Human Resource Development Practices and Commercial Banks' Performance in Malawi: The Role of System (HRIS) Usage

Winsome S. Chalanda[1] and Patrick Christopher Singogo[2]

Abstract

The study investigated the effect of human resource development practices on commercial banks' performance in Malawi with the role of system (HRIS) usage. Specifically, it aimed to examine the effect of training and performance appraisal on commercial banks' performance with the role of HRIS usage. Based on the Resource Based View (RBV) and the Unified Theory of Acceptance and Use of Technology (UTAUT), as well as an empirical literature review, five hypotheses reflecting specific objectives were formulated. The study employed a quantitative approach using an explanatory and cross-sectional research design. Structured questionnaires were used to collect data from 217 branch managers of Malawian commercial banks, and multiple linear regression analysis was conducted using SPSS version 26 to test the established hypotheses. The findings revealed that training, performance appraisal and HRIS usage have a significant positive effect on commercial bank performance. The study also established that HRIS usage significantly strengthens the effect of training and performance appraisal on commercial banks' performance by developing distinctive human capital for competitive performance. The theoretical contribution of the study is that integration of RBV and UTAUT is essential in explaining more of the effect of workforce development practices on commercial bank performance.

Keywords: Training, Performance Appraisal, HRIS Usage, Commercial Bank

Introduction

In today's highly competitive environment, human capital constitutes an organisation's most important asset, often differentiating highly successful businesses from those which struggle. Performance appraisal and training of employees is arguably a critical factor in creating an organisation capable of meeting its strategic objectives (Bano et al., 2022). According to Rothwell (2010), human resource development is a purposeful and structured process implemented by organisations to maintain effective performance across the organisation, divisions, departments, or teams. This is achieved by preparing for the succession, replacement, and strategic utilisation of key personnel over time. Human resource development is crucial in the performance of the organisation, as it ensures that the organisation has global human capital to perpetually adapt, respond and succeed in an evolving business environment (Odengo & Brett, 2016). The relationship between human resource management practices and organisational performance in financial and other institutions has been widely researched, and evidence suggests positive performance implications for the performance metrics of organisational continuity, organisational stability, and overall financial performance (Bano et al., 2022; Egwakhe et al., 2022). Moreover,

[1] University of Dar es Salaam Business School, Tanzania
Email: winchalanda@gmail.com
[2] University of Dar es Salaam Business School, Tanzania

Rothwell (2010) established that banks with robust human resource management programmes tend to exhibit higher employee engagement with low turnover and better operational efficiencies.

Several previous studies have generally recognized the role of human resource management practices in improving organisations' performance (Armstrong & Taylor, 2020; Aguinis, 2023; Simkhada, 2023). It is imperative to categorise human resource management practices based on entry stage that involves human resource planning (Armstrong & Taylor, 2020), recruitment (Dessler, 2020), selection (Mondy & Martocchio, 2016) and orientation (Snell et al., 2016); development stage that involves training (Noe et al., 2021) and performance appraisal (Aguinis, 2023), maintenance stage that involve compensation (Dessler, 2020), employee relations (Snell et al., 2016), occupational health and safety (Armstrong & Taylor, 2020), and retention (Noe et al., 2021); and exit stage that involves retirement (Mondy & Martocchio, 2016), termination procedures (Dessler, 2020) and off boarding (Aguinis, 2023) and see their strengths in influencing organisation performance. This study focuses on human resource development practices that involve training and performance appraisal in the banking industry with the role of system (HRIS) usage. Effectiveness of human resource development practices may be facilitated by a number of factors, including integrating technology into human resource development practices. In commercial banks, where performance is closely tagged to human resource management practices, such integration of HRIS into human development processes can be a game-changer. The banks, through HRIS usage, are able to identify their high potential employees, monitor their growth, and prepare them to take up leadership responsibilities whenever necessary. This helps the bank's performance on continuity, minimises risks associated with a skill gap, and enhances overall efficiency in operations (Kavanagh et al., 2019).

Despite the potential benefits that arise from using the HRIS, very few studies have explored the moderating role of HRIS usage with respect to the relationship that exists between human resource development practices and the performance of commercial banks, especially in developing countries like Malawi. A number of scholars have conducted research to explore the role of technology in organisational performance. For instance, studies conducted by Opiyo (2015), Ahmed (2020) and García-Sánchez et al. (2018) in Kenya, Bangladesh and Spain, respectively, indicated a positive relationship between the use of technology and organisational performance. The studies indicated that information technology improves communication, increases productivity, enhances decision making and improves the quality of the working conditions of organisation hence enhancing organisational performance. However, there is scanty information regarding the moderating role of HRIS on the relationship between human resource development practices and organisational performance. Malawi, has a generally sound banking sector overseen and regulated by the Reserve Bank of Malawi. The Malawian banking sector comprises commercial banks, microfinance institutions and other non-bank financial institutions (Banda & Mwale, 2020). Human resource management in the commercial banks of Malawi has also received attention over the years as these institutions seek to ensure continuity in appropriate service delivery. According to Siambi (2022), in recent years, organisations such as Malawian commercial banks have experienced challenges in leadership transition due to undefined human resource strategies to identify and develop internal talent for key leadership positions. This has led to the commercial banks opting to poach from outside rather than within the organisation as they seek employees or leaders who have successfully managed change in other financial institutions (Banda, 2021). For instance, recently the Standard Bank of Malawi and NBS Bank

have seen the appointments of chief executive officers who were apparently the head of First Capital Bank and the head of Nedbank, Botswana, respectively.

A report from the Reserve Bank of Malawi (2020) has also indicated that there are inadequate human resource development practices in the banks, and this has led to frequent management upheavals, adversely affecting the stability and performance of commercial banks. The report further recommended that the banks can utilise their advanced technologies in order to implement comprehensive succession planning strategies that will include operative human resource planning, robust training, programmes, fair and objective performance appraisal, development, mentoring and coaching, among others. Few studies investigated prediction of human resource management practices on commercial banks' performance without narrowing them to human resource development practices (Adegoroye et al., 2012; Masum et al., 2016). Nevertheless, few studies considered effect of human resource development practices on employees' performance in commercial banks while leaving a gap on their effect on commercial banks' performance (Aryal & Singh, 2025; Badejo, 2015; Mbugua, 2015). Thus, from reviewed empirical literature it can be observed that most recent empirical studies have focused on other factors than human resource development practices and system usage. Previous studies focused on general human resource practices and their effect on commercial banks' performance without even considering the role of system usage. Also, few studies that focused on human resource development practices based on employees' performance in commercial banks as their dependent variable.

On the other hand, there is still limited information regarding the role of HRIS usage on the effect of human resource development practices on organisational performance. Changes in organisations (Singogo & Mbeya, 2024), such as commercial banks, are inevitable for performance improvement and thus workforce development practices. Workforce development practices play a significant role in enhancing organisations' performance by ensuring the presence of an adaptive workforce (Majaliwa et al., 2024). Having quality information is beneficial (Singogo, 2021; Singogo & Kassimba, 2024) in enhancing changes through workforce development practices. Information systems are very useful in improving organisations' performance (Shah et al., 2020; Wilson et al., 2022), as they ensure the availability of quality information needed for decision making, such as workforce development practices. Therefore, it is imperative to identify the role of HRIS usage on the effect of human resource development practices on the organisational performance of the banking institutions. Understanding the use of HRIS in enhancing human resource development practices is critical for ensuring that organisations at all times have the right people, with the right skills, and doing the right jobs to persistently perform well (David and David, 2020). This study therefore aims to assess the effect of human resource development practices on organisational performance with the moderating role of HRIS usage in the commercial banks of Malawi. As per this study, the terms 'human resource', 'manpower' and 'workforce' are used interchangeably. The rest of the sections of this article include theoretical frameworks, empirical literature review and hypotheses development, methodology, data analysis, findings, discussion, conclusion, implications and areas for further studies, and references.

Theoretical Frameworks

The Resource-Based View (RBV) is a prominent theoretical framework in strategic management that focuses on the internal resources of an organisation as the key to achieving sustainable competitive advantage, which improves performance. The RBV was first articulated by

Wernerfelt (1984) and further developed by Barney (2002), who posited that an organisation's resources and capabilities are central to its strategy and performance. The core proposition of the RBV theme is that for an organisation to achieve a sustained competitive advantage, it should acquire and control valuable, rare, inimitable, and non-substitutable capabilities and resources and should be optimally utilised (Barney, 2002). Training activities are therefore fundamental to the development of the human capital at the bank, which the RBV theory sees as a fundamental strategic asset. By investing in employee training, banks can cultivate a workforce with unique skills and knowledge that are valuable, rare, inimitable and non-substitutable (Chukwuma et al., 2022). Similarly, performance appraisal systems help banks identify, develop and retain performing employees, aligning with RBV's focus on leveraging internal resources. By systematically evaluating employees' performance banks can recognise those who possess the potential to become future leaders, thereby safeguarding the bank's critical talent.

On the other hand, the Unified Theory of Acceptance and Use of Technology (UTAUT) as proposed by Venkatesh et al. (2003) was used to explain and predict user acceptance of technology. It is a crucial theoretical framework used to evaluate the acceptance and use of various technologies, such as the systems (HRIS), to enhance the performance of organisations (Mbamba & Sanga, 2024).UTAUT generally incorporates elements such as the perceived value, ease of use, user attitude, intention to use, and actual usage of a system, with additional factors like social impact and perceived enjoyment in particular situations (Maranguinic & Granić, 2014). In the context of human resource development activities, UTAUT can help understand how technology usage affects the operation and effectiveness of human development practices. This includes integration of HRIS usage as a means of ensuring that the banks are able to choose and select the best candidates as successors. The technology can provide insight into the choice of those with the best skills and appropriate training and those that have performed well to ensure that there is enhanced organisational performance. Although the model's application has shown positive effect on enhancing technology acceptance and predicting user behaviour across various sectors, UTAUT was originally developed for voluntary usage scenarios in an organisational context. This, however, may limit its applicability to mandatory usage because the organisations are free either to accept the usage of technological tools such as HRIS to enforce the human resource development practices and ensure the right successors are chosen and prepared for the future enhanced organisational performance.

Empirical Literature Review and Hypotheses Development

Training, HRIS Usage and Commercial Banks' Performance

Training as one of the human resource development practices is critical for the progress of the banking sector, as it guarantees the banks have skilled employees who can enhance efficiency and productivity, adapt to changing environmental dynamics, and strengthen their competitive edge (Ali et al., 2014). Without clearly specifying human resources development practices, Simkhada (2023) highlighted that human resource development practices enhance the return on assets of Nepalese commercial banks. On the other hand, though not in the banking industry, Odengo and Brett (2016) concluded that although power companies train their staff, training has not always resulted in improved performance. On the other hand, HRIS usage improves the quality of services the HR department or professionals provide by providing timely information to employees and supervisors, producing accurate data for decision-making (training), facilitating self-service for employees and knowledge sharing with various members of the organisation at different levels (Mbamba & Sanga, 2024; Tansley & Watson, 2000). Without explicitly showing

how HRIS usage can improve organisation performance or the role of HRIS usage in explaining the relationship between training and organisation performance, Solimon et al. (2023) established that HRIS assists in identifying training gaps. Moreover, though not explicitly, Opiyo (2015) highlighted some sorts of link between HRIS usage and the performance of commercial banks in Kenya. Hendrickson (2003) suggests that the effective use of HRIS in managing training programmes leads to better resource allocation, improved employee performance, overall stability and long-term success of the organisation.

According to Solimon et al. (2023), HRIS usage can enable continuous monitoring of employees and provision of feedback on the progress of the training programmes. HRIS usage also helps to align training programmes with the organisation's long term strategic goals by ensuring that training provided supports the overall direction of the company (Hendrickson, 2003). Therefore, in the context of training, HRIS usage can play a moderating role by ensuring that training enhances more organisational performance. Thus, given the internal recruitment struggle and the limited number of studies in Malawi that examine the relationship between training and bank performance. The existence of contradictory findings regarding the link between training and, organisational performance and the overlook of previous studies on the role of HRIS usage in the relationship between training and commercial bank performance, three hypotheses are proposed as follows:

H1: There is a positive effect of training on commercial banks' performance.
H2: There is a positive effect of HRIS usage on commercial banks' performance.
H3: HRIS usage moderates the positive effect of training on commercial banks' performance.

Performance Appraisal, HRIS Usage and Commercial Banks' Performance

According to Aguinis (2023), performance appraisal is a mechanism for the provision of a structured method for evaluating and developing employees, which in turn enhances organisational performance. Various authors have clearly emphasised the importance of performance appraisal for organisational performance without integrating the role of HRIS usage. For example, Segbenya and Ansah (2021) found a positive relationship between performance appraisal and organisational performance. Moreover, the study by Ali (2014) highlighted the importance of performance appraisal on the individual performance which leads to the organisational performance of the banks. Practically, performance appraisal is one of the means for employees' development (Khugshal, 2020). As the banking sector continues to evolve, the strategic application of performance appraisals in human resource development will remain crucial for maintaining a competitive edge and achieving long-term success. Besides, performance appraisal increases the flow of communication from the workers to the management because it is a forum through which the management and the workers are able to communicate on performance, personal goals, and development needs (Zafar et al., 2020). The effectiveness of the communication increases the motivation of the workers. The bank will benefit from the improved performance because the management will understand the aspirations and capabilities of the employees. Therefore, the practices above help in motivating the employees, ensuring good succession, and improving performance.

Recent research has also confirmed that the use of HRIS helps in ensuring that the performance appraisal process is accurate, complete, and linked with human resource development plans. According to Tansley and Watson (2000), the use of HRIS helps in human resource development

by enabling a proper understanding of employee performance patterns, readiness, and potential for leading. DeNisi and Murphy (2017) argue that a combination of HRIS use and performance appraisal helps not only in improving the accuracy of talent evaluation but also leads to greater effectiveness of human resource development plans. Furthermore, the application of HRIS facilitates continuous performance management, and the evaluation and feedback process is carried out on a continuous, as opposed to an annual, basis. This is especially important in the banking industry, which operates in a fast-paced environment where the availability of performance information in real time is central in ensuring the efficiency of operations. According to Stone and Lukaszewski (2009), continuous performance management is made possible through the application of HRIS, as it provides the necessary tools for real-time performance tracking and evaluation.

Inclusion of HRIS usage within the framework of performance appraisal has great effect on the performance of commercial banks. Since HRIS has the capability to automate the process of performance appraisal, it reduces hassles of paperwork, minimizes mistakes, and ensures that there are proper links within the process of performance appraisal at the organizational level. According to Hendrickson (2003), usage of HRIS within the framework of performance appraisal can help in optimizing accuracy within performance appraisal, thus resulting in optimized talent management within organizations. The adoption of HRIS enhances the efficiency of organisational and individual performances by ensuring easy performance appraisal, offering precise feedback, and establishing an equitable and personalised platform (Kawiana, 2023). Apart from the aforementioned, the use of HRIS is significant, as it provides for digital feedback systems that also allow for timely, regular and structured feedback from peers and managers, fostering a culture of continuous improvement and development (Zafar et al., 2020). Hence, the strategic use of HRIS in performance appraisal can streamline processes, improve data accuracy, and enhance decision-making. Thus, given the limited number of studies in Malawi that examine the relationship between performance appraisal and commercial bank performance, and the overlook of previous studies on the role of systems (HRIS) usage in the relationship between performance appraisal and commercial bank performance, two hypotheses are proposed as follows:

H4: There is a positive effect of performance appraisal on commercial banks' performance.
H5: HRIS usage moderates the positive effect of performance appraisal on commercial banks' performance.

Conceptual Framework

Based on the literature review and the identified research gap, the conceptual framework in Figure 1 presents the hypothesised relationships by focusing on variables of interest, i.e., training, performance appraisal, HRIS usage and commercial bank performance.

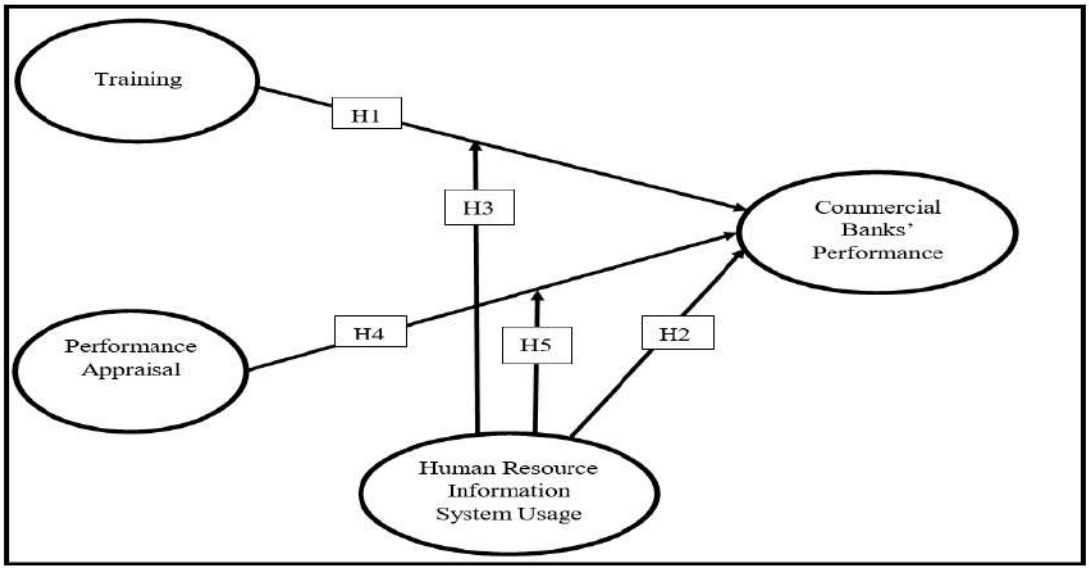

Figure 1: Conceptual Framework
Source: Synthesized from literature

Methodology and Approaches

This study was built on the theoretical and literature review. The study employed a quantitative approach to achieve more reliable and meaningful results within the research context. This approach was selected due to its structured and statistical characteristics, which allow for drawing informed conclusions and making well-founded decisions regarding the course of action (Kalof et al., 2008). This study was conducted in Malawi, focusing on the cities of Lilongwe and Blantyre. These two cities were selected as they are the country's primary economic hubs, hosting the majority of commercial banks' headquarters and main branches (Muzondiwa & Arokia, 2024). The study employed an explanatory research design by adopting the use of a cross-section survey approach to collect data from the study's targeted population. The design is cost-effective; therefore, it is a sensible option given the researcher's financial constraints. According to Bankers Associations of Malawi Report (2026), Malawi has a total of nine (9) commercial banks. The research only targeted the five (5) commercial banks, which include National, Standard, NBS, First Capital, and FDH banks. The selection was done based on the major market players known for their vast branches as well as geographical spread (Muzondiwa & Arokia, 2024). Among the five, a total of 551 commercial bank managers, as indicated in Table 1, formed the initial population studied.

The study adopted a probabilistic sampling technique to confirm that the sample is a representative of the population, thereby allowing for valid generalisations and minimising biases (Bryman, 2016). Specifically, a stratified sampling method was employed to select key informants from the commercial banks, maximising the diversity and representativeness of the population. As per Bloomfield and Fisher (2019), stratified sampling involves dividing the population or pool of data into clear subgroups. The population of this study is 551 managers of commercial banks. The required sample of this study involves 226 managers of commercial banks based on the table described by Krejci and Morgan (1970), which illustrates that if the population is between 550 and 600, then the required sample size is 226.

Table 1: Population and Sample Size

#	Bank	Branches (N)	Proportionate (P) = N/551	Sample size (n) = P*226
1	National	135	0.2450	55
2	Standard	126	0.2286	52
3	NBS	116	0.2105	48
4	FDH	97	0.1651	37
5	FCB	77	0.1397	39
	Total	551		226

Source: Field data (2024)

For this analysis, the unit of analysis was the performance of commercial banks, while the unit of enquiry was the commercial bank managers. Using this analysis, the data collection process was conducted through structured questionnaires for commercial bank managers. With the assistance of this questionnaire, data creation was done in English with simple questions to ensure correct incorporation of relevant information for the objectives of this research. This questionnaire allows the collection of data from a large sample, hence increasing the generalisability of the analysis (Kothari, 2019) for this research. Table 2 presents the reflective measurement for all variables used, as well as their sources and indicators. For this data collection process, target variables for this analysis were measured using questions formulated from 5-point Likert scales that range from 1 = strongly disagree to 5 = strongly agree (Kothari, 2019). Reliability in research refers to the extent to which an experiment test or any measuring procedure yields the same results on repeated trials (Neuman, 2007). The instruments used in this study were not merely created by the researcher but were developed based on theoretical models established by experts in the fields of human resource development practices, HRIS usage and organisational performance. Thus, in this study, the Cronbach's alpha, a statistical technique, was utilised to assess the reliability, in which a measurement above 0.7 was considered to be reliable, as shown in Table 2.

Table 2: Variable Indicators, Source(s), Reliability, Mean and Standard Deviation (SD)

Variable	Source(s)	Indicators with their loadings	Cronbach's α	Mean	SD
Training	Mehreen and Ali (2022)	Training needs identification (.727).	.892	4.07	1.05
		Training content and relevance (.842).			
		Training effectiveness (.862).			
		Equal training participation and accessibility (.704).			
		Training frequency on leadership (.826).			
Performance appraisal	Odengo and Brett (2016)	Accurate evaluation of employee performance by being fair and avoiding biases (.684).	.863	4.32	1.38
		Identifies areas for personal and professional development (.864).			
		Ensures continuous evaluation of employee performance (.712).			
		Determines compensation based on performance (.717).			

HRIS usage	Mbamba and Sanga (2024); Bilgic (2020)	HRIS ensures that employee performance data are securely stored and easily accessible (.538).	.856	4.18	1.48
		HRIS effectively tracks employees' skills gaps (.777).			
		HRIS tracks employee performance before and after training programs (.861).			
		HRIS monitors employee performance consistently (.878).			
		HRIS used to evaluate training effectiveness (.910).			
Commercial bank performance	Banda (2021); Simkhada (2023)	Making the best investment decisions (.810).	.740	4.57	1.06
		Return on assets (.884).			
		Return on equity (.758).			
		Volume of bank transactions (.787)			

Source: Field data (2024)

The study followed all the required ethics and standards for conducting research. For example, required approvals from the university, and relevant authorities were obtained before commencing data collection. Furthermore, confidentiality of the information gathered was ensured and data used in this study may be provided on permission of commercial banks managers. The funding for this study was purely incurred by the author

Data Analysis

Of the 226 questionnaires distributed, successfully collected and complete were 217, resulting in a response rate of 96%. This response rate was attained as the questionnaires were distributed online (emails), followed by multiple follow up approaches such as phone, email, and wherever possible, in person. Mugenda and Mugenda (2003) state that a 50% response rate is considered adequate for descriptive studies and acceptable for analysis and publication. Consequently, a 96% response rate was considered sufficient for analysing and interpreting the research findings. Characteristics of collected data are as presented in Table 3.

Table 3: Sample Characteristics (n = 217)

Demographic Characteristics	Category	Frequency	Per cent
Number of branches per bank	National	53	24.4
	Standard	50	23.1
	NBS	46	21.2
	FDH	38	17.5
	FCB	30	13.8
Branch manger's experience	<6	67	30.8
	6-10	72	33.2
	11-15	64	29.5
	>15	14	6.5
Gender	Male	113	52.1
	Female	104	47.9

Age	<25	11	5.1
	25-29	45	20.7
	30-37	85	39.2
	38-45	65	29.9
	>45	14	5.1
Education level	Diploma	8	3.6
	Bachelor's degree	130	59.9
	Master's degree	79	36.4
Management level	Top management	83	38.2
	Middle management	122	56.2
	Lower Management	12	5.6

Source: Field data (2024)

Validity refers to the extent to which a tool, instrument, or method accurately measures what it is intended to measure. In the context of research and assessments, validity ensures that the conclusions drawn from the results are sound and reflective of the phenomenon under study. To ensure that the measures of specific constructs in the study were distinct and not excessively correlated with measures of other constructs, a discriminant validity test was conducted using SPSS. The fitness of the dataset for factor analysis was evaluated using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity. Bartlett's Test determines whether there is a linear correlation between the variables, while KMO tests how well the data can be explained on the basis of present factors (Pallant, 2011). Convergent and divergent validities came out well. In fact, it was found that the four elements of the construct differ greatly from each other and have an average factor value of above 0.7 and a KMO value of 0.813, indicating the shared variability of the data is well above the threshold at which it is adequate for meaningful factor analysis. Further, Bartlett's Test of Sphericity is found significant at $\chi^2 = 438.563$, df = 6, and $p < 0.001$. A KMO criterion was used on the factor solution, retaining only those factors that had an Eigenvalue of one and above. The first four factors explained a major variance of 68.3% of the original variance. The factor loadings were extracted for each variable and factor through Principal Component Analysis and Varimax rotation. The tables below show the results contained in Table 4 and Table 5.

Table 4: Kaiser-Meyer-Olkin Measure and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.813
Bartlett's Test of Sphericity	Approx. Chi-Square	438.563
	df.	6
	Sig.	.000

Source: Field data (2024)

Table 5: Discriminant Validity Based on Cross Loadings

Variables	Training	Performance Appraisal	HRIS Usage	Commercial Bank Performance
T1	**.727**	.076	.112	.172
T2	**.842**	.052	.073	.146
T3	**.862**	.014	.06	.073
T4	**.704**	.008	.065	.195

T5	**.826**	.032	.178	.047
PA1	.132	**.684**	.015	.035
PA2	.064	**.864**	.041	.016
PA3	.015	**.712**	.004	.015
PA4	.018	**.717**	.002	.021
HRISU1	.001	.006	**.538**	.141
HRISU2	.024	.013	**.777**	.062
HRISU3	.062	.154	**861**	.015
HRISU4	.085	.046	**.878**	.016
HRISU5	.092	.015	**910**	.043
CBP1	.285	.039	.043	**.810**
CBP2	.234	.034	.068	**.884**
CBP3	.203	.037	.027	**.758**
CBP4	.032	.065	.024	**.787**

Source: Field data (2024)

Findings

The regression equation model specified for the study was:

$$CBP = \beta_0 + \beta_1 T + \beta_2 PA + \beta_3 HRISU + \beta_4 T*HRISU + \beta_5 PA*HRISU + \varepsilon$$

Where: CBP = Commercial bank performance; T = Training; PA = Performance appraisal; HRISU = Human resource information system usage; β_0 = Constant, $\beta_{1\ldots5}$ = Coefficients of respective variables; ε = Error term. Prior to computing the estimates of the coefficient of the regression models of specified equations, the analysis of multicollinearity based on the condition index was considered. A condition index exceeding 30 generally indicates the existence of multiple relationships among the variables. However, based on the calculation of the condition index presented, it is clear that all condition indexes are below 30 as presented in Table 6. Other key assumptions, such as normality and heteroskedasticity, were tested and were found to satisfy assumptions for multiple linear regression analysis, as is the case for this study.

Table 6: Collinearity Diagnosis

Dimension	Eigen V.	Index	Variance Proportions					
			Constant	T	PA	HRISU	T*HRISU	PA*HRISU
1	4.176	1.000	.00	.00	.00	.00	.00	.01
2	1.125	1.927	.00	.00	.00	.00	.46	.15
3	.668	2.501	.00	.00	.00	.00	.50	.44
4	.018	15.330	.01	.58	.20	.06	.00	.10
5	.007	24.127	.01	.07	.75	.76	.03	.19
6	.006	25.455	.98	.35	.04	.18	.01	.11

Table 7: OLS Regression Model with Commercial Banks' Performance as the Dependent Variable

Hypothesis	Variables	β	t-values
	Main effects:		
H1:	Training	.189	2.041**
H4:	Performance appraisal	.453	3.755***
H2:	HRIS usage	.332	3.502***

	Interaction effects:		
H3:	Training*HRIS usage	.284	2.339**
H5:	Performance appraisal*HRIS usage	.548	2.837***
	Model summary: R^2=.452, R^2adj=.442, F(5, 211)=43.801***		

*Notes: ***p<.01, **p<.05, p<.10 (two-tailed)*
Source: Field Data (2024)

The first hypothesis (H1) was that training has a positive effect on the performance of commercial banks. From the regression results, as presented in table 7, it was found that training has had a positive effect on commercial bank performance, as the results are statistically significant (β = .189, t = 2.041, $p \leq 0.05$). This shows that there is an increase of 0.189 units in commercial bank performance with a unit increase in training. This finding is in line with Simkhada (2023); Odengo and Bett (2016); and Friday (2019). The second hypothesis (H2) proposed that there is a positive relationship between HRIS usage and the performance of commercial banks in Malawi. The regression analysis outcome, as presented in Table 7, showed a statistically significant positive effect of HRIS usage on the performance of commercial banks (β = .332, t = 3.502, $p \leq 0.01$), which shows that for every unit increase in HRIS usage, there was a 0.332-unit increase in the performance of commercial banks. This finding is in line with Opiyo (2015); and Hendrickson (2003).

The third hypothesis (H3) proposed that HRIS usage moderates the positive effect of training on commercial banks performance in Malawi. The results of regression analysis, presented in Table 7, show that HRIS usage played a statistically significant positive moderating role on the positive effect of training on commercial banks performance in Malawi (β = .284, t = 2.339, $p \leq 0.05$), meaning that the increase in HRIS usage by one unit enhances the positive effect of training on commercial bank performance by 0.284 units. The results coincide with Solimon et al (2023); Bhatt et al. (2023; and Delery and Roumpi (2017). The fourth hypothesis (H4) proposed that performance appraisal positively affects the performance of commercial banks (β = .453, t = 3.755, $p \leq 0.01$) and that a one-unit change in performance appraisal results in an increase of 0.453 units for the performance of the commercial banks. The results align with the findings by Segbenya and Ansah (2021); Ali et al (2014); Khugshal (2020); and Dessler (2020). The fifth hypothesis (H5) posited that HRIS usage moderates the positive effect of performance appraisal on commercial banks performance in Malawi. The regression analysis results, as summarized in Table 7, revealed a statistically significant positive moderating role of HRIS usage on the positive effect of performance appraisal on commercial banks performance in Malawi (β = 0.548, t = 2.837, $p \leq 0.01$) indicating that a unit increase in HRIS usage strengthen the significant positive effect of performance appraisal on commercial bank performance by 0.548 units. The results are consistent with Hendrickson (2003); Loutzenhiser (2012); Kawiana (2023); Armstrong and Taylor (2020) who concluded that HRIS usage supports other HR functions by offering appropriate services. Based on the regression analysis results, the previous established equation model was revised and became as follows:

$$CBP = 0.189T + 0.453PA + 0.332HRISU + 0.284T*HRISU + 0.548PA*HRISU + \varepsilon$$

From the revised equation model, post hoc analysis for HRIS usage as a moderating variable was conducted as depicted in Figure 2.

$\boldsymbol{\partial}(CBP/T) = 0.189 + 0.284HRISU$ and $\boldsymbol{\partial}(CBP/PA) = 0.453 + 0.548HRISU$

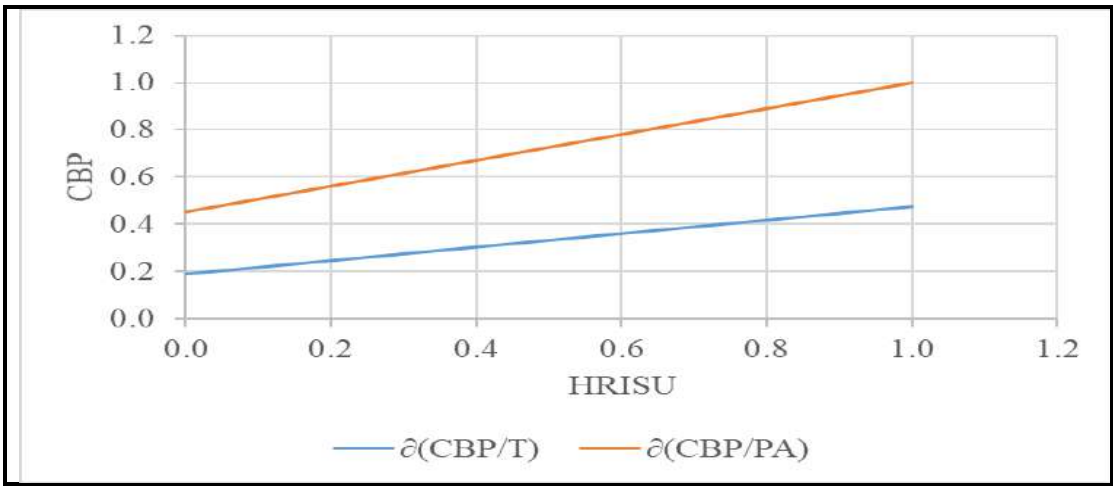

Figure 2: **Post Hoc Analysis on Moderating Effect of HRISU**
Source: Filed data (2024)

From the post hoc analysis in Figure 2, it can be noted that training investment yields significantly higher performance returns when supported by active HRIS usage. Also, it can be noted that performance appraisal investment yields significantly higher performance returns when supported by active HRIS usage.

Discussion of the Findings

The study investigated the effect of human resource development practices on commercial bank performance in Malawi with the role of system (HRIS) usage. All prior established specific objectives as reflected in hypotheses were attained. The first objective of the research was to establish the effect of training on the performance of commercial banks. From table 7 above, it is evident that training has a positive effect on commercial banks' performance. The findings entail that when employees are trained, they become unique and contribute more to organizations' performance aligning with RBV. The second objective of the study was to assess the effect of HRIS usage on the performance of commercial banks. The results, as presented in Table 7, reveals that HRIS usage has a significant positive effect on commercial bank performance. The findings entail that when there is HRIS usage organizations' performance increases aligning with UTAUT. The third objective was to assess the moderating effect of HRIS usage on the positive effect of training on commercial banks' performance in Malawi. From the results of the study in Table 7, it is revealed that HRIS usage positively and significantly strengthens the effect of training on the performance of the commercial banks. The findings entail that when training is interacted with HRIS usage, the effect of training on organisations' performance increases, supporting integration of RBV (training and performance appraisal) and UTAUT (HRIS usage).

The fourth objective was to determine the effect of performance appraisal on commercial banks' performance in Malawi. From the presented results in Table 7, it has been disclosed that there is a statistically positively significant effect of performance appraisal on the commercial banks' performance. Performance appraisal or evaluation helps identify of human resources weaknesses to turn them into strengths, thereby ensuring the availability of unique human resources and thus aligning with RBV. The fifth objective was to assess the moderating effect of HRIS usage on the positive effect of performance appraisal on commercial banks' performance in Malawi. From the results of the study in Table 7, it is revealed that HRIS usage positively and significantly

strengthens the effect of performance appraisal on the performance of the commercial banks. The findings entail that when performance appraisal is interacted with HRIS usage, the effect of performance appraisal on organisations' performance increases, supporting integration of RBV and UTAUT. The results are consistent with Hendrickson (2003) and Loutzenhiser (2012), who stressed that continuous performance management is ensured by the inclusion of HRIS within the performance appraisal process because all necessary tools for monitoring and evaluating performance required for the success of the organisation can be derived from it. The findings posit that integrating HRIS in the training and performance appraisal system brings transparency, fairness and consistency in the training and evaluation process, which are vital for improving organisation performance through employees' engagement and productivity. HRIS usage promotes a culture in which feedback is instantaneous and target setting is linked dynamically to organisational goals. Furthermore, HRIS use assists in objective performance evaluations (or using data) and informs employers of who their best performing employees are to consider them for training. Hence, the usage of HRIS increases the training and performance appraisal influence on the performance of the commercial banks.

Conclusion, Implications and Areas for Further Studies

This study investigated the effect of manpower development practices on the performance of Malawian commercial banks with the role of HRIS usage. On one hand, it focused on examining the effect of training, performance appraisal and HRIS usage on the performance of Malawian commercial banks. On the other hand, it focused on examining the effect of training and performance appraisal when interacted with HRIS usage on the performance of Malawian commercial banks. The results entail that training, performance appraisal and HRI significantly affect Malawian commercial bank performance in a positive way. The results entail that the effect of training and performance appraisal on Malawian commercial banks' performance significantly increases when interacted with HRIS usage. Practically, the banks should prioritise the use of HRIS to enable the banks to have data-driven human resource development practices. Managers can influence HRIS to access comprehensive data on employee performance and training. By identifying skill gaps and career aspirations through HRIS data, managers can align training programmes with the specific needs of future leaders. Moreover, HRIS usage can effectively track potential leaders and their training. By so doing, managers can minimise the costs associated with external hiring or emergency leadership transitions. As such, it decreases both economic and action risks emanating from leaders who quit banks.

Additionally, through human resource development practices, the study strengthens the applicability of resource-based view theory when integrated with the HRIS. In the same vein, the study stretches the applicability of the unified theory of acceptance and use of technology on improving commercial banks' performance while strengthening the effect of human capital development practices on commercial banks' performance. From this new theoretical knowledge, commercial banks and other organisations should find a better way of integrating human capital development practices with HRIS in order for such practices to have a substantial effect on commercial banks' and organisations' performance. For the purpose of ensuring integration of manpower development practices and HRIS, the Bank of Malawi should provide a circular requiring commercial banks to acquire systems that enhance manpower capital development practices to improve their performance. In realising this, the Bank of Malawi may come up with a policy that specifies special features of the systems to be acquired for commercial banks to gain benefits from manpower development practices. On the other hand, given the imperative of

integrating manpower planning and HRIS, the Malawian government, through the Bank of Malawi, may come up with reinforcement strategies for commercial banks to start using HRIS by providing subsidies for technology adoption in such commercial banks. Furthermore, future studies should investigate the effect of manpower planning development practices in other service sectors such as hospitals and higher learning institutions to see if the findings of this study can still be valid. Moreover, other functional information systems, such as accounting information systems and marketing information systems can be studied as moderators to see if they may assist key functions in commercial banks or other service organisations to enhance better performance. On top of that, since the R^2 for this study was 0.452 (45.2%), future studies can incorporate more variables such as organisation size and employee satisfaction or other workforce entry practices when integrated with HRIS on commercial banks' (or any type of service organisation) performance.

References

Adegoroye, A. A., Oladejo, M., & Moruf, A. (2012). Strategic human resources management practices in the post consolidated Nigerian commercial banks. European Journal of Business and Management. 4(15), 168–176. https://files01.core.ac.uk/download/pdf/234624379.pdf

Aguinis, H. (2023). *Performance management.* Sage Publications. https://vulms.vu.edu.pk/Courses/.pdf

Ahmed, H., (2020) Effectiveness of HRIS in banking sector in Bangladesh: A study on United Commercial Bank Ltd (UCBL). *Indian Scientific Journal of Research and Engineering and Management.* 8(1), 2320-2882. https://www.researchgate.net/publication/371445528

Ali, Z. (2014). Impact of succession planning on employee's performance: Evidence from commercial banks of Pakistan. *American Journal of Humanities and Social Sciences Research,* 5(1), 473-480. https://www.researchgate.net/profile/Zulqurnain-Ali/publication/280878483

Armstrong, M., & Taylor, S. (2020). *Armstrong's Handbook of Human Resource Management practice,* 15th Edition, London: Kogan Page Publishers. https://www.koganpage.com/hr-learning-development/armstrong-s-handbook-of-human-resource-management-practice-9781398606630

Aryal, N. P., & Singh, G. K. (2025). Influence of Human Resource Development Practices on Employee Performance: A Case of Prime Commercial Bank Limited. *Journal of Business and Management Review*, *6*(6), 733–749. https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q

Badejo, A. E. (2015). Strategic human resource management practices and employees' career development in selected commercial banks in Lagos State, Nigeria. *European Journal of Business and Management*, *7*(2), 83–94. https://files01.core.ac.uk/download/pdf/234626203.pdf

Banda, L. G. (2021). Determinants of commercial banks' performance in Malawi: An autoregressive distributed lag (ARDL) approach. *Journal of Economics and International Finance,* 13(4), 163-174. https://doi.org/10.5897/JEIF2021.1142

Banda, M., & Mwale, N. (2020). Challenges in succession planning in commercial banks in Malawi. *African Journal of Business Management, 14*(6), 211-220. https://academicjournals.org/journal/AJBM/edition/June_2020#

Bankers Association of Malawi (2026). Banking Sector: Member Commercial Bank. https://www.iob.bam.mw/banking-sector

Bano, Y., Omar, S. S., & Ismail, F. (2022). Succession planning best practices for organizations: A systematic literature review approach. *International Journal of Global, 1(1), 39-48, https://doi.org/10.56225/ijgoia.v1i1.12*

Barney, J. B. (2002). *Gaining and sustaining competitive advantage.* Upper Saddle River, NJ: Prentice Hall. https://lccn.loc.gov/00066890

Bhatt, M., Joshi, P., & Bariya, S., (2023). A study on the impact of technology in HR practices on performance management in IT industry. *Journal of Strategic Human Resource Management,* 12. 1-8. https://www.researchgate.net/publication/370638034

Bilgic, E., (2020). Human Resources Information Systems: A Recent Literature Survey. Contemporary Global Issues in Human Resource Management, *Emerald Publishing Limited Leeds*, 73-87, https://doi.org/10.1108/978-1-80043-392-220201008

Bloomfield, J., & Fisher, M. J. (2019). Quantitative Research Design. *Journal of the Australasian Rehabilitation Nurses Association*, 22, 27-30. https://doi.org/10.33235/jarna.22.2.27-30

Bryman, A. (2016). *Social Research Methods*, 5th Edition, London: Oxford University Press.

Chukwuma I.O., Ohakim E., Agbaeze E.K., Alaefule F.O., Iwobi U.M., UgwujaG.C., & Ojonugwa J., (2022). Succession Planning and Financial Performance: A Resource-Based View Analysis. *International Journal of Research and Innovation in Social Science (IJRISS),* |6(1), 749-753.

David, F. R., & David, F. R. (2020). *Strategic Management: A Competitive Advantage Approach, Concepts and Cases.* Pearson Education. https://cmls.org.uk/online/wp-content/uploads/2019/07/Strategic-Management-A-Competitive-Advantage-Approach.pdf

Delery, J. E., & Roumpi, D. (2017). Strategic human resource management, human capital, and competitive advantage: Is the field going in circles? *Human Resource Management Journal, 27*(1), 1–21. https://doi.org/10.1111/1748-8583.12137

DeNisi, A. S., & Murphy, K. R. (2017). Performance appraisal and performance management: 100 years of progress? *Journal of Applied Psychology, 102*(3), 421–433, https://doi.org/10.1037/apl0000085

Dessler, G. (2020). *Human Resource Management*, 16th Edition, Pearson. https://www.amazon.com/Human-Resource-Management-16th-Dessler/dp/9353942209

Egwakhe, A. J., Akinlabi, B. H., Magaji, N., & Ojuolape, S. A., (2022). Succession planning strategies and employee performance of selected deposit money banks in Lagos state, Nigeria: The moderating effect of educational qualification. *European Journal of Human Resource*, *6*(1), 52–65. https://doi.org/10.47672/ejh.1065

Friday, E.O. (2019). Employee training and succession planning of selected deposit money banksin Abia State, Nigeria. *SEISENSE Journal of Management*, 2(1),47-56. https://doi.org/10.33215/sjom.v2i1.80

García-Sánchez, E., García-Morales, V. J., & Martín-Rojas, R. (2018). Influence of technological assets on organizational performance through absorptive capacity, organizational innovation and internal labour flexibility. *Sustainability*, *10*(3), 770. https://doi.org/10.3390/su10030770

Hendrickson, A. R. (2003). Human resource information systems: Backbone technology of contemporary human resources. *Journal of Labor Research*, *24*(3), 381. https://www.s12122-003-1002-520230506-1-eggcsm-libre.pdf

Kalof, L., Dan, A. & Dietz, T., (2008). *Essentials of social research*, London: Open University Press. https://www.amazon.com/Essentials-Social-Research-Linda-Kalof/dp/0335217826

Kavanagh M.J., Johnson R.D., & Godson T., (2019). *Human resource information system: Basic application and the future decisions*, 4th Edition, Sage Publications. https://www.researchgate.net/publication/337826993

Kawiana, I. (2023). Utilization of information and communication technology in performance management: For a better organization. *Neo Journal of economy and social humanities,* 2, 186-193. https://doi.org/10.56403/nejesh.v2i3.126

Khugshal R. (2020) Succession planning and its emerging issues in today's dynamic environment: An empirical study, *EPRA International Journal of Economics and Business Review.*8. https://doi.org/10.346713/epra3093

Kothari, C. (2019). *Research methodology: Methods and techniques.* 4th Edition, New Age International Publishers, New Delhi. https://www.scribd.com/document/499977794

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, *30*(3), 607–610. https://doi.org/10.1177/001316447003000308

Loutzenhiser, K. (2012). Making room for e-government through succession planning. Management Association (Ed.), *Human Resources Management: Concepts, Methodologies, Tools, and Applications* (pp. 600-610). IGI Global Scientific Publishing. https://doi.org/10.4018/978-1-4666-1601-1.ch037

Majaliwa, E., Kessy, S. S., & Sanga, J. J. (2024). Enhancing the Potential Absorptive Capacity of the Project-Based Organizations Through Human Resources Development: Evidence from Registered Contractors in Tanzania. *ORSEA Journal*, *13*(2), 35–51. https://doi.org/10.56279/orseaj.v13i2.3

Marangunic, N., & Granić, A. (2014). Technology acceptance model: A literature review from 1986 to 2013. *Universal Access in the Information Society, 14*, 81 - 95. https://link.springer.com/article/10.1007/s10209-014-0348-1

Masum, A. K. M., Azad, Md. A. K., & Beh, L.-S. (2016). The role of human resource management practices in bank performance. *Total Quality Management & Business Excellence*, *27*(3–4), 382–397. https://doi.org/10.1080/14783363.2014.1002762

Mbamba U.O.L., & Sanga J.J., (2024). Human resource information systems usage and competitiveness of organisations: A survey of higher learning institutions in Tanzania, *University of Dar es Salaam Library Journal*, 19 (1), 156-172. https://www.ajol.info/index.php/udslj/article/view/275196

Mbugua, G. M. (2015). *Relationship between strategic human resource management practices and employee retention in commercial banks in Kenya. Doctoral dissertation*. http://ir.jkuat.ac.ke/handle/123456789/1715

Mehreen, A., & Ali, Z. (2022). The Interplay Between Employee Development Factors and Succession Planning in Predicting Employee Performance: Evidence from Retail Banks. *Industrial and Commercial Training.* https://doi.org/10.1108/ICT-10-2021-0072

Mondy, R. W., & Martocchio, J. J. (2016). *Human Resource Management*, 14th Edition, Pearson. https://www.amazon.com/0133848809

Mugenda O.M. & Mugenda A.G. (2003). *Research Methods; Quantitative and Qualitative Approaches*, ACT, Nairobi. http://ir-library.ku.ac.ke/handle/123456789/8328

Muzondiwa, M., & Arokia, D. R. (2024). A study on analysis of financial challenges of Small and Medium Sized Enterprises (SMEs) in international markets with special reference to Blantyre commercial Center-Malawi, Central Africa. *I-Manager's Journal on Economics & Commerce*, *4*(2), 46. https://doi.org/10.26634/jecom.4.2.21070

Neuman, W.L, (2007). *Basics of Social Research: A qualitative and quantitative approaches*, 2nd Edition, Pearson Education Inc. USA. https://www.researchgate.net/publication/215466702

Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2021). *Fundamentals of human resource management,* 9th Edition, McGraw-Hill Education. https://www.amazon.com/dp/1264131143

Odengo R.A. & Brett S., (2016) Influence of succession planning practices on performance of Kenya power limited company. *International Journal of Business Strategy,*1(1), 127-143. https://doi.org/10.47672/ijbs.102

Opiyo, P., (2015). Effects of human resource information system on performance of commercial banks in Kenya: A case of Kenya commercial bank. *International Journal of Research and Development,* 1(1). https://www.researchgate.net/publication/280224429

Pallant, J. (2011). *SPSS survival manual: A step by step guide to data analysis using SPSS*, 4th Edition, Allen & Unwin. https://www.amazon.com/SPSS-Survival-Manual-Julie-Pallant/dp/0335242391

Reserve Bank of Malawi (2020). *Malawi banking sector report*. https://cedarcapital.mw/content/uploads/2020/06/Malawi-Banking-Sector-Report-June-2020.pdf

Rothwell, W. (2010). *Effective succession planning: Ensuring leadership continuity and building talent from within,* 4th Edition, A AMACOM Division Publications New York. https://www.amazon.com/0814414168

Segbenya M, & Ansah J. (2021). Influence of human resource management practices on organisational performance at Atwima Mponua Rural Bank Limited. *J Bus Enterp Dev*. 9,118-127. https://doi.org/10.47963/jobed.v9i.182

Shah, N., Chalu, H., & Michael, F. (2020). Effect of E-HRM on HR Efficiency in Private Commercial Banks of Tanzania. *ORSEA Journal*, *10*(1). https://journals.udsm.ac.tz/index.php/orsea/article/view/3699

Siambi, J. (2022). Leadership Succession Planning and Organization Transition: A Review of Literature. International Journal of Managerial Studies and Research, 10(3), 16-30. https://doi.org/10.20431/2349-0349.1003003

Simkhada, A. (2023). Impact of succession planning practices on the profitability of Nepalese commercial banks. *International Journal of Emerging Trends in Social Sciences*. *Asian Journal Online Publishing Group,* 14(1), 1–11. https://doi.org/10.55217/103.v14i1.595

Singogo, P. (2021). The impact of buyer-supplier quality information exchange and institutional pressure on green economic supply Chain Performance in Tanzania. *ORSEA Journal*, *11*(1). https://journals.udsm.ac.tz/index.php/orsea/article/view/4465

Singogo, P. C., & Kassimba, Y. A. (2024). Determinants and Consequences of Information Exchange Quality in the Buyer-Supplier Relationship: Evidence from the Fishing

Industry of Tanzania. *University of Dar Es Salaam Library Journal*, *19*(1), 138–155. https://doi.org/10.4314/udslj.v19i1.10

Singogo, P. C., & Mbeya, H. F. G. (2024). The Effect of Organizational Change on the Performance of Public Service Organizations in Malawi. *ORSEA Journal*, *14*(1), 24–38. https://doi.org/10.56279/orseaj.v14i1.2

Snell, S., Morris, S., & Bohlander, G. (2016). *Managing Human Resources,* 17th Edition, Cengage Learning. https://www.scirp.org/reference/referencespapers?referenceid=2815717

Solimon Y.E., Mahmoud M., & Moustafa D., (2023). *Succession planning for banks: Managing transitions: An Egyptian case.* Central Bank of Egypt Succession Planning Awareness Report. *https://masrafeyoun.ebi.gov.eg/wp-content/uploads/2023/07/Succession-Planning-for-Banks.pdf*

Stone, D. L., & Lukaszewski, K. M. (2009). An expanded model of electronic human resource management systems' acceptance and effectiveness. *Human Resource Management Review*, 19, 134-143. https://doi.org/10.1016/j.hrmr.2008.11.003

Tansley C. & Watson T. (2000). Strategic exchange in the development of human resource information system (HRIS). *New Technology Work and Employment*. 15(2), 108-122. https://doi.org/10.1111/1468-005X.00068

Venkatesh, Morris, Davis, & Davis. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, *27*(3), 425. https://doi.org/10.2307/30036540

Wilson, T., Rwehumbiza, D. A., & Nguni, W. (2022). Logistics Management Information Systems, Training and Availability of Contraceptives: A Case of Uganda's Public Health Sector. *ORSEA Journal*, *12*(1). https://journals.udsm.ac.tz/index.php/orsea/article/view/4986

Zafar, A., Khawaja, G., Akhtar, H., & Iqbal, F., (2020). Effect of succession planning on organizational growth. *Journal of Social Sciences and Humanities*, 59, 21-33. https://doi.org/10.46568/jssh.v59i1.323