Assessing the Effectiveness of Electronic Human Resource Management System on Human Resource Management

Case Study of Zesco Limited in Lusaka District

***Abstract*—**Technology advancement during the last few decades has boosted the implementation and application of electronic human resource management (e-HRM). e-HRM systems are perhaps transforming the role of human resource (HR) thereby creating value to the organization. Keeping this in mind, the research findings contribute to the discussion on eHRM and its strategic approach to the effectiveness of human resource management (HRM). To deal with these aspects, a comprehensive review was done on the existing literature on the related topic. The findings suggest a mixed consensus on the relevant area. This study aimed to assess the effectiveness of the e-HRM system on human resource management at ZESCO Limited. The objectives of the study was to establish the effectiveness of e-HRM system that have been implemented at ZESCO Limited and how it improves employee performance management and appraisals, and find ways in which administration processes of recruitment, selection, employee engagement, feedback and commitment in administering human resource and administrative processes such as training and development,recruitment,selection and employee retention have been improved by the e-HRM system.Data was collected from 112 human resource staff located within Lusaka district. Findings revealed that the e-HRM system at ZESCO Limited has significantly improved employee efficiency, streamlined administration processes, and provided employees with easy access to HR information. However, challenges such as technical issues and resistance to change were identified. In conclusion, the e-HRM system has positively impacted human resource management at ZESCO Limited but there is a need for continuous training and support to address the challenges faced by employees. Recommendations include providing ongoing support and training, addressing technical issues, and encouraging a culture of change and adoption of the e-HRM system within the organization. The eHRMS emerged as a valuable tool for key stakeholders in reviewing employee performance, identifying training needs, and allocating resources for training, leading to improved availability and equity in the distribution of a few resources. The eHRMS in ZESCO is well positioned to become an integral part of the business and the backbone of the organization's infrastructure.

Keywords— Electronic Human Resource Management System, Improvement on employee efficiency, Performance Management, Administrative processes, ZESCO Zambia Limited.

1.0 INTRODUCTION

1.1 Background

Electronic Human Resource Management Systems (e-HRMS) are now central to effective HR operations in many organizations worldwide. Emerging from basic digital tools introduced during the late 20th century, these systems have evolved significantly with the advent of personal computers and, later, the internet, which enabled organizations to shift from paper-based HR tasks to digital platforms. Initially, HR functions like payroll, attendance tracking, and basic employee records were among the first to be automated. This marked a fundamental change in how HR departments operated, enabling faster processing times and reducing human error in routine tasks (William & Singh, 2023).

By the early 2000s, as internet connectivity became universal, e-HRMS systems evolved further. Many organizations, including large-scale energy providers like ZESCO Limited in Zambia, embraced online portals, self-service features, and real-time data access. These changes allowed employees to participate more directly in their HR-related activities, from updating personal records to requesting leave.

More recently, e-HRMS solutions have incorporated cloud-based services, mobile applications, and even artificial intelligence to streamline recruitment, enhance performance management, and optimize workforce analytics (Nyathai et al., 2023). In the global landscape, the adoption of e-HRMS has proven beneficial across multiple dimensions of HR management. Research highlights that e-HRMS improves organizational performance by enhancing productivity, minimizing costs, and facilitating more informed decision-making through data-driven insights (Rosen & Lepsinger, 2015).

The technology's transformative effects, however, are not without challenges specifically in the Zambian setting, where issues like system integration, data security, and employee resistance can impact implementation outcomes (Shamount et al., 2022). ZESCO Limited, Zambia's primary electricity supplier, is a vital case for examining the implications of e-HRMS in a Zambian public sector organization.

This research investigates how ZESCO's e-HRMS system impacts its HR practices, focusing on recruitment, performance management, employee engagement, and decision-making processes. As ZESCO faces pressures to optimize operations due to energy demands and climate change challenges, understanding the role of e-HRMS is essential in addressing efficiency, transparency, and accountability within its HR functions.

1.2 Statement of the problem

When This study addresses a vital knowledge gap by assessing the effectiveness of e-HRMS specifically in the Zambian context, where such studies remain limited. ZESCO Limited, as Zambia's leading energy utility provider, is an influential entity in the nation's economic and social development. By examining the effectiveness of e-HRMS in ZESCO limited HR operations, this study contributes to valuable insights into how technology can drive HR efficiency in organizations that play a critical role in national infrastructure. Organizational performance can be determined by the organisations resources and their effectiveness in transforming these resources into real capabilities (Paauwe, 2009). HRM effectiveness and efficiency will lead to the enhancement of the entire organization's performance and strategic orientation (Stanton & Coovert, 2004). The introduction of an e-HRM system is expected to improve the efficiency of HRM processes, provide better service delivery, and enhance the effectiveness of strategic orientation for HRM (Parry & Tyson, 2011). The HRM system is composed of a "bundle of HR practices or policies oriented towards some overarching goal" (Lepak, Liao, Chung, & Harden, 2006, p.221). It is divided into three levels: HRM philosophy, HRM policy, and HRM practices (Becker & Gerhart, 1996; Lepak et al., 2006; Monks et al., 2013). This categorization of HRM levels (HRM philosophy, HRM policy, and HRM practices) is in alignment with Ruël et al.'s (2004) e-HRM definition.

Consequently, the administrative operations of the HR department might be greatly enhanced. An individual's strategic contribution, personal credibility, and the timely delivery of HR services are all areas that might benefit from technological advancements. Human resources can play a key role in facilitating and accelerating organizational transformation by easing the transition to new ways of working for employees. Additionally, HR needs to make sure that everything is in line with the company's big-picture plan.

Adopting and subsequently using suitable technology can accomplish all of the tasks. By highlighting the technology's benefits and challenges, the findings can guide ZESCO's management in refining their HR processes and inform similar organizations on best practices for e-HRMS integration. This research will also provide recommendations to address issues such as data security and employee resistance, which can influence the success of e-HRMS adoption which has resulted in resistance from individual employees when it comes to its application. Since the effectiveness of e-HRMS at ZESCO may have broader implications for HR practices in similar sectors across Zambia, the study's findings will support the creation of more robust e-HRMS policies and practices that align with Zambia's labor laws, data protection policies, and organizational needs. Through this assessment, the study not only informs ZESCO's strategy but also contributes to the broader understanding of e-HRMS's potential to transform HR management practices within the Zambian public sector.

1.3 Objectives

i. Assess the effectiveness of e-HRMS on employee performance management.

ii. Assess the effectiveness of e-HRM on employee engagement and commitment

iii. Assess the effectiveness of e-HRM on recruitment, selection and retention of employees

1.4 Theoretical framework

The theoretical framework for this research is justified in three main theories: Technology Acceptance Model (TAM), Resource-Based View (RBV), and Human Capital Theory. These theories provide a structured basis to examine how e-HRMS influences various aspects of HR management, such as recruitment, performance appraisal, employee engagement, and decision-making, at ZESCO Limited. The Technology Acceptance Model (TAM), developed by Davis (1989), is a prominent framework for examining the adoption and effectiveness of new technologies. TAM suggests that Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are the primary factors influencing an individual's decision to adopt a new technology. In the context of ZESCO Limited's e-HRMS, TAM can help explain how HR managers and employees accept and use the e-HRMS based on its perceived benefits and ease of integration into daily HR tasks. Perceived Usefulness:

In this study, PU is assessed by assessing how e-HRMS improves HR efficiency, accuracy, and transparency, particularly in recruitment, performance tracking, and data management. Perceived Ease of Use: This factor examines the user-friendliness of the e-HRMS at ZESCO. If HR staff find the system easy to navigate, they are more likely to utilize it effectively, reducing operational costs and improving HR service delivery. By applying TAM, the research investigates how acceptance of the e-HRMS impacts HR operations at ZESCO, assessing whether the perceived benefits align with actual improvements in HR processes and outcomes. The Resource-Based View (RBV) posits that organizations can achieve competitive advantage by effectively utilizing valuable, rare, inimitable, and non-substitutable (VRIN) resources (Barney, 1991). e-HRMS, when integrated into ZESCO's HR management, represents a valuable technological resource that can streamline processes, improve HR-related decision-making, and foster efficiency.RBV is relevant to this study in that e-HRMS offers ZESCO a unique advantage in managing workforce data, talent acquisition, and performance evaluations. By enabling quicker access to data and minimizing manual tasks, the system provides HR managers with an opportunity to enhance productivity and strategic HR planning. Specifically, e-HRMS contributes to Resource Efficiency: Human Capital

Theory suggests that investments in employees' skills, knowledge, and capabilities can lead to better organizational performance (Becker, 1964). e-HRMS at ZESCO enables the HR department to manage human capital more effectively by facilitating training, performance tracking, and career development activities. Applying Human Capital Theory in this context helps explore how e-HRMS influences ZESCO's ability to nurture and retain talent through: Enhanced Training and Development: e-HRMS can track employee progress, identify skill gaps, and facilitate personalized training plans that improve workforce competencies. This theory supports the view that e-HRMS, by improving HR management practices, can contribute to building ZESCO's human capital and, consequently, its organizational performance.

2.0 LITERATURE REVIEW

2.1 Employee Performance Management and Appraisals

Employee performance management and appraisals are essential tools in organizational success, enabling managers to evaluate, guide, and enhance the productivity and contribution of employees. These practices are closely linked to a company's overall strategy and goals, fostering an environment of continuous improvement, engagement, and accountability. To grasp the depth of their significance, it is crucial to explore the definitions and meaning of these two interrelated concepts.

Performance management refers to an ongoing process of communication between a manager and an employee that occurs throughout the year, in support of accomplishing the strategic objectives of the organization. According to Aguinis (2019), performance management is a continuous process of identifying, measuring, and developing the performance of individuals and aligning performance with the strategic goals of the organization. The process not only sets expectations for employees but also monitors their progress and provides feedback to ensure that objectives are met. The primary goal of performance management is to create a shared understanding among employees and supervisors regarding what needs to be achieved (outcomes), how it should be done (behaviors), and how success will be measured. It enables organizations to direct and support their workforce by establishing clear performance criteria and offering consistent feedback that drives employee growth (DeNisi & Murphy, 2017). Performance management systems are forward-looking, focusing on improvement and development rather than solely on past achievements or shortcomings.

A well-implemented performance management system provides a structured approach to assessing employees' work and identifying areas for improvement, thus fostering their professional growth. It also ensures that employees' individual goals align with the broader organizational goals, creating synergy and enhancing overall productivity (Pulakos, 2009). This alignment between employee objectives and organizational strategy ensures that the workforce contributes meaningfully to achieving long-term business success. Employee appraisals, on the other hand, are formal evaluations of an employee's work performance, typically conducted at regular intervals, such as annually or semi-annually. They represent a specific component of the broader performance management system and serve as a structured mechanism for reviewing past performance. Employee appraisals focus on assessing how well employees have met established performance standards and objectives, highlighting strengths and areas for improvement (Armstrong & Taylor, 2020). According to the Chartered Institute of Personnel and Development (CIPD), performance appraisal is "a method by which the job performance of an employee is documented and evaluated, usually in terms of quality, quantity, cost, and time." The primary purpose of employee

appraisals is to provide feedback, which can serve as a basis for decisions on promotions, rewards, and training needs. Appraisals are instrumental in identifying gaps between expected and actual performance, thus allowing managers and employees to address those gaps through development plans or further training. Employee appraisals are commonly associated with key activities such as setting individual performance goals, providing periodic assessments, and discussing outcomes during appraisal meetings (Aguinis, 2019). These evaluations are typically based on objective metrics, such as sales numbers, customer satisfaction ratings, or productivity levels, though subjective factors such as teamwork, communication skills, and problem-solving abilities are often considered. Effective appraisals require transparent communication and a supportive environment where employees feel encouraged to seek feedback and participate in their own performance improvement (Bach, 2005). As a result, appraisals contribute not only to individual growth but also to organizational success by ensuring that employees' skills and competencies are continuously enhanced to meet the changing needs of the business.

2.2 Employee Engagement and Commitment in administering HR processes

Globally, organizations are increasingly relying on e-HRMS to enhance employee engagement and commitment. Research by Al-Dmour et al. (2019) found that e-HRMS platforms help maintain continuous communication between employees and management, providing channels for feedback and addressing employee concerns. By streamlining HR processes, e-HRMS also reduces administrative tasks, allowing HR professionals to focus more on strategic issues that enhance employee engagement (Noe et al., 2017). Furthermore, by providing employees with access to self-service platforms where they can monitor their performance, benefits, and career progression, e-HRMS can foster a sense of ownership and empowerment, which leads to higher engagement (Kavanagh et al., 2020).In Africa, the link between e-HRMS and employee engagement is gaining attention. A study by Mthoko et al. (2020) in the South African private sector found that e-HRMS played a crucial role in boosting employee morale and commitment by making HR services more accessible and responsive to employees' needs. The study highlighted that e-HRMS made it easier for employees to access personal records, training opportunities, and benefits information, which improved their overall satisfaction and commitment to the organization. Additionally, research conducted in Kenya by Kamau and Njeru (2021) revealed that e-HRMS improved communication channels between employees and managers, fostering a stronger sense of engagement. In Zambia, studies on the use of e-HRMS to improve employee engagement and commitment are limited, but available research indicates positive trends. For example, a study by Musonda and Banda (2022) on the implementation of e-HRMS in Zambian government institutions found that employees were more satisfied when they could easily access HR services through digital platforms. The research noted that e-HRMS systems contributed to increased transparency and improved communication between HR departments and employees, which, in turn, bolstered employee commitment to the organization.

2.3 Recruitment, Selection, Retention of Employees

e-HRMS has revolutionized recruitment and selection processes globally. Research by Stone and Dulebohn (2013) highlights that e-HRMS streamlines the recruitment process by automating job postings, applications, and resume screenings, reducing time-to-hire and improving the quality of candidates. Furthermore, e-HRMS enables data-driven decision-making, allowing HR professionals to assess candidates based on analytics and predictive models. In terms of retention, studies have shown that e-HRMS systems contribute to employee retention by making onboarding smoother and facilitating better

integration into the organizational culture (Fisher et al., 2019). Locally, e-HRMS is beginning to make strides in improving recruitment and retention processes in Zambia. A study by Kalaba (2021) on e-HRMS in Zambian mining companies noted that automating recruitment processes reduced hiring times and improved the quality of hires. Furthermore, by enhancing transparency in recruitment and selection, e-HRMS systems have contributed to fairer hiring practices. However, the study also noted that the full potential of e-HRMS in improving retention was not yet realized due to challenges in system adoption and integration. Contribution to the Current Study: The global, regional, and local literature underscores the role of e-HRMS in streamlining recruitment, selection, and retention processes. These insights will be crucial in evaluating the effectiveness of e-HRMS at ZESCO Limited, particularly in assessing whether the system has contributed to better recruitment outcomes and employee retention.

The literature reviewed provides a comprehensive understanding of the role of e-HRMS in improving human resource management practices globally, regionally, and locally. It highlights the importance of these systems in enhancing employee performance management, engagement, and recruitment. The studies reviewed will form the basis for assessing the effectiveness of e-HRMS at ZESCO Limited, as they offer insights into both the benefits and challenges associated with the implementation of such systems. This study will build on the existing literature to evaluate the specific outcomes of e-HRMS in the context of ZESCO Limited, providing a localized understanding of its impact on HR management practices.

3.0 METHODOLOGY

This study utilized a mixed research model, combining qualitative and quantitative methods to thoroughly examine the impact of electronic Human Resource Management Systems (e-HRMS) on HR practices at ZESCO Limited. Qualitative methods, including interviews and focus groups, provided deep insights into employee perceptions, system usability, and experiences, capturing details that quantitative measures alone could not. Quantitative methods, such as structured questionnaires, were used to statistically analyze the e-HRMS's effect on key HR metrics like employee engagement, productivity, and satisfaction. The target population for this study consists of key personnel at ZESCO Limited's three regional offices in Lusaka who are directly involved with the electronic Human Resource Management System (e-HRMS). The study employed purposive sampling to select participants, focusing on individuals directly involved with the electronic Human Resource Management System (e-HRMS) at ZESCO Limited. This method, as described by McMillan and Schumacher (2006), involves deliberately targeting knowledgeable individuals for research. A sample is a group of subjects chosen from a larger population (White, 2008) Hence, it should be noted that not all employees of ZESCO Limited located in Lusaka were enrolled in the study. The sample consisted of 40 respondents from the head office, 35 from the southern region (Kabwata) office, and 37 from the northern region (Malambo) office.

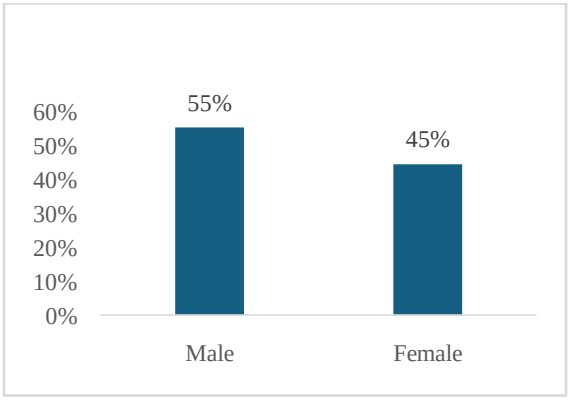
Primary data were collected from regional managers, branch managers, and human resource officers through interviews and a questionnaire, and from payroll administrators and registry clerks through focus group discussion. Through document analysis, secondary data were collected. The data analysis for the study utilized both quantitative and qualitative techniques to gain a comprehensive understanding of the effectiveness of the electronic Human Resource Management System (e-HRMS) at ZESCO Limited. Quantitative data, gathered from surveys, was analyzed using data visualization tools like bar charts, histograms, and scatter plots.

Data triangulation in this study involved using multiple research methods surveys, structured questionnaires, interviews, and focus groups to cross-check and validate findings. This approach provided a more comprehensive understanding of the research context by combining quantitative and qualitative data.

4.0 FINDINGS/RESULTS

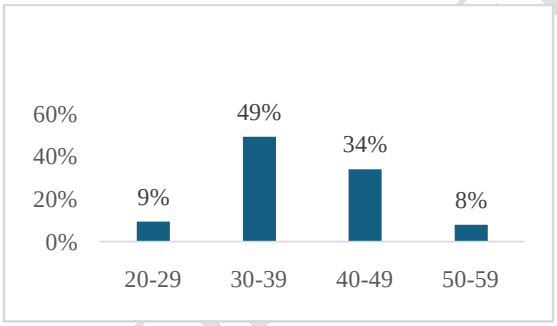
4.1 Presentations of research Findings

a) Gender of Respondents



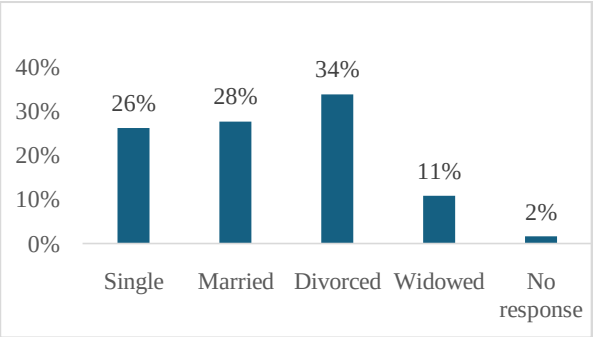
The table above shows that the majority (36) of the respondents were males accounting for 55% of the distribution.

b) Age of Respondents



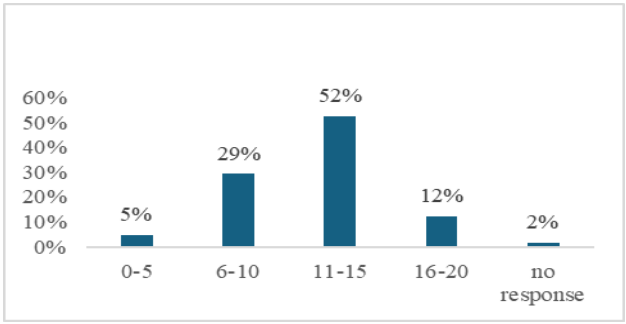
While the graph also shows that respondents between the ages of 30-39 were in the majority, with a total number of 32, accounting for 49% of the distribution. The least were those in the age group 50-59, whose count was 5, accounting for 8% of the distribution.

c) Marital Status



Futher, Respondents who were divorced were in the majority, with a total number of 22 (34%), while those that were married were 18 (28%). The widows were 7 (11%), while there was one non-response.

d) Years in Position for Respondents



The representation above shows that most of the respondents had held their position for 11-15 years, with a count of 34 (52%). The minority had held their position for 0-5 years, and these were 3 (5%).

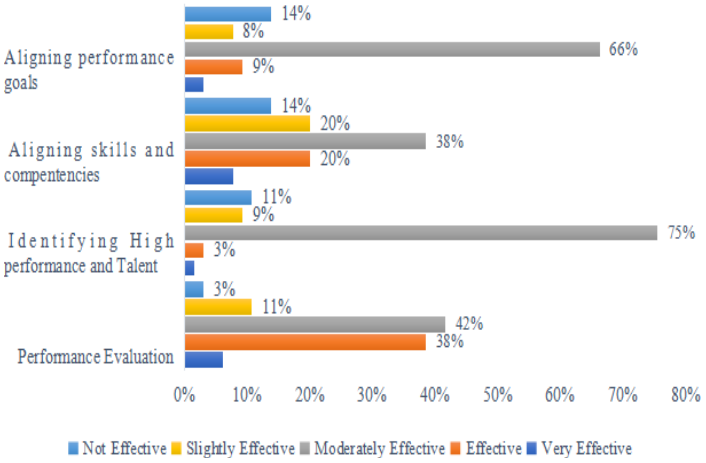
4.2 Employee Performance Management and Appraisals

The objective of the study is to identify the effectiveness of e-HRM on employee performance management and appraisals at ZESCO Limited and whether there has been an improvement on efficiency on employee's overall performance.

e) Accuracy and timely performance evaluation turnaround

e-HRMS	Very Effective	Effective	Moderately Effective	Slightly Effective	Not Effective
Performance Evaluation	6%	38%	42%	11%	3%
Identifying High performance and Talent	2%	3%	75%	9%	11%
Aligning skills and competencies	8%	20%	38%	20%	14%
Aligning performance goals	3%	9%	66%	8%	14%

f) Accuracy and timely performance evaluation turnaround



Accuracy and Timely Performance Evaluation Turnaround, 25 (38%) and 27 (42%) respondents were of the view that the e-HRM system was effective and moderately effective respectively. Only 2 (3%) of the respondents were of the view that the e-HRM system was not effective in this regard. Regarding Performance Goal Setting and Alignment, only 6 (9.2%) of the respondents held the view that the e-HRM system was effective. 43 (66.2%), who were also the majority held the view that the e-HRM system was moderately effective in this regard. 9 (13.8%) were of the view that the e-HRM system was not effective in this regard. Most of the respondents 41.5% were of the view that the e-HRM system was moderately effective in so far as accuracy and timely performance evaluation turnaround was concerned.

Those that held the view that the e-HRM system was effective in this regard were 25 (38.5%). Only 2 (3.1%) were of the view that the e-HRM system was not effective in this regard. 49 (75.4%) of the respondents held the view that the e-HRM system was moderately effective in identifying high performance and talent identification, and these were the majority.

Only 1 (1.5%) respondent held the view that the e-HRM system was very effective in this regard, while those that held the view that the e-HRM system was not effective in this regard were only 7 (10.8%).Regarding the assistance of e-HRM System on Alignment of Skills and Competencies, 25 respondents (38.5%), who were also the majority, held the view that the e-HRM system moderately assisted. Only 5 (7.7%) respondents were of the view that the e-HRM system assisted very effectively, and these were the minority.

9 (13.8%) of the respondents held the view that the e-HRM system had not assisted in so far as alignment of skills and competencies was concerned.

4.3 Employee Engagement, Training and Development, Feedback and Commitment

Table 1: Employee Engagement

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.898[a]	4	.575
Likelihood Ratio	3.347	4	.501
Linear-by-Linear Association	.273	1	.601
N of Valid Cases	65		

Table 2: Employees' engagement and participation

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.622[a]	4	.961
Likelihood Ratio	.623	4	.960
Linear-by-Linear Association	.026	1	.871
N of Valid Cases	65		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is 1.34.

a. 7 cells (70.0%) have expected count less than 5. The minimum expected count is .45.

The X^2 =2.898, P>.05 shows that there is no significant relationship between gender and retention. Therefore, we do not reject the null hypothesis (H_0), which posits that gender and employee retention, and turnover are independent of one another. In table 2 the X^2 =.622, P>.05 shows that there is no significant relationship between gender and employee participation. Therefore, we do not reject the null hypothesis (H_0), which posits that gender and employee participation are independent from one another.

Table 3: Employee training and development

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	17.627[a]	16	.346
Likelihood Ratio	16.589	16	.413
Linear-by-Linear Association	.469	1	.494

N of Valid Cases	65		

a. 22 cells (88.0%) have expected countless than 5. The minimum expected count is .05.

The findings in table 3 represent the X2 =17.627, P>.05 show that there is no significant relationship between years on position and participation in training and development. Therefore, we do not reject the null hypothesis (H0), which posits that Years on Position and Participation in Training and Development are independent of one another. This suggests that Years on Position do not play a significant role in determining Participation in Training and Development.

Table 4: Application pool for employee training

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.350[a]	20	.756
Likelihood Ratio	12.876	20	.883
Linear-by-Linear Association	.287	1	.592
N of Valid Cases	65		

a. 26 cells (86.7%) were expected to be countless than 5. The minimum expected count is .02.

In table 4 the findings assume that the X^2 =15.350, P>.05 show that there is no significant relationship between trends and patterns identification and the increase in applications' pool. Therefore, we do not reject the null hypothesis (H_0), which posits that trends and patterns identification and the increase in applications' pool are independent of one another. This suggests that trends and patterns identification does not play a significant role in determining the increase in applications' pool.

Table 5: Timely reporting and feedback

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.271[a]	20	.865
Likelihood Ratio	15.815	20	.728
Linear-by-Linear Association	.227	1	.634
N of Valid Cases	65		

a. 26 cells (86.7%) have been expected to be countless than 5. The minimum expected count is .03.

The findings in table 5 posits that the X2 =13.271, P>.05 show that there is no significant relationship between accuracy and timely Reporting and the challenges/difficulties experienced in implementing HR activities. Therefore, we do not reject the null hypothesis (H0), which posits that accuracy and timely Reporting & the challenges/difficulties experienced in implementing HR activities are independent of one another. This suggests that accuracy and timely Reporting has no significant role in determining the challenges/difficulties experienced in implementing HR activities.

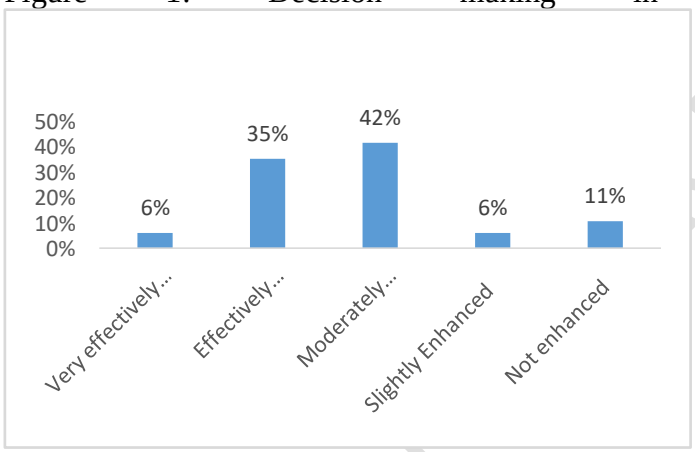
Table 6: Employee recognition and Rewards

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.001[a]	12	.191
Likelihood Ratio	14.000	12	.301
Linear-by-Linear Association	.243	1	.622
N of Valid Cases	65		

a. 16 cells (80.0%) have expected count less than 5. The minimum expected count is .02.

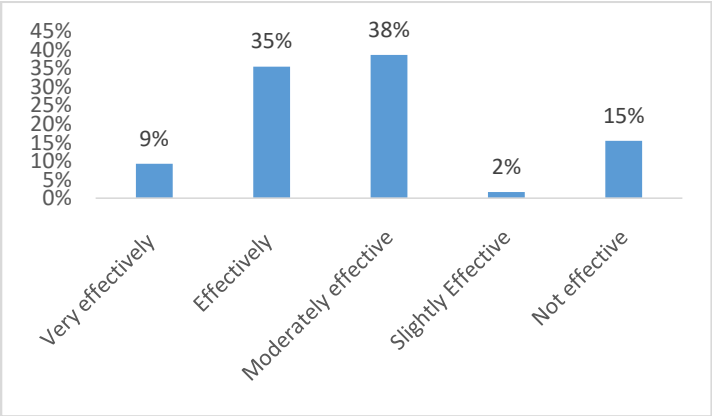
While in table 6 the X^2 =16.001, P>.05 show that there is no significant relationship between the years that one holds a position and employee recognition and reward. Therefore, we do not reject the null hypothesis (H_0), which posits that years that one holds a position & employee recognition and reward are independent of one another. This suggests that years that the number of years one holds a position has no significant bearing employee recognition and reward

Figure 1: Decision making in workforce analytics and Reporting



The findings in figure 1 assume that 7 (10.8%) of the respondents held the view that the e-HRM system had not enhanced Data Driven Decision Making and Workforce Analytics and Reporting, while 27 (41.5%) of the respondents held the view that the e-HRM system moderately enhanced Data Driven Decision Making and Workforce Analytics and Reporting. 23 (35.4%) held the view that the e-HRM system effectively enhanced the Data Driven Decision Making and Workforce Analytics and Reporting.

Figure 2: Workforce planning and forecasting



The findings in figure 2 suggest are that 6 (9.2%) of the respondents were of the view that the e-HRM system very effectively impacted Improvement of Workforce Planning and Forecasting. Only 10 (15.4%) were of the view that the e-HRM system was not effective in so far as the improvement of Workforce Planning and Forecasting was concerned. 23 (35.4%) held the view that the e-HRM system was effective in improvement of Workforce Planning and Forecasting, while only 6 (9.2%) indicated that the e-HRM system was very effective in this regard.

Table 7: Increased Efficiency in HR Reporting and Metrics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Effective	6	9.2%	9.2%	9.2%
	Moderately Effective	29	44.6%	44.6%	53.8%
	Slightly Effective	4	6.2%	6.2%	60.0%
	Not Effective	26	40.0%	40.0%	100.0%
	Total	65	100.0%	100.0%	

26 (40%) of the respondents held the view that the e-HRM system was not effective in increasing the efficiency in HR reporting and metrics. A total of 29 (44.6%) of the respondents were of the view that the e-HRM system was moderately effective in so far as Increased Efficiency in HR Reporting and Metrics was concerned; while only 6 (9.2%) of the respondents were of the view that the e-HRM system was effective.

Table 8: Employee Participation, Engagement and Challenges in Implementing HR activities

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.410[a]	12	.173
Likelihood Ratio	18.801	12	.093
Linear-by-Linear Association	5.994	1	.014
N of Valid Cases	65		

a. 16 cells (80.0%) have expected count less than 5. The minimum expected count is .05.

Results in table 8 assumes the X2 =16.410, P>.05 show that there is no significant relationship between the e-HRM system's impact on employee participation in training and development & the e-HRM system's impact on Employee engagement and motivation. Therefore, we do not reject the null hypothesis (H0), which posits that e-HRM system's impact on employee participation in training and development & the e-HRM system's impact on Employee engagement and motivation are independent of one another.

Table 9: Employee engagement and motivation

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	42.192[a]	15	<.001
Likelihood Ratio	37.236	15	.001
Linear-by-Linear Association	.000	1	.996
N of Valid Cases	65		

a. 20 cells (83.3%) have expected count less than 5. The minimum expected count is .02.

The finds in table 9 assumes the X^2 =42.192, P<.05 show that there is a significant relationship between the e-HRM system's impact on employee engagement and motivation & the e-HRM system's contribution to the challenges/difficulties in implementing HR activities. Therefore, we reject the null hypothesis (H_0), which posits that the e-HRM system's impact on employee engagement and motivation & the e-HRM system's contribution to the challenges/difficulties in implementing HR activities are independent of one another.

Table 10: Skills and Competencies Required in the Organization

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.676[a]	16	.476
Likelihood Ratio	19.419	16	.248
Linear-by-Linear Association	1.354	1	.245
N of Valid Cases	65		

a. 21 cells (84.0%) have expected count less than 5. The minimum expected count is .23.

The X^2 =15.676, P>.05 show that there is no significant relationship between the e-HRM system's impact on employee participation in training and development & the e-HRM system's impact on alignment of skills and competencies required in the organization. Therefore, we do not reject the null hypothesis (H_0), which posits that the two variables are independent of one another.

Table 11: Recognition and Reward System

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	43.736[a]	12	<.001
Likelihood Ratio	21.744	12	.040
Linear-by-Linear Association	9.200	1	.002
N of Valid Cases	65		

a. 17 cells (85.0%) have expected countless than 5. The minimum expected count is .03.

The X^2 =43.736, P<.05 show that there is a significant relationship between the e-HRM system's impact on employee recognition and reward system & the e-HRM system's impact on performance goal setting and alignment. Therefore, we reject the null hypothesis (H_0), which posits that the e-HRM system's impact on employee recognition and reward system & the e-HRM system's impact on performance goal setting and alignment are independent of one another.

4.4 Effectiveness on Recruitment, Selection and Retention of Employees.

Table 12: Improvement of Recruitment Metrics

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.222[a]	15	.866
Likelihood Ratio	12.168	15	.666
Linear-by-Linear Association	.159	1	.690
N of Valid Cases	65		

a. 20 cells (83.3%) have expected count less than 5. The minimum expected count is .14.

The X^2 =9.222, P>.05 show that there is no significant relationship between the e-HRM system's impact on improvement of recruitment metrics & the e-HRM system's impact on compliance and risk management. Therefore, we do not reject the null hypothesis (H_0), which posits that the two variables are independent of one another. This suggests that the e-HRM system's impact on the improvement of recruitment metrics does not play a significant role in determining the e-HRM system's impact on compliance and risk management

Table 13: Increased Efficiency in HR Reporting and Compliance

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	27.854[a]	15	.023
Likelihood Ratio	36.412	15	.002
Linear-by-Linear Association	.225	1	.635
N of Valid Cases	65		

a. 18 cells (75.0%) have an expected count less than 5. The minimum expected count is .06.

The X^2 =27.854, P<.05 show that there is a significant relationship between the e-HRM system's impact on Increased Efficiency in HR Reporting and Metrics & the e-HRM system's impact on compliance and risk management. Therefore, we reject the null hypothesis (H_0), which posits that the two variables are independent of one another.

Table 15: e-HRM System Impact on Experience and Satisfaction

Chi-Square Tests			
	Value	df	Asymptotic Significance 2-sided)
Pearson Chi-Square	5.451[a]	9	.793
Likelihood Ratio	6.843	9	.653
Linear-by-Linear Association	1.123	1	.289
N of Valid Cases	65		

a. 12 cells (75.0%) have expected count less than 5. The minimum expected count is .15.

The X^2 =5.451, P>.05 show that there is no significant relationship between the age of an employee and the e-HRM system's impact on experience and satisfaction. Therefore, we do not reject the null hypothesis (H_0), which posits that the age of an employee and the e-HRM system's impact on experience and satisfaction are independent of one another. This suggests that age of an employee has no significant role in determining the e-HRM system's impact on experience and satisfaction

Table 14: Data Driven Decision Making and Workforce Analytics

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	27.785[a]	16	.034
Likelihood Ratio	29.792	16	.019
Linear-by-Linear Association	7.403	1	.007
N of Valid Cases	65		

a. 21 cells (84.0%) have expected count less than 5. The minimum expected count is .12.

The X^2 =27.785, P<.05 show that there is a significant relationship between the impact of the e-HRM System on Data Driven Decision Making and Workforce Analytics & the impact of e-HRM System on Accuracy & Timely Performance Turnaround. Therefore, we reject the null hypothesis (H_0), which posits that the two variables are independent of one another. This suggests that Data Driven Decision Making and Workforce Analytics has a significant role in determining Accuracy & Timely Performance Evaluation Turnaround in the context of the e-HRM system.

Table 16: Identifying High Skilled Talent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Effective	1	1.5%	1.5%	1.5%
	Effective	2	3.1%	3.1%	4.6%
	Moderately Effective	49	75.4%	75.4%	80.0%
	Slightly Effective	6	9.2%	9.2%	89.2%
	Not Effective	7	10.8%	10.8%	100.0%
	Total	65	100.0%	100.0%	

Table 17: Alignment of Skills, Competencies and Performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Effectively Assisted	5	7.7%	7.7%	7.7%
	Effectively Assisted	13	20.0%	20.0%	27.7%
	Moderately Assisted	25	38.5%	38.5%	66.2%
	Slightly Assisted	13	20.0%	20.0%	86.2%
	Not Assisted	9	13.8%	13.8%	100.0 %
	Total	65	100.0%	100.0%	

Results in table 16 assume that the majority (75.4%) of respondents indicated that the e-HRM system has a moderate effect on identifying high performance and talent identification. Only 7 (10.8%) of the respondents indicated that the e-HRM system was not effective in identifying high performance and talent identification; while 1 (1.5%) respondent indicated that the e-HRM system was very effective in this regard. While the results in table 17 indicate that 25 (38.5%) of the respondents indicated that the e-HRM system moderately assisted in aligning skills and competencies. 9 (13.8%) indicated that the e-HRM system had not assisted them regarding alignment of skills and competencies.

Table 18: Retention and Employee Turnover

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Effective Improvement	1	1.5%	1.5%	1.5%
	Effective Improvement	11	16.9%	16.9%	18.5%
	Moderate Improvement	37	56.9%	56.9%	75.4%

	Slight Improvement	8	12.3%	12.3%	87.7%
	No Improvement	8	12.3%	12.3%	100.0%
	Total	65	100.0%	100.0%	

The table shows that 37 (56.9%) respondents moderately improved employee retention and employee turnover, and these were the majority. Only 1 (1.5%) and 8 (12.3%) indicated that the e-HRM system effectively improved and did not improve employee retention and employee turnover respectively.

Table 19: Quality of Hire in Recruitment and Selection Process

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Effectively Enhanced	1	1.5%	1.5%	1.5%
	Effectively Enhanced	13	20.0%	20.0%	21.5%
	Moderately Enhanced	17	26.2%	26.2%	47.7%
	Slightly Enhanced	9	13.8%	13.8%	61.5%
	Not Enhanced	24	36.9%	36.9%	98.5%
	No Response	1	1.5%	1.5%	100.0%
	Total	65	100.0%	100.0%	

The above table shows that 24 (36.9%) of the respondents held the view that the e-HRM system had not enhanced the quality of hire in the recruitment and selection process; while 13 (20%) were of the view that the e-HRM system had effectively enhanced the quality of hire in the recruitment and selection process. Those that held the view that the e-HRM system had moderately enhanced the quality of hire in the recruitment and selection process were 17 (26.2%).

Table 20: Increase in Applications Pool Diversity and Improvement of Recruitment Metrics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Effectively Improved	1	1.5%	1.5%	1.5%
	Effectively Improved	1	1.5%	1.5%	3.1%
	Moderately Improved	45	69.2%	69.2%	72.3%
	Slightly Improved	3	4.6%	4.6%	76.95
	Not Improved	15	23.1%	23.1%	100.05
	Total	65	100.0%	100.0%	

Table 20 the results suggest that 69.2% (45) of the respondents were of the view that the e-HRM system moderately improved the increase in applications pool diversity, and these were the majority. 23% (15) indicated that the e-HRM system had not improved on the increase in applications pool diversity. Only 1 (1.5%) respondent indicated that the e-HRM system effectively improved the applications pool diversity, same as those that felt the e-HRM system very effectively improved the applications pool diversity.

Table 21: Improvement of Recruitment Metrics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Effectively Improved	9	13.8%	13.8%	13.8%
	Moderately Improved	24	36.9%	36.9%	50.8%
	Slightly Improved	20	30.8%	30.8%	81.5%
	Not Improved	12	18.55	18.5%	100.0%
	Total	65	10 0.0%	100. 0%	

According to table 21 above, 24 (36.9%) of the respondents were of the view that the e-HRM system moderately improved recruitment metrics. These were followed by those that were of the view that the e-HRM system slightly improved the recruitment metrics (30.8%). Only 12 (18.5%) were of the view that the e-HRM system had not improved the recruitment metrics.

5.0 Discussion of Research Findings

5.1 Employee Performance Management and Appraisals

The study found that ZESCO Limited's e-HRM system significantly improved performance management, including appraisals, job analysis, and overall employee efficiency. Key features like real-time tracking, goal setting, self-assessment, and automated reminders have enhanced employee performance by promoting accountability, aligning goals with company objectives, and facilitating timely feedback. While 41.5% of employees expressed moderate satisfaction with the system's performance evaluation turnaround time, some reported a need for improved report accuracy.

5.2 Effectiveness on Employee Engagement, Training and Development, Feedback, and Commitment

The study found no significant relationship between e-HRM's impact on employee participation in training and development and its impact on employee engagement and motivation. Despite this, e-HRM improved data-driven decision-making and retention moderately (56.9%). Gender and years in position had no significant effect on retention rates. Challenges were noted in the system's ability to align skills and improve reporting accuracy. Only 1.5% of respondents found it highly effective in identifying top performers, suggesting areas for improvement in talent management features.

5.3 Effectiveness on Recruitment, Selection, and Retention of Employees

e-HRM has streamlined ZESCO's recruitment processes by automating job postings, application tracking, and interview scheduling. This has improved communication, reduced resource consumption, and increased the diversity of applicants by utilizing online job portals and social media. Automation has also reduced the risk of favoritism and corruption in recruitment, fostering a more transparent, fair, and efficient selection process. Centralized data access and standardized templates have enhanced candidate experiences and HR team collaboration, supporting organizational growth and competitiveness.

5.4 CONCLUSION

Overall, ZESCO Limited's e-HRM system has partially fulfilled its objectives of enhancing recruitment efficiency, promoting transparent HR practices, supporting timely feedback mechanisms, and enabling data-driven decision-making. While the system has improved recruitment workflows, broadened the talent pool, and introduced significant transparency into HR processes, moderate satisfaction with reporting capabilities and limited improvements in skills alignment and retention rates suggest areas for development. Positive relationships between feedback mechanisms, goal-setting functionalities, and data-driven decision-making confirm that the system has foundationally improved HR operations. However, enhancing reporting accuracy and strengthening training and development functionalities could optimize its impact further. The study demonstrates that ZESCO's e-HRM system has successfully modernized HR processes, though opportunities remain for further optimization to fully leverage its benefits in enhancing recruitment, engagement, and data-driven decision-making.

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582
583