organizations such that their overall performance has been directly affected by the levels of information technologies employed. Human resources management is greatly impacted by the technologies deployed due to the leading role it plays in every organization (Obeidat, 2012). Therefore, the organizations need to carefully identify and employ those systems that will have a positive impact on dimensions such as efficiency, effectiveness and improved employee experience.

A number of human resource practices are dependent on the availability of an effective human resource information system. For example, recruitment, learning and development, job design, reward etc. require that proper systems are in place and that such systems are actually used for the intended purpose. All these activities that support a high-performance culture in organisations depend on enabling tools that are specifically tailored to each activity. Most Human Resource Information Systems have incorporated into their functionalities several sub-systems that deal with performance management, reward, learning and development, succession planning, payroll, time management, personal record keeping, etc.

With the advancing of technology, a number of Zambian firms have implemented HRIS, of which ZESCO is one of them. The aim of implementing and adopting HRIS at ZESCO is to reduce the amount of manual processing and therefore increase the levels of efficiency in the various processes and increase productivity in employees by giving them a platform that streamlined the routine human resource processes. It is against this unexpected change or adaptation in management of the available human capital that this study is being carried out. HRIS has been used by ZESCO for the past fourteen (14) years. This study will therefore assess the effectiveness of the human resource information systems and how this has affected work performance at ZESCO Limited.

The article is organized as follows, introduction, statement of the problem, research objectives, theoretical framework, literature review, methodology and research design, findings, discussion, conclusion, and recommendations.

## 2. Statement of the Problem

While there has been increased development in software applications, there has been no known assessment at ZESCO Limited aimed at evaluating or assessing how the systems continue to impact on work performance. Recently, the advent of the unexpected pandemic in the name of Covid-19 at the beginning of 2020 placed demands on organisations to adapt and test their resilience in the use of technology in order to continue being relevant and HRIS was not spared. Unfortunately, there appears to be insufficient knowledge on the subject in Zambia, particularly at ZESCO Limited, therefore there is little or no evidence on how HRIS has influenced Human Resource operations and whether or not it has resulted in the expected efficiency and effectiveness. This suggested study attempted to bridge the knowledge gap about whether there is increased effectiveness in Human Resource Operations in ZESCO Limited following HRIS implementation. The purpose of this research is to assess the effects of the Human Resource Information System on work performance in ZESCO Limited.

## 3. Research Objectives

In order to achieve the above-mentioned purpose, the following objectives were used:

- 1) To assess how the implementation of Human Resource Information System has affected the personnel administration ZESCO Limited.
- 2) To determine the effects of Human Resource Information System on customer service provision at ZESCO Limited.

## 4. Theoretical Framework

This study was guided by the Resource-Based View Theory. One of the most influential schools of thought that has been utilized in the investigation of the matter is the resource-based view (RBV), which was initially offered by [Wernerfelt \(1984\)](#), and the fundamental contention of RBV is that the performance of a company is directly proportional to the resources that it possesses. In this case the resources that ZESCO possesses are the Human Resource Information System. When resource-based view (RBV) analysis is done to determine how information technology (IT) affects an organization, IT is viewed as an organizational resource that has the potential to improve organizational capabilities if well applied and, as a result, contribute to overall improved work performance and positively win the confidence of the customers which in this case are those who are using ZESCO electricity. When resource-based valuation (RBV) is used to assess the value of information technology, information systems are typically categorized as resources.

According to Obeidat (2012), an organizational resource that can create advantage must possess the characteristic of being valuable (meaning that the resource can enable a firm to conceive or implement strategies that improve its efficiency or effectiveness). Value, which is solely concerned with the generation and maintenance of a competitive advantage many researchers, in addition to using financial indicators, also use indicators for measuring efficiency improvement such as productivity (Zhu & Kraemer, 2004) and cost reduction (include COG/S, SGA/S and so on) (Obeidat, 2012) to examine the impact of information systems (IS) on the operational efficiency of a company. At ZESCO Limited, the effectiveness of HRIS must be in the areas of recruitment, selection, job analysis, performance appraisals and communication. Another area includes customer satisfaction. This is done in order to determine whether or not Information System has a positive or negative effect on other unique indicators, such as customer satisfaction (Obeidat, 2012) and market share, are employed in certain contexts. These indicators are used in certain conditions.

## 5. Literature Review

Several organizations including ZESCO have adopted Human Resources Information System (HRIS) in order to become competitive in the corporate world by easily retrieving information and having paperless offices. The use of HRIS has been promoted as an opportunity for human resource professionals to become strategic partners with management as it helps to generate better information for decision making. Today's organizations all over the world both public and private have to remain alert and adaptive to unforeseen events, such as external crises, which create increased uncertainty among their workforce and pose immediate threats to the organizations' performance and viability. However, with the recent COVID-19 pandemic, organizations suddenly have had to navigate the unprecedented and thereby find new solutions to challenges arising across many areas of their operations. Pandemics have occurred intermittently over centuries (Khrais et al., 2021). In light of the aforementioned, this section provides literature review in line with the main objective of establishing the effect of Human Resource Information Systems on Human Capital Management at ZESCO Limited in Zambia.

One of the most vital components of an organization's human resource administration functions is their Human Resource Information System (HRIS), which is also one of the most significant Management Information Systems. The majority of HR planning tasks should be automated, and a modern HRIS should be able to assist companies in doing so. As a result of its ability to collect, manage, and report information for use in decision-making, HRIS has emerged as an important strategic instrument (Lema, 2013).

The Human Resource department can monitor and justify some of the HR-related expenses that the organization has incurred over time using the established HRIS system. The system may track HR-related expenses such as training

fees for newly hired employees and benefits provided to employees and their reported dependents. The HRIS system calculates termination costs, and the HR department can then determine how thoroughly they addressed the employees' issues. If the cost is considerable, the HR department investigates the reasons why people are departing. By determining the reasons, the HR department can make changes by implementing a new recruitment strategy that will benefit the firm.

The technology also tracks attendance and timeliness. The HR department can identify frequent absentees and late comers because they have a direct impact on the company's production. As a result, the HR department can take the appropriate steps to overcome or mitigate the problem. The HR department, on the other hand, can identify employees who have good attendance and punctuality so that a proper awarding system can be developed to acknowledge and encourage them to continue their good work habits.

The payroll in the HRIS automates the entire process by regularly acquiring and updating employee payroll data. It also collects data such as employee salary bills, calculates various deductions and taxes on salaries, generates automatic periodic payouts, and manages employee tax reports. This improves the effectiveness of the HR department's job tasks. With up-to-date information, this system makes the human resource department's job much easier and simpler because everything is available at any time and is just a click away. Furthermore, the HR department creates all regulatory data, such as Pay As You Earn (PAYE) and National Health Insurance Management Authority (NHIMA) contributions, using the payroll system. This option is critical in strategy development.

The management of an organization's human capital has been fundamentally altered by the introduction of human resource information systems (HRIS). HRIS has evolved as a significant instrument for optimising HR processes, boosting productivity, and supporting strategic decision-making as a result of developments in technology and data management. The following are some of the most effective uses of HRIS that businesses can put to use in order to reach their full potential in terms of human resource management.

#### 1) The Automation of Administrative Tasks

The Automation of Administrative Tasks is one of the key Benefits of Using HRIS One of the key benefits of using HRIS is the streamlining of administrative tasks. The Human Resources Information System (HRIS) decreases the amount of manual labour required, eliminates the need for paperwork, and enhances operational efficiency. This system is used for everything from the onboarding of new employees to the handling of payroll. According to the findings of a study that was conducted by (Mosenq, Ahmad, Khurram, & Bahaudin, 2015), the implementation of an HRIS results in significant time savings and minimises the number of errors that are related with the manual entry of data.

The Human Resource Information System (HRIS) enables businesses to centralise all employee data, including personal information, employment history,

performance metrics, training records, and many other types of information (Obeidat, 2012). The Human Resources Information System (HRIS) gets rid of data silos and makes it easier to retrieve accurate information by keeping a centralised database (Armstrong, 2009). This centralised method protects the security of the data and provides human resources professionals with the ability to make informed decisions based on complete employee profiles.

#### 2) Improving Recruitment and Selection

An efficient human resource information system (HRIS) can improve recruitment and selection by supplying capabilities such as applicant tracking, resume processing, and candidate evaluation. HRIS streamlines the hiring process, cuts down on the amount of time it takes to fill positions, and enhances the quality of hires by connecting job sites and automating the screening of resumes. According to the findings of a study conducted by (Mosenq et al., 2015), HRIS considerably improves both the effectiveness of recruitment and decision-making.

#### 3) Tools to Define Objectives, Track Progress and Conduct Performance Assessments

HRIS plays a significant role in performance management by offering tools to define objectives, track progress, and conduct performance assessments. This facilitates performance management. The Human Resource Information System (HRIS) helps detect skill gaps, recognise top performers, and improve overall organisational performance by providing real-time feedback, facilitating goal alignment, and providing performance dashboards (Bah, Duramany-Lakkoh, & Kalvin, 2022). According to the findings of a study conducted by (Mosenq et al., 2015), businesses that utilise HRIS for performance management claim higher levels of employee engagement and productivity (Al-Tarawneh & Tarawneh, 2017).

#### 4) Enabling Employee Self-Service

The HRIS enables employees to access and update their personal information, request time off, check pay stubs, and take part in training programmes. In addition, employees can view and engage in training programmes. The Human Resources Information System (HRIS) helps save time and improves employee satisfaction by minimising reliance on HR staff. Additionally, employees receive a sense of ownership and control over their HR-related tasks, which leads to enhanced engagement and morale (Mosenq et al., 2015). This leads to a positive impact on the organisation as a whole.

#### 5) Training and Development Support

HRIS makes it easier to manage training and development programmes by keeping a record of employee training needs, facilitating the scheduling of courses, and keeping an eye on their progression. HRIS is able to assist in the identification of skill gaps, the delivery of tailored training, and the evaluation of the effectiveness of training efforts thanks to the integration of learning management systems (Al-Tarawneh & Tarawneh, 2017). According to research conducted by Esangbedo, Bai, Mirjalili, & Wang, 2021, the implementation of HRIS has a fa-

avorable impact on the learning outcomes of employees and increases the capabilities of organisations.

#### 6) Streamlining Compensation and Benefits Management

HRIS makes it easier to manage compensation and benefits by automating salary calculations, keeping track of employee benefits, and providing access to pay-related information in real time. This contributes to improved management of compensation and benefits. This encourages transparency, helps ensure accuracy, and reduces the likelihood of errors. According to the findings of research conducted by [Esangbedo et al. \(2021\)](#), businesses that use HRIS for pay management report increased levels of employee satisfaction and a decrease in the number of compensation-related complaints.

#### 7) HRIS Enables HR Professionals and Managers to Make Data-Driven choices

Providing Real-Time Access to detailed Human Resources Data, HRIS provides users with real-time access to complete HR data, which enables HR professionals and managers to make decisions based on the data rather than their intuition ([Lippers & Swiercz, 2005](#)). With the help of the analytics and reporting capabilities contained inside HRIS, businesses are able to recognise patterns, forecast upcoming needs, and evaluate the effectiveness of their HR activities. An analysis that was carried out by [Chen & Aklikokou \(2020\)](#) underlines the significance of HR analytics with regard to increasing organisational performance and strengthening strategic decision making.

There has been a growing concern in the recent past among all key stakeholders in the country on how ZESCO Limited operates in terms of recruitment, selection, appraisals and communication in fulfilling its objectives and meeting the needs of the customers. There is also lack of data and analysis in other Zambian organisations both private and public. It is hoped that the findings in this study will contribute the knowledge for other organisation of similar information systems in Zambia to use.

## 6. Methodology and Research Design

In this study, mixed method research design was used. Research design refers to the overall strategy and analytical approach that you have chosen in order to integrate, in a coherent and logical way, the different components of the study, thus ensuring that the research problem will be thoroughly investigated ([Creswell, 2011](#)). The convergent parallel research was be utilized to conduct this study. Convergent parallel design consists of taking qualitative and qualitative data collection and analysis and comparing or relating the two and then interpreting them. Areas of convergence or divergence between the qualitative and quantitative results should be discussed. In this case quantitative data was collected using a survey questionnaire from members of ZESCO Limited staff while qualitative data using an interview guide was collected from the customers and areas of similarities or differences shall be discussed.

The study's target population comprises of management and non-Management



staff at ZESCO Limited head office and regional offices who work under the Human Resource Department (HRD). On the other hand customers were also randomly sampled from the ten regions but specifically those who have been connected to ZESCO for more than three years. This data was collected from the ZESCO system. In this study, the researcher targeted all staff working under the Human Resource (HR) department at ZESCO Limited, and as such a census was taken into account for purposes of conducting the study. Therefore, no sample was computed by the researcher as all targeted respondents forming the population were included in the study from ZESCO Limited's head office and selected regional offices. In total, there were one hundred and two (102) respondents who participated in the survey from the 132 staff working under the HR department at a regional and headquarter level representing 77% response rate from questionnaires. The respondents included both management and non-management staff members who worked for the Human Resource Department (HRD) at ZESCO Limited's head office and regional offices. The study used a purposive sampling to choose management and non-management staff from Headquarters and Regional offices. Twenty (20) customers were randomly sampled from which two (02) were from each of the 10 regions and each one was interviewed.

The researcher collected material from using both questionnaires and interviews. Questionnaires were distributed via email and were subsequently assembled while the interviews were done through phone calls using the contact from the system. Quantitative data was first analyzed. This study began with descriptive statistics to see what the perception of ZESCO Limited views about HRIS on job analysis, recruitment, selection, performance appraisal and communication. Then inferential statistics were used to provide measures of how data supported the hypothesis and if data was generalizable beyond what was tested. To do this, Chi-Square were used using the Statistical Package for Scientists (SPSS) version 25. Qualitative data was analyzed using the themes which emerged. Once all data was transcribed, the researcher did all the analysis manually. The related themes were later used in the structure of the results presentation and discussion of results sections supported with appropriate verbatim quotes. During the data analysis, the researcher searched for patterns of data which was later interpreted.

The researcher strictly observed the acceptable norms of the environment throughout the study. Respondents were not coerced to participate in the research and they were assured that the data collected will be kept confidential. On the other hand, respondents were assured that findings of the study will only be used for academic purposes. Before the actualization of data collection, the researcher sought for approval and clearance from the Directorate of Research and Graduate Studies (DRGS).

## **7. Findings**

### **1) The Effect of HRIS on Personnel Administration**

In order to assess how the implementation of HRIS has affected Personnel administration at ZESCO. Personnel administration was measured based on job analysis, recruitment application, selection application, performance appraisal (**Table 1**).

The interpretation of the results of the descriptive data reported above on assessing how the implementation of HRIS has affected Personnel administration, are presented as follows below (**Table 2**).

In general, the data indicates that the mean scores indicate a prevailing inclination towards identifying performance appraisal and performance measurement processes as more effective in contrast to the recruitment and selection application procedures. The evaluation of job analysis at ZESCO suggests that it occupies a position within the moderate, indicating a degree of effectiveness in relation to the utilisation of Human Resource Information Systems (HRIS).

The findings that are shown on **Table 3** demonstrate that the asymptotic value is 0.014, which is lower than the  $p$ -value of 0.05. Therefore, because the asymptotic value or probability value was 0.014, we are able to say HRIS has a statistically significant effect on Personnel Administration. Therefore, the findings above show that HRIS has a statistically significant effect on Personnel Administration, as measured by Performance measurement, Performance Appraisal, Job Analysis, Recruitment Application, and Selection Application.

## 2) The effect of HRIS on customer service provision at ZESCO Limited.

In order to assess how the implementation of HRIS has affected customer service at ZESCO. Customer Service was measured based on HRIS communication application and also what the customers said as a way of verifying the information (**Table 4**).

The interpretation of the results of the descriptive data reported above on assessing how the implementation of HRIS has affected customer service, are presented as follows below (**Table 5**).

The findings that are shown in **Table 6** demonstrate that the asymptotic value is 0.031, which is higher than the  $p$ -value of 0.05. Therefore, because the asymptotic value or probability value was 0.031, we accept that HRIS has a statistically

**Table 1.** Implementation of HRIS on Personnel administration.

the implementation of HRIS has affected Personnel administration	N	Minimum	Maximum	Mean
Recruitment Application	102	1	5	3.34
Selection Application	102	1	5	3.40
Job Analysis	102	1	5	3.64
Performance Appraisal	102	2	5	3.77
Performance Measurement	102	2	5	3.89
Valid N (listwise)	102			

Source: Shabongo (2023), SPSS Version 25.

**Table 2.** Interpretation of descriptive statistics results.

Personnel administration by HRIS	Mean Score	Interpretation of findings
Recruitment Application	3.34	The data indicates that the recruitment application process received an average score of 3.34 on a rating scale. The aforementioned statement suggests a moderate degree of effectiveness in relation to HRIS role in recruitment application.
Selection Application	3.40	The mean score for the selection application process has been observed to be marginally higher, with a value of 3.40. This observation suggests that the level of satisfaction or effectiveness in the recruitment application process is comparable, potentially with certain enhancements or a marginally superior outcome.
Job Analysis	3.64	Job Analysis had a mean score of 3.64. The observation of a higher mean score of 3.64 for job analysis suggests that individuals perceive this particular component of the HRIS process to be even more effective.
Performance Appraisal	3.77	The performance appraisal yielded a mean score of 3.77. The mean score for the performance appraisal process is relatively higher, with a value of 3.77. This observation suggests that there is a higher level of satisfaction among employees and stakeholders regarding the evaluation and appraisal of their performance by the HRIS.
Performance Measurement	3.89	The measurement of performance, as indicated by the mean score of 3.89, is a crucial aspect in evaluating and assessing the effectiveness and efficiency of HRIS. Performance measurement appears to be the aspect that has received the most favorable evaluation, as evidenced by its highest mean score of 3.89. This statement implies that the through HRIS, ZESCO has implemented efficient methodologies for quantifying and evaluating performance of staff.

Source: Shabongo (2023), SPSS Version 25.

**Table 3.** Chi-square tests of HRIS on personnel administration.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.564 <sup>a</sup>	16	0.014
Likelihood Ratio	28.770	16	0.021
Linear-by-Linear Association	0.363	1	0.531
N of Valid Cases	102		

Source: SPSS (2023). <sup>a</sup>20 cells (80.0%) have expected count less than 5. The minimum expected count is 0.11.

significant effect on Customer Service. Therefore, the findings above show that HRIS does have a statistically significant effect on Customer Service, as measured by Communication Application.

**Table 4.** Implementation of HRIS has affected customer service at ZESCO.

the implementation of HRIS and Customer Service	N	Minimum	Maximum	Mean
Communication Application	102	2	5	3.74
Valid N (listwise)	102			

Source: Shabongo (2023), SPSS Version 25.

**Table 5.** Interpretation of descriptive statistics results of HRIS on Customer service.

Customer Service and HRIS	Mean Score	Interpretation of findings
Communication Application	3.74	Based on the calculated mean score of 3.74, it can be inferred that there exists a favourable perception or consensus among individuals regarding the influence of Human Resource Information Systems (HRIS) on the provision of customer service as measured by Communication Application within the organisational context of ZESCO.

Source: Shabongo (2023), SPSS Version 25.

**Table 6.** Chi-square tests “HRIS has a statistically significant effect on customer service”.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.178 <sup>a</sup>	16	0.031
Likelihood Ratio	11.253	16	0.731
Linear-by-Linear Association	0.242	1	0.603
N of Valid Cases	102		

Source: SPSS (2023). <sup>a</sup>20 cells (80.0%) have expected count less than 5. The minimum expected count is 0.11.

Customers also interviewed responded in a similar to what was collected using the questionnaire from the ZESCO workers. Concerning receiving message about power disconnection, one customer from Eastern Region said in the interview via the phone, “whenever there is power disconnection, I receive the message a day before”. Another customer added that “if when applying for connection you used someone’s phone number then you will not receive any message but the person whose number you used”.

Concerning reporting about ZESCO power cut challenges, the customers mostly stated by interviewees that “this time there is no need to report the ZESCO problem physically to the offices. I either call or use a text and ZESCO staff communicates”.

About those who applied to be connected, the researcher found out from the customers if during the waiting period before connection they received the messages form ZESCO. One customer agreed that, “I didn’t follow up the connection process but I received on my phone when my number was ready and even

when they were to come to connect”.

## 8. Discussion

### 1) Implementation of HRIS affects Personnel Administration

Findings in line with the first objective which was to assess how the implementation of Human Resource Information System has affected the personnel administration ZESCO Limited, revealed that HRIS has a statistically significant effect on Personnel Administration, as measured by Performance measurement, Performance Appraisal, Job Analysis, Recruitment Application, and Selection Application. This study finding is in agreement with the research by [Khrais, Shidwan, Alafandi, & Alsaeed \(2021\)](#) and [Shahreki's \(2019\)](#) studies which both revealed a positive association or effect between HRIS and work performance.

Furthermore, in terms of the mean score, job analysis ranked the highest amongst the personnel administration at ZESCO, which indicates that there is a high degree of effectiveness amongst the personnel administration in relation to the utilisation of Human Resource Information Systems (HRIS). The findings above are in line with the literature from scholars such as [Kiruja \(2021\)](#) in Kenya, and [Hosain, Manzurul Arefin, & Hossin \(2020\)](#) in Bangladesh. [Kiruja \(2021\)](#) study focused on the impact of Human Resource Information System on the performance of Kenyan oil and gas companies, while [Hosain et al. \(2020\)](#) study focused on Multinational Corporations in Bangladesh. According to [Kiruja \(2021\)](#) study's findings, oil and gas companies' training and development programs and overall company performance are significantly impacted by HRIS.

This study also clearly suggested that since employees can easily obtain training in their own convenient times, its integration with Human Resource Information Systems has a stronger impact. The findings above are similar to those reported in [Kiruja \(2021\)](#) study and in Bangladesh, [Hosain et al. \(2020\)](#) study which examined the link between the HRIS and five components. In addition, the findings of [Hosain et al. \(2020\)](#) using the required statistical techniques showed that all five HRIS components had positive correlations with operational efficiency, with e-recruitment & selection and e-communication having the strongest relationships. In this study the correlation was weak on decision-making about the employee performance.

The results in this study clearly show that utilizing of the information from HRIS analytics helps in forecasting and anticipating future workforce requirements by analysing retirement patterns, organisational growth strategies, and industry advancements.

The study also revealed that in order to streamline the recruitment process, it is imperative to implement automation techniques that encompass various stages, starting from the posting of job openings to applicant tracking and initial screenings, which HRIS at ZESCO does. The utilisation of HRIS can effectively expedite the process of identifying highly qualified candidates, thereby significantly reducing the time it takes to hire suitable individuals for a given position.

On the issue of the Employee Self Service functionalities that come with HRIS at ZESCO in order to facilitate employees' ability to conveniently access and modify their personal details, review payslips, submit leave requests, and administer their benefits. [Esangbedo et al. \(2021\)](#) in his study agreed with study that HRIS is the most convenient way of managing payslips as compared to use of printouts. There is need to improve this functionality so that it is truly "self-service" as the name imply. By implementing this system, employees at ZESCO as well as other organisations that use HRIS are given the ability to independently handle their HR-related responsibilities, resulting in a decrease in administrative tasks. Human Resource Managers can utilize HRIS to establish, monitor, and assess employee performance objectives and Key Performance Indicators (KPIs). In addition, the study has revealed that in order to foster employee growth and enhance their commitment, it is advisable to incorporate periodic performance evaluations and constructive feed-back sessions into the organisational framework. This is in line with the proposals from [Midiwo \(2016\)](#) that emphasized that feedback should be prompt and informative.

## **2) Effect of HRIS on Customer Service Provision at ZESCO Limited**

Findings in line with the second objective which was to determine the effect of Human Resource Information System on customer service provision at ZESCO Limited, revealed that HRIS does have a statistically significant effect on Customer Service, as measured by Communication Application and also from the interviews conducted. The use of HRIS enables HR to provide efficient service to both internal employees and external customers. This is made possible by automating tasks such as leave administration, salary advances, and subsistence allowances, which allows staff to focus on serving customers rather than spending time on administrative processes. The study revealed that this is working well as ZESCO and that even customers have appreciated the system. The results agree with [\(Bah et al., 2022\)](#) whose study also revealed that automation of messages to employees and customers lessen to burden to both Human Resource Managers and customers. This allows for better tracking and management of these processes by staff which reduces follow up time with manual processes. The automation provided by HRIS offers the above advantages for employees.

## **9. Conclusion**

Findings in line with the first objective which was to assess how the implementation of Human Resource Information System has affected the personnel administration ZESCO Limited, revealed that HRIS has a statistically significant effect on Personnel Administration, as measured by Performance measurement, Performance Appraisal, Job Analysis, Recruitment Application, and Selection Application.

Findings in line with the second objective which was to determine the effect of Human Resource Information System on customer service provision at ZESCO Limited, revealed that HRIS does have a statistically significant effect on Cus-

tomers Service, as measured by Communication Application. The use of HRIS enables HR to provide efficient service to both internal employees and external customers. With HRIS when HR is giving a good service to the local customer who is an employee under Customer Service, they will in turn also give a good service to customers, without them leaving their work area to go and follow up the payments physically. This allows employees to concentrate on serving customers, as opposed to spending time following up on the leave administration process, leave commutation, petty cash, subsistence allowance, allowing them to track the processes online. The automation which comes with HRIS is beneficial for staff as it allows them to track the processes online hence saving time.

In essence, the utilisation of Human Resource Information Systems (HRIS) is of utmost importance in elevating work performance through the optimisation of HR procedures. This is achieved by leveraging data-driven insights, which in turn empower both HR practitioners and employees to operate with heightened efficiency and effectiveness within the organisational framework, and this can be seen from the findings obtained as they relate to ZESCO.

## Recommendations

The following are the recommendations based on the findings obtained:

- 1) In order to ensure continuous improvement, it is imperative to conduct regular evaluations of the system, either on a quarterly or monthly basis. These evaluations will help identify any areas that may require enhancements or improvements.
- 2) There is need to optimise and enhance the efficiency of the recruiting and onboarding procedures within the Human Resource Information System (HRIS) at ZESCO.

## Conflicts of Interest

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

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