EXAMINING HUMAN RESOURCES INFORMATION SYSTEMS ON THE

PERFORMANCE OF BANKS: A CASE STUDY OF NATIONAL

MICRO-FINANCE BANK

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE

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CERTIFICATION

The undersigned certify that she has read and hereby recommends for acceptance by The Open University of Tanzania a dissertation titled; **"Examining Human Resources Information Systems on the Performance of Banks, A Case Study of National Micro-Finance Bank".** In fulfilment of the requirements for the Degree of Master of Human Resource Management of the Open University of Tanzania.

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Dr Lilian Macha

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Date

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DECLARATION

I, **Noemi Mseven,** declare that the work presented in this dissertation is original. It has never been presented to any other University or Institution. Where other people's works have been used, references have been provided. It is in this regard that I declare this work as originally mine. It is hereby presented in partial fulfilment of the requirement for the Degree of Master of Human Resource Management of the Open University of Tanzania.

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Signature

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Date

DEDICATION

I dedicate this report to my father, my mother, my best friends Irene Joshua and Neema Kipilipili, my siblings Mary Mseven and Elisha Mseven.

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The accomplishment of this study was through support from a variety of people. Before all, I would like to thank my Almighty God for giving me health and guiding me throughout my studies and conducting this study. His blessings upon me were very important in making me able to prepare this study.

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ABSTRACT

Generally, the study intended to examine the effects of human resources information systems on the performance of banks. The study contained three specific objectives which were to determine the contribution of NMB's e-recruitment practice on their overall performance, to examine the influence of induction's e-training and development on NMB bank performance and to determine the extent to which e-payroll administration affects the overall performance of the NMB banks. A descriptive strategy was adopted in the study. A case study design was preferred in this study. The research was carried out at the Dar es Salaam headquarters of the National Microfinance Bank. Convenience sampling techniques and purposive sampling techniques were used. Data were collected through questionnaires, interviews and documentary review. Mean scores and Standard Deviations were used in analysis. Firstly, the findings have revealed that e-recruitment practices influence the performance of the bank through increased profitability and return on assets. Secondly, the findings have revealed that e-training among human resource information systems influences the performance of NMB through increased profit and return on assets. Finally, the findings have revealed that e-payroll as among human resource information systems influences the performance of NMB through increased profit and return on asset. It is recommended that the management of the bank should ensure that there is increased implementation of electronic recruitment in the bank, e-training and development programs are implemented effectively in the bank and e-payroll should be implemented effectively.

Keywords: *Human resources information systems, performance of banks, NMB's e-recruitment practice, e-training*

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LIST OF ABBREVIATIONS

APS	Australian Public Service
HR	Human Resource
HRD	Human Resource Department
HRIS	Human Resource Information System
HRM	Human Resource Management
IS	Information System
IT	Information Technology
KRA	Kenya Revenue Authority
MNCs	Multinational Corporations
OSHA	Occupational Safety and Health Authority
SMEs	Small and Medium Enterprises
WHO	World Health Organization
NMB	National Microfinance Bank

CHAPTER ONE

INTRODUCTION

1.1 Background of Research Problem

Since the turn of the century, developed countries have found human resource information systems popular. There have been changes in human resource management across the world from traditional one to strategic oriented human resource management. The merging of HRM and IS is outlined by HRIS. One of the greatest esoteric HR tools in contemporary enterprises is HRIS (Phanwattan, 2017).

In developing countries, the importance of information technology adoption in banks has grown exponentially over the past two decades as a result of globalization, fast technological advancement, the emergence of the knowledge-based economy, and other factors (Avgerou et al, 2016). Additionally, implementation of information technology in organizations is said to have significant impacts on job designing, human resource planning in organizations as well as working environment of organizations (Keiser, 2019). Given these pressures, conventional HR management approaches are generally ineffective. Strategic decision-making is facilitated by integrated IS, particularly HRIS, which boosts productivity and service quality while reducing operating costs (Zainol, Fernandez, & Ahmad, 2017).

The organization must rely more on HR functions for operational and reporting needs as a result of the growth in complex organizational requirements. As a result of this change, an information base supporting HRD processes and practices must be

created. The term "human resource information systems" (HRIS) refers to such a database (Gupta, 2013). The emergence of HRM, now a modern management function, in the middle of the twenty-first century led to an expansion of HR's remit beyond simply managing employees to include creating and implementing high performance work systems (Thiteet al., 2011).

Emergence of HRIS in the banking industry was considered to be an important disciplinary towards achievement of objectives of human resources. Customer satisfaction is the banks' "competitive advantage." Nowadays, customers are no longer satisfied only with the availability of a product; they seek active communication with the banks' employees. Therefore, the banks are starting to focus on the values they can get from their employees. HRIS has transformed banks' financial as well as non-financial processes from manual to automatic computerized systems (Matimbwa & Masue, 2019).

Tanzania's banking sector has expanded over time; hence, more work is needed to maintain its current pace. It will be necessary to have timely, accurate, and trustworthy information to make wise judgments if the banking industry is to continue to flourish. Additionally, it will need qualified human resources to support its operations effectively and efficiently. As is common knowledge today, human resources have developed into important organizational assets because they contribute their skills, experience, and talents to the organization, assisting it in achieving its goals (Njau, 2018).

1.2 Statement of the Problem

In relation to the background information of this study, it was mentioned that commercial banks could cut down on their overall process costs by implementing human resource information systems, among other benefits. Nevertheless, the outdated human resource information system that was utilized by the majority of banks back in the day, including NMB, has some gaps. The gaps include the consequences of recruiting people with the wrong skills, providing insufficient training and development for them, losing them prematurely, developing payment structures that are ineffective or misguided, and failing to consider succession planning. All of these things can be avoided. These are some of the difficulties that need to be overcome by commercial banks. A much greater emphasis has been placed on useful measures for assessing the overall benefits of the investment in the HRIS system.

The past HRIS was unable to simplify the work, and the Human Resources department as a whole was inefficient, losing a lot of time on paper works that, in turn, provided inaccurate information. As a result, National Microfinance Bank (NMB Plc) decided to implement HRIS in 2006. Prior to that, the manual system had failed to simplify the work. The management of the company concluded that it needed to implement this new system because it was struggling with a number of issues, such as an excessive amount of paperwork to process, an insufficient flow of information, a slow speed when querying information, and an influx of incorrect information. Untapped research potential exists in how commercial banks' Human Resource Information Systems affect their overall performance. In light of this, the

purpose of this study will be to assess the degree to which HRIS contributes to the overall performance of banks.

1.3   General Objective

The general objective of this study is to examine the effects of human resources information systems on the performance of banks.

1.3.1   Specific Objectives

i)   To determine the contribution of NMB's e-recruitment practice on their overall performance.

ii)   To assess the influence of induction's e-training and development on NMB bank performance.

iii)   To determine the extent to which e-payroll administration affects the overall performance of the NMB banks.

1.4   Research Questions

1.4.1   General Research Question

What is the effect of human resources information system on the performance of banks?

1.4.2   Specific Research Questions

i)   What are the contributions of NMB's e-recruitment system on their overall performance?

ii)   How do the induction's e-training and development influence the overall performance of NMB?

iii)   How does the e-payroll administration affect the overall performance of the NMB bank?

1.5   Significance of the Study

The findings of this study will contribute new knowledge, particularly regarding HRIS and the performance of banks. These findings will also contribute, in their own way, to the enhancement of HRIS in financial institutions. In addition, the findings of this research will be helpful to a wide variety of institutions, including private companies and public agencies. This will educate human resource managers on the value of utilizing HR information systems throughout the company. The government will benefit from introducing new information, and it will aid other businesses that wish to implement this system by providing resources such as money and experience.

1.6   Scope of the Study

Geographically, this study was conducted in Dar es Salaam City Centre at NMB headquarters. Thematically, the study focused on Human Resources information system with particular interest on banks performance by specifically address the position of HRIS, the benefits and users' perceptions on HRIS. In this study the scope covers key employees including the human resources director, human resources officers, the information technology manager, and the computer analyst.

1.7 Organization of the Study

This study is organized into five chapters; Chapter one contains introduction to the problem with inclusion of the background of the study, statement of the problem

where ideal, reality and gap are presented, research objectives which guide the study, research questions, significance of the study as well as the scope of the study. Chapter two presents theoretical positioning of the study where different theories which relate to the study are presented, empirical literature review where different studies conducted on similar issue by previous researchers are previewed, research gap where the missing information from previewed literatures is provided and conceptual framework which shows the existing relationship among variables of the study. Chapter three presents research methodologies which were used in collecting data from the selected organization, analysis of the collected data as well as presentation of data. Chapter four provides the presentation and discussion of the findings. Chapter five provides summary, conclusion and recommendations. At the end of the study chapters, references and appendices are provided.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This chapter will review theoretical literature reviews, empirical literature review, conceptual framework and research gap related to the examining human resources information system on the performance of banks.

2.2 Definition of Key Terms

Human Resources: Human resources are the group of people who work for a company, industry, or economy collectively constitute (Bal, Bozkurt, & Ertemsir, 2012). Finding, vetting, hiring, and training job candidates are the responsibilities of a company's human resources (HR) division. Additionally, it manages employee benefit plans.

Information System: An information system is a coordinated group of parts used to gather, store, and process data as well as to deliver knowledge, information, and digital goods. Information systems are essential for businesses and other organizations to run and manage operations, communicate with clients and suppliers, and engage in market competition (Cascio, 2015). An IS consists of a variety of components, including hardware, software, connections to and data from computer systems, information system users, and the system's housing. Information systems include, but are not limited to, networks, databases, and personal computers.

Human Resources Information System (HRIS): Human Resources Information System is used to gather and keep track of personnel data. Most of the time, an HRIS includes all essential features required for complete human resources management (HRM). It is a system for learning and development, performance management, and other things. The term "HRIS" can also refer to HRIS software (Hartel& Fujimoto, 2014).

Banks: A bank is a financial institution with permission to accept deposits and issue loans. Financial services, including wealth management, currency exchange, and safe deposit boxes may also be offered by banks (M. Georgescu, 2015). Banks come in a variety of forms, such as retail banks, commercial or corporate banks, and investment banks. In the majority of nations, the national government or central bank oversees bank regulation. Banks play a significant role in the economy by offering essential services to both consumers and companies (StudyCorgi, 2022).

Performance: Performance is the act of doing something successfully and utilizing knowledge as opposed to just having it or the act of successfully completing a task (Njau, 2018). A strong performance measurement system employs metrics that managers can influence, gives timely and consistent feedback, compares the metrics to some sort of standard, includes both short- and long-term metrics, and equalizes the objectives of the organization and the individual. Organization performance, as defined by Richard (2009), is the actual output or results of an organization as assessed against outputs, goals, and objectives. It examines how well a company performed in relation to its aims and objectives.

Coaching: Coaching can simply be defined as personalized and goal-oriented process under which a trained individual who is known as coach works with coachee or clients for the purpose of facilitating their personal and professional development (Grant, 2017).

Mentoring: Mentoring can be described as dynamic and mutually beneficial relationship under which an experienced or knowledgeable individual provides guidance, support as well as knowledge to mentee for the purpose of enhancing their personal and professional development (Grant, 2017).

Workshops: Cambridge dictionary define workshop as collaborative and hands-on learning or training event which is conducted in a specific environment and participants of such training engage in practical activities and discussions purposively to gain particular skills.

Net pay: Net pay can simply be described as an amount of money which is received for a particular work after all deductions and taxes have been taken out (Alcocer & Cozad, 2021). The definition shows that net pay is money which is paid to an individual including employees after authorities responsible for taxation have already taken out particular amount of tax which is supposed to be paid by an employee every month.

Employee benefits: Employee benefits can simply be defined as forms of compensations which are provided to employees in addition to their base salaries and

wages. These can either be employee benefits which are required by laws and employee benefits which are not required by laws (Walker, 2022).

2.3 Theoretical Underpinning of the Study

2.3.1 System Theory

The theory was founded by Ludwig Von Bertalanffy in 1940. The systematic investigation of the rational coordination of self-governing phenomena was central to system theory (Lai, 2017). Systems theory refers to Tran's disciplinary philosophy concerning the origin of complex structures in a social setting or environment (Rhodes, 2012). This is about the current frameworks and ideologies that define the theory and how it is applied in practice. System theory's fundamental tenet is that every system has boundaries and functions that are explained by its make-up and function.

This theory is applied to this study in order to clarify the design of the human resource information system and its expected effects on human resource service delivery. System theory encompasses raw materials, technical information, human resources, and financial resources. These components are critical for human resource information systems in order to provide efficient human resource services. Despite its importance, system theory has a few flaws, including the fact that it was previously regarded as an abstract concept, there were no universities devoted to it, and there were no specific tools or methods for applying it.

2.4   The Empirical Review

2.4.1 Contribution of the e-Recruitment System on the Overall Performance of the Banks

The study done by 2020, Ruel, Johnson, and Lukaazewski looked into the benefits of eHRM and artificial intelligence (AI) for hiring people in the US hospitality industry. They wanted to find out how companies in the hospitality and tourism industries can use e-HRM to find qualified employees, keep more of them, and replace them faster. The study looked at the existing research on eHRM and AI in hiring employees. It found that eHRM and AI have the potential to change how the hospitality industry recruits and chooses employees, which could lead to better organizational outcomes.

Digitization in Talent Acquisition: A Case Study of Al in Recruitment was the subject of Paramita's study in 2020. The study's goal was to find out how the company recruits people. The phenomenon of Al in recruiting is used to talk about the analysis and discussion, with different points of view, especially from human resources and operation management, interacting with each other. The study was a qualitative inductive case study in which HR professionals were interviewed with the help of a guide. The study's results showed that digitizing the hiring process leads to hiring qualified people who make the company more competitive by redefining customer orientation, operations, and collaboration.

Furthermore, the study by Malik and Mujtaba (2018) looked into how E-Recruitment affects the HR department's ability to do its job in the private sector of Pakistan. The study's goal was to discover the latest technological advances in recruitment and how

they help HR managers today. The study was a cause-and-effect study that tried to determine how strong and what links there were between causes and effects. Using questionnaires, the researcher gathered information from HR professionals like heads of HR and other leaders of private firms in Lahore, Multan, Faisalabad, Islamabad, and Quetta. The study's results were based on statistical tests such as sample size, descriptive statistics, correlations, and regressions. The results showed that E-recruitment significantly affects how well HR departments in Pakistan work. Galanaki (2002) did a study on the problems with e-recruitment. He found that candidates had privacy and security concerns about the personal information they put in their resumes and applications posted on the Internet. Other problems with e-recruitment include poor navigational links within sites, problems with posting resumes, and issues with contacting candidates (Smith, 2004). Lengnick-Hall and Lengnick-Hall (2007) say that a human resource information system includes a database that helps firms connect all of their units and activities structurally and speed up the flow of information, especially during the hiring process. They say that using an information system to hire people makes the whole process easier and cuts down on costs.

Another study by Tyagi in 2012 was about how firms in India use E-Recruitment to find and hire good employees. The primary purpose of this study by Tyagi was to determine what kinds of E-recruitment methods are used in India and what kinds of benefits organizations get from using these methods. This study used several techniques and designs to analyze. The methodology used included interview guides, questionnaires, and secondary data. The findings of this study revealed that getting

the best employee through the recruitment process, is through the means of planning, finding, evaluating, hiring, and bringing them on board. The researcher of this study also found that implementing the HRIS process allows companies to use the best hiring and recruiting methods and hire the best people on the market.

The study by Overbrook (2012) shows that the hiring process is one of the last daily tasks that most companies think is important for integration, but it is actually one of the most important. As it gets harder to find good people, recruiters look to their own employees to find the next candidate for a job opening. Also, Rawat (2010) says that in the case of higher education institutions, the effectiveness, efficiency, and quality of electronic recruitment will allow universities to profile their staff by pointing out their strengths and weaknesses, which will help them figure out what they have. They will be able to set up effective ways to hire people, train them, and help them grow. So, the key is to get the right people in the right place at the right time.

The study by Decenzo and Robbins in 2010 on the impact of Human Resources information systems revealed that recruitment aims to find skilled people who can fill open jobs in an organization. In addition, the study pointed out that the HRIS sets the groundwork for work by figuring out what tasks different people do at work and how those tasks affect them. Through human resource planning, managers can predict the demand for workers now and in the future and the nature of employee problems, such as how to keep employees. Thus, the study concluded by highlighting that when hiring, employers should be considered all these factors.

2.4.2 Influence of Induction's E-Training and Development on Bank Performance

The research was carried out by Frost (2019) and titled "The Importance of Training and Development in the Workplace." According to the study's findings, training is a prime opportunity to expand the knowledge base of all employees; however, many employers find the opportunities for development to be expensive. When employees attend training sessions, they take time away from their regular work, potentially slowing down project completion. Despite the potential drawbacks, training and development offer benefits to both the company and the individual employees. These benefits invest time and money worthwhile for both the company and the employees.

Another study was carried out by Wynen et al. (2020). It was titled "How Multiple Organizational Changes Shape Managerial Support for Innovative Work Behavior: Evidence from the Australian Public Service." According to the findings of this study, which are based on the threat-rigidity theory, the level of managerial support for innovative work behaviour (IWB) of employees decreases as employees perceive an increasing number of organizational changes. These assertions have been validated by analyses of data from the Australian Public Service (APS) employee census.

Mindfulness training in the workplace: exploring its scope and outcomes was the topic of a study by Klatt and colleagues (2019). The researcher of this study carried out an integrative literature review for this research using all four of its standard steps: search, selection, analysis, and synthesis. With this method's help, we could

compare and contrast relevant articles, integrate distributed information, generate new knowledge, and provide research directions on mindfulness practices in work settings. The authors found that mindfulness-based training is an effective intervention for organizations to improve their employees' mental health, well-being, and performance. This was determined through a review of 28 different empirical studies.

A total of 51 significant outcomes associated with mindfulness-related training were identified. These outcomes were classified as effective at the individual (23), job or work (17), group or team (7), and organizational (4) levels. According to the research findings, very few businesses have implemented a mindfulness training program for their staff members despite the many advantages associated with doing so. The authors suggest that industry leaders and managers adopt a proactive approach and include mindfulness-related practices in their professional development training for employees at all levels. This is intended to improve both personal and professional growth and performance. Further, the researcher mentioned that one of the primary advantages of regular staff training is that it will make it easier for your employees to perform their jobs by equipping them with the tools, strategies, and information they need to fulfil their responsibilities. The study further explained this. Training improves performance and enables employees to carry out their work responsibilities in a manner that is both more effective and more efficient (Chan, 2016).

Another study that Chan carried out in 2017, titled "The Impact of Pay Satisfaction, Job Stress, and Abusive Supervision on Turnover Intention among Banking

Employees", looked at the relationship between these factors and employees' intentions to leave their jobs. A total of one hundred bank employees working for public and private banks in Vehari provided the information for this study, which compiled the results. The findings indicated an inverse relationship between pay satisfaction and intention to leave an organization. In contrast, there was a significant positive relationship between job stress, abusive supervision, and intention to leave an organization. In addition, the research demonstrated that bank Employees who are allowed to increase their knowledge by participating in training sessions would, over time, see improvements in how well they perform their jobs.

2.4.3 Effects of E-Payroll Administration on the Overall Performance of Banks

Kazem et al., 2019 did a study that looked at the role of electronic management requirements in achieving the Excellence banking performance in the Middle East Investment and Finance Bank, Al-Watani Islamic Bank, and Bank of Baghdad. The study respondents included bank employees, the board of directors, the managing director, the deputy director commissioner and management. The study's primary objective was to determine banking institutions' performance. The study's findings revealed a gap between the results and the needs of electronic management. This is because, despite the high technology available, most departments do not have enough qualified people to work on electronic work. Another study done by Masum, Kabir, and Chowdury (2017) did research the factors that affect firms in Bangladesh's use of E-HRM. They looked at a case study of firms in Bangladesh. The study, among others, intended to examine the relationship between individual, technological, environmental, and organizational factors and the adoption of E-HRM. The study

utilized the stratified sampling method to choose 331 people from 46 large organizations in Bangladesh to participate. Factor analysis and descriptive statistics were used to determine the answers to structured questionnaires. The study findings revealed that the top management of firms in Bangladesh is in favour of using E-HRM.

Another study by Mutiku (2019) examined how institutional factors affect the implementation of human resource information systems in Kenya's Machakos County Government. The survey used a descriptive research design, and the primary data came from 174 county government employees who were chosen randomly. The results showed that putting in place, a human resource information system is linked to leadership style, staff training, organizational policy, and managing change. The study says that the county government should be ready to use human resource information systems (HRIS) and ensure that the environment is good for HRIS.

Milgo (2016) looked into what people thought were important factors in the Kenya Revenue Authority's HRIS (KRA) use. The research design for the survey was descriptive. The people in the population are all KRA workers in Nairobi. The study used a "stratified sampling" method to get data from KRA. From the results of the descriptive statistics, the respondents said that the implementation of HRIS at KRA was affected by good communication, support from top management, help from the ICT department, training, help from the HR department, and participation from users.

2.5   Research Gap

On the subject of the Human Resource Information system, for example, numerous studies have been written. Benfatto (2017) focuses on the Human Resource Information System and how it relates to the performance of the human resource function. The study concludes that implementation effectiveness is necessary for HRIS effectiveness but is not sufficient. According to the findings of Bhardway and Gounder's (2021) research on the subject of analyzing human resource information systems in organizations, the effectiveness of HRIS can be affected by a number of factors, including the quality of the system, its unification, and its usefulness. Even though all of these researchers have made important contributions to HRIS knowledge, there is still a dearth of research on the relationship between HRIS and the performance of banks. As a result, the purpose of this study was to examine the effect of human resource information system on the performance of banks.

2.6   Conceptual Framework

A *conceptual framework* is a theoretical structure consisting of norms, ideologies, and procedures encompassing the ideas that comprise a broad concept (Zikmund, 2003). As seen in figure 2.1, the conceptual framework for this study is based on the effects that human resource information systems have on the overall performance of banks in Tanzania. The bank's performance is being used as the dependent variable in this study, and the practices of the human resource information system are being used as the independent variables. Independent variables in this study include e-payroll administration practice, electronic induction training and development, and the electronic recruitment process.

Independent Variables   **Dependent Variable**

Inductions' e-training and development
- Options for professional training
- Additional training
- Coaching and mentoring
- Workshops and seminars

E-payroll practice
- Filling of taxes
- Payroll computations
- Employee benefits
- Calculation of deductions
- Net-pay

Bank Performance

E-recruitment practice
- Decisions on hiring
- Posting job vacancy
- Assessing candidates
- Online selection
- Online interview
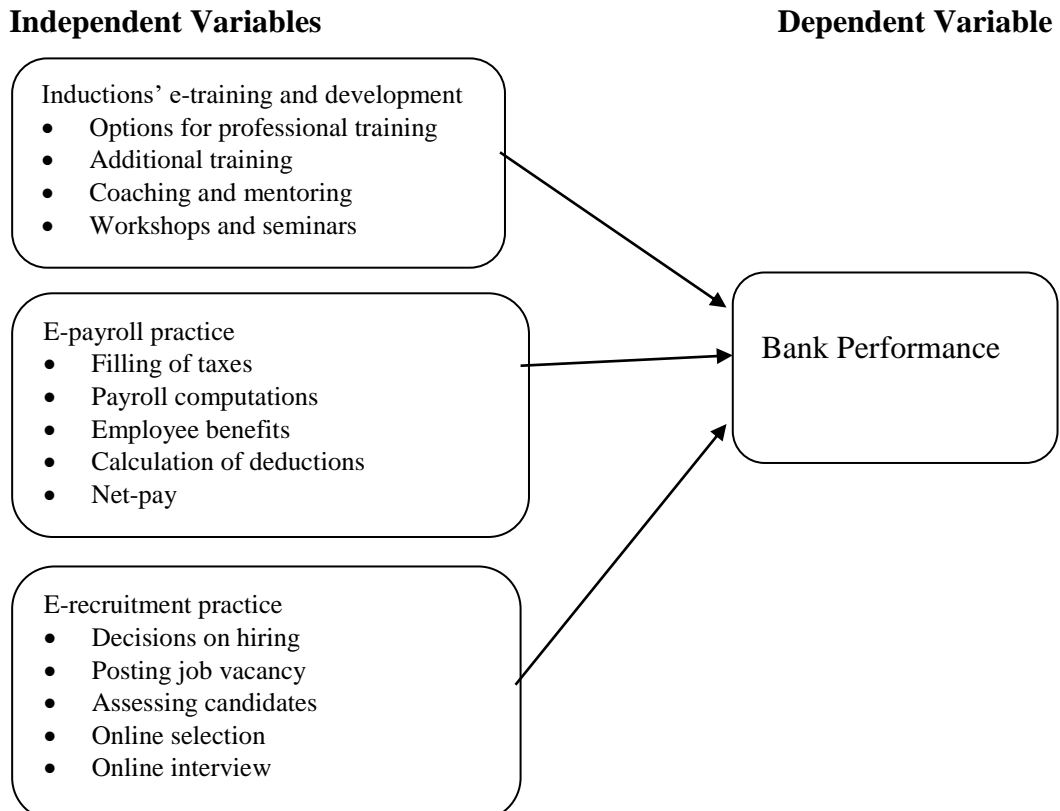
Figure 2.1: Conceptual framework

Source: Researcher, 2022

2.7   Theoretical Framework

2.7.1 Induction's E-Training and Development

E-training and development is described as training provided to employees with an electronic platform. In this system of training, an organization can use the system in training employees without assembling them in one location at the same time. The variable is associated with the system theory which provides that there is an interconnection of various components of human resource information system including e-training and development system. The relationship between the variable and dependent variable of the study (bank performance) is that, effective implementation of e-training and development can lead to improvement in bank

performance. This can be revealed from the study by Frost (2019) who revealed that implementation of e-training improves skills and finally improving performance. Furthermore, Wynen et al. (2020) revealed that e-trainings increase innovative behavior among employees and thus improvement in performance among employees.

2.7.2 E-Payroll Practice

This is electronic system used by employers in paying employees for work they have completed. The variable is associated with the system theory which provides that there is an interconnection of various components of human resource information system including e-payroll system. The relationship between the variable and dependent variable of the study (bank performance) is that, effective practices of e-payroll in the organization can lead to improvement in performance of bank. Masum, et al (2017) revealed that adoption of electronic human resource management including e-payroll has a close relationship with improved performance. Kazem et al., 2019 when studying on the role of electronic management found that e-HRM influences performance.

2.7.3 E-Recruitment Practices

Electronic recruitment practices are the use of web-based technology for the various processes of attracting, assessing, selecting, recruiting and on boarding job candidates. The relationship between the variable and dependent variable of the study is that effective e-recruitment practices can lead to improvement in organizational performance. This can be revealed from the study by Daniel (2019)

who revealed that e-recruitment was a key component of human resource management and thus established bock for organizational performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1   Overview

This chapter provides a description of the research strategy as well as the research design that will be utilized in the course of carrying out this study. It provides a description of the research design, study location, sampling procedures, data collection methods, sample size, and data analysis plan that were utilized in the study.

3.2   Research Strategy

The research strategy which was employed in this study was descriptive strategy. This kind of strategy was used in the study simply because it assisted in measuring variables as they exist naturally. It was helpful in providing description of individual variables. In this strategy, the research design which was preferred was case study design. This is a kind of design which assesses a single phenomenon. Case study design was preferred in this study because it was helpful in undertaking an in-depth examination on the influence of human resource information system on performance of organization. Lohman and Boyd (2021) are of the view that case study strategy is important considering that it increases flexibility in data collection, it is flexible in exploring deeper causes of phenomenon as well as ease of explaining results to the audience. These benefits associated with usage of case study design are what have made the researcher prefer case study design in this study.

3.2.1 Survey Population

The population for this study covered 80 staff from the NMB Dar es Salaam headquarters as well as managers of the bank. Staffs of the bank were used in the study considering that they were helpful in revealing the contribution of e-recruitment, e-training and e-payroll on performance of the bank. Management of the bank was also useful in the study given that they have important role to play in ensuring effective implementation of e-recruitment, e-payroll and e-training. Hence, they provided information which was helpful in meeting objectives of the study. The target population of this study was 80 employees at NMB Headquarters.

3.2.2 Area of the Research

The research was carried out at the Dar es Salaam headquarters of the National Microfinance Bank, which can be found in the central business district of Dar es Salaam. In light of this, NMB is the leading banks in Tanzania in terms of balance sheet with approximately 22% market share in both loans and customer deposits. Also, the bank has a large number of employees with around 3450 employees. Therefore, the status of the bank in terms of profitability and number of employees motivated the researcher to study on electronic human resource management systems and their contribution towards performance of the bank.

3.3   Sampling Design, Procedures and Sample Size

3.3.1 Sampling

The researcher used a non-probability sampling technique because of the nature of the subject. In non-probability sampling, rather than selecting samples at random, the

researcher instead relied on his or her own personal opinion to make selections for the samples (McLeod, 2014).

3.3.2 Sampling Procedures

3.3.2.1 Purposive Sampling

The technique was used in this study in order to ensure selection of respondents in response to the judgements of the researcher. With the aid of purposeful sampling, the researcher can exclude replies that are irrelevant or do not meet the parameters of the investigation (Depoy & Giltin, 2013). In this study, key employees, including the human resources director, human resources officers, the information technology manager, and the computer analyst were selected based on their skills and knowledge concerning HRIS at NMB.

3.3.2.2 Convenience Sampling

Another sampling procedure which was used in the study is convenience sampling. The technique was adopted in this study in order to select respondents who were conveniently available. The technique was used in this study because it was relatively quick, simple and cost-effective. To minimize bias during the study, these techniques were used in conjunction with simple random sampling. Due to the inaccessibility of other sampling techniques, the researcher created questions and distributed them to the intended group.

3.3.3 Sample Size

The sample size of this study was 44 respondents who included 40 staff of NMB Headquarter and 4 members of management. The sample size of this study was

obtained in response to sample size formula which was proposed by Yamane (1967).

The formula is;

n=N/1+N(e)2

Where; n= sample size, N= total population and e= probability of errors

n= 80/1+80(0.1)2

n= 80/1+0.8

n= 80/1.8= 44

3.4   Variables and Measurement Procedures

3.4.1 Variables

The study relied on both quantitative data and qualitative data which were collected from both primary sources and secondary sources. The variables which were used in collecting data are independent variables of the study (e-payroll, e-recruitment and e-training) as well as dependent variable of the study which is bank performance.

3.4.2 Measurement Procedures

3.4.2.1 Dependent Variable

The dependent variable of the study is bank performance. This variable was measured by looking at whether there is increase in return on asset and increase in return on equity.

3.4.2.2 Independent Variables

Personal attributes: Personal attributes which were measured in this study include age, gender, education level and working experience of respondents. Age of respondents was measured in years, gender of respondents was measured in terms of

(1-female, 2= male). Education variable was measured by four-point scales ranging from 1 for Certificate level, 2 for Diploma level, 3 Bachelor Degree and 4 for Master's Degree. Working experience was measured by three-point scale ranging from 1 for 0-5 years, 2 for 6-11 years and 3 for 12 years and above.

E-Recruitment practices: E-recruitment practices was measured in terms of whether the system is used in making decisions on hiring, posting job vacancies, assessment of candidates, online selection and online interview. Five Likert scale with options of strongly agree, agree, neutral, disagree and strongly disagree will be used. Percentages and frequencies will be calculated.

E-training and development: E-training and development was measured in terms of whether there are options for professional training, additional trainings, coaching and mentoring as well as workshops and seminars. Five Likert scale with options of strongly agree, agree, neutral, disagree and strongly disagree will be used. Percentages and frequencies will be calculated.

E-payroll administration practice: These was measured in terms of whether the system is used in payroll computations, filling taxes, determining employee benefits, calculating deductions and calculating net-pay. Five Likert scale with options of strongly agree, agree, neutral, disagree and strongly disagree will be used. Percentages and frequencies will be calculated.

3.5   Methods of Data Collection

Data collection methods which were used in collecting data in this study were

questionnaire method, interview method as well as documentary review.

3.5.1 Questionnaires

This was major data collection method that the researcher used in collecting information from respondents who participated in the study. The researcher prepared questionnaires in papers and supply them to all respondents who were randomly selected. Open-ended questions and closed-ended questions were prepared in response to the specific objectives of the study. Open-ended questions were prepared to provide respondents with the opportunity to provide explanations. Closed-ended questions were prepared to ensure that respondents do not skip from the options provided. This led to a collection of accurate information. The questionnaire contained two parts of which the first part was on demographic characteristics of respondents while the second part was questions in each specific objective. The questionnaire method was used because of its simplicity in collecting data from a large population within a short time.

3.5.2 Interviews

According to Kothari (2019), an interview is a research tool that involves presenting oral-verbal stimuli and receiving replies in the form of oral-verbal responses. This method provides instant input from respondents, generates a wide range of themes that are appropriate, and demonstrates the responses of respondents to numerous topics, allowing for in-depth investigation (Anderson et al., 2014). The researcher employed both structured and unstructured interviews. The reason behind using structured interviews is that it made the process easy while at the same time

expanding the line of questioning and giving a better idea of the issue. The unstructured interview was also used because it enhanced better understanding of participants and it was flexible. It also provided room for extra questions which were not prepared in the guide while remaining on the same topic. The method was also used in the study considering the direct participation of the researcher. This provided room for more clarification concerning the problem under study during conversations.

3.5.3 Documentary Reviews

The ability to locate, examine, and extract meaningful information from existing papers is made possible by the document review process (Charu, 2015). As opposed to independently gathering the data, document review is often less expensive. Documents within the organization will be reviewed and analysed to understand the implementation and HR functions. Various documents were reviewed in this study including strategic plan of the organization and annual reports of the organization which indicated number of employees from year to year.

3.6   Data Processing And Analysis

On the basis of the data information gathered from the primary and secondary sources, we will conduct both descriptive and content analysis. After the data have been edited to ensure their completeness, consistency, and reliability, they were coded so that their interpretation can be made more easily.

3.6.1 Content Analysis

An assortment of interpretive and methodical analyses, known as content analysis are done on data supplied in text format with the researcher's intuitive view in mind (Monique et al., 2019). Since content analysis is a versatile data analysis technique when examining substantial volumes of spoken data, it was used. The researcher hoped to use context analysis to measure and examine how important variables relate to the concepts in the research questions. The researcher was able to draw conclusions about the meanings included in the writings in the same way, particularly after interview. Additionally, by categorizing the collected data into several themes, this technique allows a researcher to describe behavioural responses to communications (Kawulich, 2015).

3.6.2 Descriptive Analysis

In this study descriptive analysis was undertaken through preparation of tables and figures containing frequencies and percentages of responses. Demographic characteristics of respondents were analyzed using those presented tables and figures. Also, Mean Scores and Standard Deviations were used in analyzing and interpreting data from each specific objective of the study.

3.7   Expected Results of the Study

The results which were expected from this study were that e payroll administration practice, electronic induction training and development, and the electronic recruitment process have influence on performance of the bank.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Overview

This chapter provides an analysis of findings of the study which were obtained from respondents of the study. The findings presented in this chapter answer the research questions prepared under chapter one of the study. The findings are based on the demographic information of respondents participated in the study and the key findings in each objectives of the study. Also, the chapter provides discussion of all findings presented. The study contained three specific objectives which were; to determine the contribution of NMB's e-recruitment practice on their overall performance, to examine the influence of induction's e-training and development on NMB bank performance and to determine the extent to which e-payroll administration affects the overall performance of the NMB banks.

4.2 Demographic Characteristics of Respondents

The demographic information in this study were personal information of every respondent who participated in the study especially those who attempted questionnaires. These provided information of individuals such as age of respondents, sex of respondents, education level of respondents and working experiences of respondents. Demographic characteristics of respondents of the study are presented in table 4.1.

Table 4.1: Demographic characteristics of respondents

Characteristic	Category	Frequency	Percent
Age	20-29	5	12.5
	30-39	19	47.5
	40-49	12	30
	50 and above	4	10
Sex	Male	26	65
	Female	14	35
Education level	Certificate	0	0
	Diploma	0	0
	Bachelor	33	82.5
	Masters	7	17.5
Working experience	0-5 years	12	30
	5-10 years	20	50
	11years and above	8	20

Source: Field data, 2023

4.2.1 Age of Respondents

The findings in table 4.1 show that 5 respondents (12.5%) were aged between 20-29 years, 19 respondents (47.5%) were aged between 30-39 years, 12 respondents (30%) were aged between 40-49 years, while 4 respondents (10%) were aged 50 years and above. The findings show that majority of respondents participated in the study were aged between 30-39 years. This implies that NMB Dar es Salaam headquarters has large number of employees aged above 30 years. These had enough experience on human resource information system and thus provided information on the extent to which human resource information system in the bank influenced bank performance.

4.2.2 Sex of Respondents

The findings in table 4.1 show that 26 respondents (65%) were males while 14 respondents (35%) were females. The findings show that majority of respondents participated in the study were males. This implies that majority of employees at

NMB Headquarters are male. Existence of employees from different sex was helpful in enrolling respondents from different sex. This was crucial in obtaining varying perceptions on human resource information system and how it influences performance of the bank.

4.2.3 Education Level of Respondents

The findings in table 4.1 show that 33 respondents (82.5%) had Bachelor education while 7 respondents (17.5%) had Master's level of education. The findings show that majority of respondents participated in the study had Bachelor degree level of education. This implies that NMB Headquarter has majority of employees with Bachelor education. Education level of respondents was important in influencing understanding of respondents on human resource information system and the influence of the system on performance of the bank.

4.2.4 Working Experience of Respondents

The findings in table 4.1 show that 12 respondents (30%) had working experience of 0-5 years, 20 respondents (50%) had working experience of 5-10 years while 8 respondents (20%) had working experience of 11 years and above. The findings show that majority of respondents had working experience of 5-10 years. This implies that most of employees at NMB Headquarter have a working experience of more than 5 years. These had enough experience on human resource information systems used in the bank and how the systems influence performance of the bank.

4.3   Contribution of NMB's E-Recruitment Practice on Overall Performance

The first objective of the study was prepared in order to determine the contribution of

e-recruitment practice on performance of NMB. In order to meet the objective, several statements were prepared containing information on e-recruitment and performance of the bank. Respondents of the study were required to agree or disagree with the provided statements. Responses were measured using five likert scale with options of strongly agree, agree, neutral, disagree and strongly disagree. Standard deviation and mean scores presented in Table 4.2 show responses.

Table 4.2: Contribution of NMB's e-recruitment practice on overall performance

Statements	N	Mini	Maxi	Mean	Std. Dev
e-recruitment is used in making decisions on hiring something which leads to increase in profitability of bank	40	1	5	2.68	1.228
e-recruitment is useful in posting job vacancies something which contributes to improved profitability	40	1	5	2.35	1.099
Assessment of candidates through e-recruitment is helpful in hiring right candidates who assist in increasing return on asset	40	1	5	2.70	1.224
e-recruitment leads to online selection of right candidates to assist in increasing profitability	40	1	5	2.43	1.130
e-recruitment through online interviews leads to hiring of right candidates who assist in increasing profitability of bank	40	1	4	1.95	0.846

Source: Field data, 2023

In the first statement, respondents were asked on whether e-recruitment is used in making decisions on hiring something which leads to increase in profitability of bank. The findings in Table 4.2 show that the Mean Score was 2.68 while Standard Deviation was 1.228. The findings show that majority of respondents were on the side of agreeing that e-recruitment is used in making decisions on hiring something which leads to increase in profitability of bank. Therefore, e-recruitment as among human resource information system influences performance of the bank through making decisions on hiring.

Documentary review was undertaken to determine the profitability of the bank in the years 2018, 2019 and 2020. The NMB Annual report of 2020 revealed that profit generated in 2018 was 97,663 billion, in 2019 profit rose to 142,167 billion while in 2020 profit increased to 205,802 billion. This shows that human resource information system has been among factors behind improved performance of the bank through increase in profitability. The findings relate to those in the study by Johnson, and Lukaazewski (2020) who revealed that e-recruitment system is useful in hiring people in US hospitality industry who assist in increasing performance.

In the second statement, respondents were asked on whether e-recruitment is useful in posting job vacancies something which contributes to improved profitability. The findings show that the Mean score was 2.35 while Standard Deviation was 1.099. The implication of the findings is that majority of respondents were on the side of agreeing that e-recruitment is useful in posting job vacancies something which contributes to improved profitability. During interviews with managers of the bank, Participant 3 said;

> *We do announce on available job vacancies through online sources because majority of job seekers are currently using online sources of job advertisements. This has been helpful in obtaining skilled employees who have assisted in increasing profitability of the bank. It has also been helpful in increasing number of customers who generate profit for the bank.*

Therefore, e-recruitment as among human resource information systems assists in improving performance of the bank by increasing profitability of the bank. The findings relate to those in the study by Akyuz and Isaac (2021) on effect of electronic recruitment on performance of first bank branches in North West. The findings of the

study revealed that e-recruitment has positive relationship with performance of the first bank.

In the third statement, respondents were asked on whether assessment of candidates through e-recruitment is helpful in hiring candidates who assist in increasing return on asset. The findings in Table 4.2 show that the Mean Score was 2.70 while Standard Deviation was 1.224. The findings show that most of respondents were on the side of agreeing that assessment of candidates through e-recruitment is helpful in hiring candidates who assist in increasing return on asset. The implication of the findings is that e-recruitment as among human resource information systems leads to hiring of right candidates and thus improving performance of the bank through increase in return on asset. The findings relate to those in the study by Daniel (2019) on impact of e-recruitment on organizational performance in commercial banks of Nigeria. The findings revealed that e-recruitment was a key component of human resource management which had positive influence on organizational performance and success.

In the fourth statement, respondents were asked on whether e-recruitment leads to online selection of right candidates to assist in increasing profitability. The findings in Table 4.2 show that the Mean Score was 2.43 while Standard Deviation was 1.130. The findings show that most of respondents were on the side of agreeing that e-recruitment leads to online selection of right candidates to assist in increasing profitability. During interviews with managers of the bank, Participant 2 was quoted explaining;

Implementation of e-recruitment system in our bank has been crucial in ensuring that there is assessment and selection of candidates who are skilled and experienced enough in the field of banking. These have positive contribution in increasing profitability of the bank through effective services provision.

The implication of the findings is that e-recruitment is used in the bank in selecting skilled candidates through online sources. These candidates are later on contributing to improved profitability because of improvement in services provided in the bank. Documentary review was undertaken to determine the profitability of the bank in the years 2018, 2019 and 2020. The NMB Annual report of 2020 revealed that profit generated in 2018 was 97,663 billion, in 2019 profit rose to 142,167 billion while in 2020 profit increased to 205,802 billion. This shows that human resource information system has been among factors behind improved performance of the bank through increase in profitability. The findings relate to those in the study by Akyuz and Isaac (2021) on effect of electronic recruitment on performance of first bank branches in North West. The findings of the study revealed that e-recruitment has positive relationship with performance of the first bank.

In the final statement, respondents were asked on whether e-recruitment through online interviews leads to hiring of right candidates who assist in increasing profitability of bank. The findings in Table 4.2 show that the Mean Score was 1.95 while Standard Deviation was 0.846. The findings show that majority of respondents agreed that -recruitment through online interviews leads to hiring of right candidates who assist in increasing profitability of bank. Therefore, e-recruitment through online interviews influence performance of NMB headquarters by increasing

profitability. The findings relate to those in the study by Daniel (2019) on impact of e-recruitment on organizational performance in commercial banks of Nigeria. The findings revealed that e-recruitment was a key component of human resource management which had positive influence on organizational performance and success.

4.4   Influence of E-Training and Development on Bank Performance

The second objective of the study was prepared in order to determine the influence of e-training and development on bank performance. The aim was to understand whether implementation of e-training and development programs has been influential towards increased performance of the bank. Respondents of the study were required to agree or disagree with the provided statements. Responses were measured using five likert scale with options of strongly agree, agree, neutral, disagree and strongly disagree. Standard deviation and mean scores presented in Table 4.3 show responses.

Table 4.3: Influence of e-training and development on bank performance

Statements	N	Min	Max	Mean	Std. Dev
e-training provides options for professional training something leading to increase in return on asset	40	1	5	2.42	1.010
e-training is useful in coaching and mentoring programs and thus leading to increase in bank profitability	40	1	5	2.60	1.257
e-training is useful in designing workshops and seminars which contribute to increase in profit of bank	40	1	5	2.30	1.224
e-training is useful in offering additional trainings which assist in increasing return on asset	40	1	5	2.63	1.213

Source: Field data, 2023

In the first statement, respondents were asked on whether e-training provides options for professional training something leading to increase in return on asset. The

findings in Table 4.3 show that the Mean Score was 2.35 and Standard Deviation was 1.167. The findings show that most of respondents were on the side of agreeing that e-training provides options for professional training something leading to increase in return on asset. Therefore, e-training as among human resource information systems influences performance of NMB through professional trainings. The findings relate to those in the study by Clementina et al (2017) on electronic learning and performance of selected commercial banks in Nigeria. The findings of the study revealed that e-learning positively influence organizational performance.

In the second statement, respondents were asked on whether e-training is useful in coaching and mentoring programs and thus leading to increase in bank profitability. The findings in Table 4.3 show that the mean score was 2.60 while Standard Deviation was 1.257. The implication of the findings is that most of respondents were on the side of agreeing that e-training is useful in coaching and mentoring programs and thus leading to increase in bank profitability. Therefore, e-training as among human resource information systems influences performance of NMB through coaching and mentoring programs. The findings relate to those in the study by Asamoah and Avenorgbo (2021) on effect of e-training on performance of employees in small and medium enterprises amidst the COVID-19 pandemic. The findings revealed that there was significant relationship between e-training infrastructure and e-training methods and employee performance.

In the third statement, respondents were asked on whether e-training is useful in designing workshops and seminars which contribute to increase in profit of bank.

The findings in Table 4.3 show that the Mean Score was 2.30 while Standard Deviation was 1.224. The findings show that most of respondents were on the side of agreeing that e-training is useful in designing workshops and seminars which contribute to increase in profit of bank. Interviews were conducted with managers of the bank in order to realize the contribution of e-training on performance of Bank. Participant 1 replied;

Of course, e-trainings are important in increasing skills of employees especially on new technologies adopted by the bank. Trainings increase adaptability of employees to new changes introduced as part of making sure that the bank increases quality of services provided and more profit is generated in every financial year.

Therefore, e-training as among human resource information systems influences performance of NMB through workshops and seminars. These workshops and seminars lead to increase in level of skills and knowledge among bank employees in performing their duties and thus increasing profitability of the bank. The findings relate to those in the study by Clementina et al (2017) on electronic learning and performance of selected commercial banks in Nigeria. The findings of the study revealed that e-learning positively influence organizational performance.

In the final statement, respondents were asked on whether e-training is useful in offering additional trainings which assist in increasing return on asset. The findings in Table 4.3 show that the Mean Score was 2.63 while Standard Deviation was 1.213. The findings show that most of respondents were on the agreeing side that e-training is useful in offering additional trainings which assist in increasing return on asset. The implication of the findings is that e-training is helpful in influencing

performance of the bank through additional trainings which contribute to increase in return on asset. The findings relate to those in the study by Asamoah and Avenorgbo (2021) on effect of e-training on performance of employees in small and medium enterprises amidst the COVID-19 pandemic. The findings revealed that there was significant relationship between e-training infrastructure and e-training methods and employee performance.

4.5 The Extent to Which E-Payroll Administration Affects the Overall Performance of the NMB bank

The final objective was prepared in order to determine the extent to which e-payroll affects performance of the bank. In order to meet the objective, several statements were prepared containing information on e-payroll and performance of the bank. Respondents of the study were required to agree or disagree with the provided statements. Responses were measured using five likert scale with options of strongly agree, agree, neutral, disagree and strongly disagree. Standard deviation and mean scores presented in Table 4.4 show responses.

Table 4.4: Contribution of e-payroll on bank performance

Statements	N	Mini	Max	Mean	Std. Dev
e-payroll is used in filling taxes something which increases profitability of bank	40	1	5	2.35	1.167
e-payroll is used in payroll computation something which increases return on asset	40	1	5	2.45	1.108
e-payroll is useful in determining employee benefits something which leads to increased bank profitability	40	1	5	2.37	1.055
e-payroll is useful in calculation of deductions something which leads to increase in return on asset	40	1	5	2.55	1.239
e-payroll is useful in calculating net-pay something which leads to increase in profitability	40	1	5	2.18	1.107

Source: Field data, 2023

In the first statement, respondents were asked on whether e-payroll is used in filling taxes something which increases profitability of bank. The findings in Table 4.4 show that the Mean Score was 2.35 while Standard Deviation was 1.167. The findings show that most of respondents agreed that payroll is used in filling taxes something which increases profitability of bank. Documentary review was undertaken to determine the profitability of the bank in the years 2018, 2019 and 2020. The NMB Annual report of 2020 revealed that profit generated in 2018 was 97,663 billion, in 2019 profit rose to 142,167 billion while in 2020 profit increased to 205,802 billion. This shows that human resource information system has been among factors behind improved performance of the bank through increase in profitability. The findings imply that e-payroll as among human resource information systems influence performance of NMB by filling taxes which increase profitability. The findings relate to those in the study by Ahmed (2019) on e-HRM practices and its impact on organizational performance. The findings revealed that e-HRM practices especially electronic salary payment influence performance of organization positively.

In the second statement, e-payroll is used in payroll computation something which increases return on asset. The findings in Table 4.4 show that the Mean Score was 2.45 while Standard Deviation was 1.108. The findings show that most of respondents agreed that e-payroll is used in payroll computation something which increases return on asset. During interviews with managers of the bank, Participant 4 explained;

We are currently using electronic payroll system in computing payrolls of our employees. This has been helpful in ensuring that sufficient and adequate pays are allocated to our employees. The end result of this is increased efficiency among employees in pe4forming their duties and thus increasing performance of the bank.

The findings imply that the organization uses electronic payroll system in computing payroll of employees. This makes the organization provide salaries which are satisfactory to employees something which in turn contributes to increased performance of the bank especially increased return on asset. The findings relate to those in the study by Ahmed (2019) on e-HRM practices and its impact on organizational performance. The findings revealed that e-HRM practices especially electronic salary payment influence performance of organization positively. The findings further relate to those in the study by Elsawy and Elbadawi (2021) on impact of e-HMR on organizational performance. The findings of the study revealed that there was positive relationship between e-HRM indicators including e-payroll system and organizational performance.

In the third statement, respondents were asked on whether e-payroll is useful in determining employee benefits something which leads to increased bank profitability. The findings in Table 4.4 show that the Mean Score was 2.37 while Standard Deviation was 1.055. The findings show that most of respondents agreed that e e-payroll is useful in determining employee benefits something which leads to increased bank profitability. The findings imply that e-payroll as among human resource information systems influence performance of NMB by determining employee benefits and thus increased profitability.

In the fourth statement, respondents were asked on whether e-payroll is useful in calculation of deductions something which leads to increase in return on asset. The findings in Table 4.4 show that the Mean Score was 2.55 while Standard Deviation was 1.239. The findings show that most of respondents agreed that e-payroll is useful in calculation of deductions something which leads to increase in return on asset. The findings imply that e-payroll as among human resource information systems influence performance of NMB by calculating deductions and thus increased return on asset. findings relate to those in the study by Ahmed (2019) on e-HRM practices and its impact on organizational performance. The findings revealed that e-HRM practices especially electronic salary payment influence performance of organization positively.

In the final statement, respondents were asked on whether e-payroll is useful in calculating net-pay something which leads to increase in profitability. The findings in Table 4.4 show that the Mean Score was 2.18 while Standard Deviation was 1.107. The findings show that most of respondents agreed that -payroll is useful in calculating net-pay something which leads to increase in profitability. Documentary review was undertaken to determine the profitability of the bank in the years 2018, 2019 and 2020. The NMB Annual report of 2020 revealed that profit generated in 2018 was 97,663 billion, in 2019 profit rose to 142,167 billion while in 2020 profit increased to 205,802 billion. This shows that human resource information system has been among factors behind improved performance of the bank through increase in profitability. The findings imply that e-payroll as among human resource information systems influence performance of NMB by calculating net-pay and thus increased

profitability. The findings relate to those in the study by Elsawy and Elbadawi (2021) on impact of e-HMR on organizational performance. The findings of the study revealed that there was positive relationship between e-HRM indicators including e-payroll system and organizational performance.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1   Overview

The chapter provides summary of the study, conclusion and recommendations. Summary covers objectives, methodology as well as findings obtained. Recommendations provided are suggestions to increase employee retention.

5.2   Summary

The general objective of this study was to examine the effects of human resources information systems on the performance of banks. The study contained three specific objectives which were; to determine the contribution of NMB's e-recruitment practice on their overall performance, to examine the influence of induction's e-training and development on NMB bank performance and to determine the extent to which e-payroll administration affects the overall performance of the NMB banks.

The research strategy which was employed in this study was descriptive strategy. Case study design was preferred in this study. The population for this study covered all staff from the NMB Dar es Salaam headquarters as well as managers of the bank. The research was carried out at the Dar es Salaam headquarters of the National Microfinance Bank. Sampling techniques used in the study were convenience sampling technique and purposive sampling technique. Data were collected through questionnaires, interviews and documentary review.

In the first objective, the findings have revealed that e-recruitment practices influence performance of the bank through increased profitability and return on asset. This is because e-recruitment is used in making decisions on hiring something which leads to increase in profitability of bank, e-recruitment is useful in posting job vacancies something which contributes to improved profitability, assessment of candidates through e-recruitment is helpful in hiring candidates who assist in increasing return on asset, e-recruitment leads to online selection of right candidates to assist in increasing profitability and -recruitment through online interviews leads to hiring of right candidates who assist in increasing profitability of bank.

In the second objective, the findings have revealed that e-training provides options for professional training something leading to increase in return on asset, e-training is useful in coaching and mentoring programs and thus leading to increase in bank profitability, e-training is useful in designing workshops and seminars which contribute to increase in profit of bank, and e-training is useful in offering additional trainings which assist in increasing return on asset. Therefore, e-training as among human resource information systems influences performance of NMB through increased profit and return on asset.

In the final objective, the findings have revealed that e-payroll is used in filling taxes something which increases profitability of bank, -payroll is used in payroll computation something which increases return on asset, e-payroll is useful in determining employee benefits something which leads to increased bank profitability, e-payroll is useful in calculation of deductions something which leads

to increase in return on asset and e-payroll is useful in calculating net-pay something which leads to increase in profitability. Therefore, e-payroll as among human resource information systems influence performance of NMB through increased profit and return on asset.

5.3   Conclusion

5.3.1 Contribution of NMB's E-Recruitment Practice on Overall Performance

Basing on the findings of the study, e-recruitment implemented at NMB headquarters contributes to improvement in performance of the bank through increased profitability and return on asset. E-recruitment is used in making decisions on hiring, useful in posting job vacancies, leads to online selection of right candidates and leads to hiring of right candidates. All these contribute to increase in performance of the bank through increase in profitability and return on asset.

5.3.2 Influence of E-Training and Development on Bank Performance

Basing on the findings of the study, e-training contributes to improvement in performance of the bank through increased return on asset and increase in profitability. e-training provides options for professional training, e-training is useful in coaching and mentoring programs, e-training is useful in designing workshops and seminars, and e-training is useful in offering additional trainings which all assist in increasing return on asset and profitability of the bank.

5.3.3 The Extent to Which E-Payroll Administration Affects the Overall Performance of the NMB Bank

Basing on the findings of the study, e-payroll contributes to improvement in

performance of the bank through increase in profitability and increase in return on asset. E-payroll is used in filling taxes, used in payroll computation, useful in determining employee benefits, useful in calculation of deductions and useful in calculating net-pay something which leads to increase in profitability and return on asset of the bank.

5.4   Recommendations

Management of the bank should ensure that there is increased implementation of electronic recruitment in the bank. This is because e-recruitment will contribute to making decisions on hiring, posting job vacancies, online selection of right candidates and hiring right candidates. These candidates will have sufficient skills required in operations of the bank and thus leading to increased performance of the bank.

Management should ensure that e-training and development programs are implemented effectively in the bank. These will be helpful in providing additional trainings to employees, provision of coaching programs, mentorship programs, seminars and workshops which will increase skills of employees and finally contributing to improved performance of the bank.

Management should ensure effective implementation of electronic payroll system in the bank. The system will increase effectiveness in filling taxes, payroll computation, determining employee benefits, calculation of deductions and calculating net-pay something which will in turn contribute to improvement in performance of the bank though increase in profitability and return on asset of the bank.

5.5   Implications of the Study

5.5.1 Practical Implication

The findings of the study imply that performance of the bank can be increased through effective implementation of human resource management information systems especially e-training, e-recruitment and e-payroll. This means that effective e-trainings in the bank, effective e-recruitment and effective e-payroll can contribute to increased performance of the bank through increasing return on asset and increase in profitability.

5.5.2 Theoretical Implication

The findings imply that the system theory can be useful in an organization in influencing improved performance of the organization. This is because the theory will enhance interaction of different systems such e-recruitment system, e-payroll system and e-training system in ensuring availability of skilled employees, increasing skills of employees and providing satisfactory pays to employees which will lead to improved performance.

5.6   Area for Further Studies

This study was limited to a single financial institution which was NMB Headquarters. There are many financial institutions including other commercial banks which use human resource information systems in managing human resources. More studies should e conducted in other commercial banks in the country and determine the influence of human resource information systems on performance of these banks.

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APPENDICES

Appendix I: Questionnaire to staff of NMB Dar es Salaam headquarters

Introduction,

Dear respondents

My name is Noemi Mseven, a student of Open University of Tanzania, pursuing Master of Human Resource Management. Before accomplishing my studies, I have to conduct a study on **examining human resources information systems on the performance of banks: a case study of national micro-finance bank**. Below are questions which can be helpful in accomplishing the study. I request for your maximum cooperation in attempting these questions. The information you provide will be kept confidential.

Part A: Personal information

1. Age: 20-29   (   )

   30-39   (   )

   40-49   (   )

   50 and above   (   )

2. Sex:

   Male   (   )

   Female   (   )

3. Working experience:

   0-5 years   (   )

   6-11 years   (   )

   12 years and above   (   )

4. Education level:

   Certificate   (   )

   Diploma   (   )

   Bachelor   (   )

   Masters   (   )

5. Department --

PART B: Contribution of NMB's e-recruitment practice on overall performance

1. Has your organization implemented e-recruitment practices?

   (a) Yes   (   )   (b) No (   )

2. Are e-recruitment practices in your organization effective?

   (a) Yes   (   )   (b) No (   )

3. Were you hired in the organization through online recruitment?

   (a) Yes   (   )   (b) No (   )

4. Kindly comment on the following statement regarding influence of e-recruitment practice on bank performance

   Key: 1= strongly agree, 2= agree, 3= neutral, 4= disagree, 5= strongly disagree

S/N	Statements	1	2	3	4	5
1	e-recruitment is used in making decisions on hiring something which leads to increase in profitability of bank					
2	e-recruitment is useful in posting job vacancies something which contributes to improved profitability					
3	Assessment of candidates through e-recruitment is helpful in hiring right candidates who assist in increasing return on asset					
4	e-recruitment leads to online selection of right candidates to assist in increasing profitability					
5	e-recruitment through online interviews leads to hiring of right candidates who assist in increasing profitability of bank					

PART C: Influence of e-training and development on bank performance

Kindly comment on the following statements regarding the influence of e-training and development on performance of the bank

Key: 1= strongly agree, 2= agree, 3= neutral, 4= disagree, 5= strongly disagree

S/N	Statements	1	2	3	4	5
1	e-training provides options for professional training something leading to increase in return on asset					

		1	2	3	4	5
2	e-training is useful in coaching and mentoring programs and thus leading to increase in bank profitability					
3	e-training is useful in designing workshops and seminars which contribute to increase in profit of bank					
4	e-training is useful in offering additional trainings which assist in increasing return on asset					

PART D: The extent to which e-payroll administration affects the overall performance of the NMB banks

Kindly comment on the following statements regarding the influence of e-payroll on performance of the bank

Key: 1= strongly agree, 2= agree, 3= neutral, 4= disagree, 5= strongly disagree

S/N	Challenges	1	2	3	4	5
1	e-payroll is used in filling taxes something which increases profitability of bank					
2	e-payroll is used in payroll computations something which increases return on asset					
3	e-payroll is useful in determining employee benefits something which leads to increased bank profitability					
4	e-payroll is useful in calculation of deductions something which leads to increase in return on asset					
5	e-payroll is useful in calculating net-pay something which leads to increase in profitability					

Appendix II: Interview questions to management of NMB Headquarter

1. Does your organization practice electronic training and development? Which are the practices of e-training and development in the organization?
2. How does e-training and development influence the performance of the bank?
3. Do you have practices of electronic recruitment? Which is e-recruitment practices in the organization?
4. How does e-recruitment influence performance of the bank?
5. Do you have practices of electronic payroll? How are they practices?
6. How does e-payroll influence performance of the bank?

Appendix II: Research Clearance Letter

THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

THE OPEN UNIVERSITY OF TANZANIA

Ref. No OUT/ PG201901404   7th June, 2023

Branch Manager,

National Microfinance Bank (NMB) Head Office,

P.O.Box 9213,

DAR ES SALAAM.

Dear Branch Manager,

RE: RESEARCH CLEARANCE FOR MS. NOEMI P.MSEVEN, REG NO: PG201901404

2.   The Open University of Tanzania was established by an Act of Parliament No. 17 of 1992, which became operational on the 1stMarch 1993 by public notice No.55 in the official Gazette. The Act was however replaced by the Open University of Tanzania Charter of 2005, which became operational on 1stJanuary 2007.In line with the Charter, the Open University of Tanzania mission is to generate and apply knowledge through research.
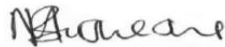
3.   To facilitate and to simplify research process therefore, the act empowers the Vice Chancellor of the Open University of Tanzania to issue research clearance, on behalf of the Government of Tanzania and Tanzania Commission for Science and Technology, to both its staff and students who are doing research in Tanzania. With this brief background, the purpose of this letter is to introduce to you **Ms. Noemi P. Mseven, Reg. No: PG201901404) pursuing Master of Human Resource Management (MHRM).** We

here by grant this clearance to conduct a research titled **"Examining Human Resources Information Systems on the Performance of Banks: A Case Study of National Micro-finance Bank (NMB Plc)"**. She will collect her data at your Office from 5th June to 5th July 2023.

4.   In case you need any further information, kindly do not hesitate to contact the Deputy Vice Chancellor (Academic) of the Open University of Tanzania, P.O.Box 23409, Dar es Salaam. Tel: 022-2-2668820.We lastly thank you in advance for your assumed cooperation and facilitation of this research academic activity.

Yours sincerely,
THE OPEN UNIVERSITY OF TANZANIA

Prof. Magreth S.Bushesha
For: VICE CHANCELLOR