EFFECT OF HRIS ON ORGANIZATIONAL PERFORMANCE

INTERNATIONAL

BUSINESS MACHINES CORPORATION (IBM) KENYA

SAMUEL MUTUGI GICHURU

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DECLARATION AND APPROVAL

Declaration by the student

I affirm that this project is the result of my independent effort and has not been submitted previously to any other university or institution for the purpose of earning a degree or any other academic recognition

Signature: … Date …08/07/2025…….

Samuel Mutugi Gichuru

MBA/2022/32928

Approval by the university supervisor

I verify that the student conducted the work detailed in this project under my guidance and supervision.

Signature… Date ...08/07/2025…….

Dr. Elijah Walubuka Ph.D. FIHRM, CHRP K. LECTURER,

MOUNT KENYA UNIVERSITY

DEDICATION

I dedicate this work to my father Francis Gichuru Manyara and mother Severina Inongathia Mukuthuria.

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I am deeply grateful to all those who have offered their support and guidance during the preparation of this research proposal. My heartfelt thanks go in particular to my supervisor, Dr. Elijah Walubuka, whose expert advice, valuable feedback, and unwavering encouragement have been instrumental in refining and directing this work. I also wish to express my heartfelt gratitude to my parents, Francis Gichuru Manyara and Severina Inongathia Mukuthuria, for their constant encouragement, wisdom, and sacrifices that have been the foundation of my academic journey. To my dear sisters, Joy Karambu and Dorcas Kinya, I deeply appreciate your emotional support, unwavering belief in me, and dependable presence.

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ABSTRACT

This study aimed to assess the impact of the HRIS on the performance of IBM Kenya. It was guided by several specific objectives: to investigate the influence of electronic training management, electronic performance appraisal, electronic payroll processing, and electronic recruitment systems on organizational performance at IBM Kenya. The research framework was grounded in three theoretical models: the TAM, the Theory of Reasoned Action, and the Theory of Planned Behavior. A descriptive research design was employed, which enabled the transformation of collected data into a structured and manageable format. This approach was deemed suitable for identifying characteristics, patterns, and relationships among various variables. The study focused on a population of 205 employees at IBM Kenya. A sample of 136 participants was selected using stratified random sampling, calculated through Taro Yamane's formula. To ensure objectivity, the stratified sampling method was complemented with simple random sampling techniques. To ensure the credibility of the research tools, expert reviewers and the academic supervisor provided feedback on the questionnaire. The reliability of the instrument was verified using Cronbach's alpha, with a threshold of 0.7 considered acceptable for internal consistency. Quantitative analysis formed the core of the data evaluation process. This included descriptive statistics such as Ms, SDs, and percentages. A regression analysis was carried out to determine the strength and nature of the relationship between HRIS components and organizational performance. Data were visualized using frequency tables and statistical summaries. The analysis was conducted using SPSS software version 26. Primary data was collected through structured questionnaires using a Likert scale format, while secondary data was sourced from IBM's official financial records and website. Inferential statistics, including correlation and linear regression analyses, were used to test the hypotheses. The results revealed statistically significant positive relationships between e-training ($\beta = 0.414$; $p < 0.05$), e-appraisal ($\beta = 0.518$; $p < 0.05$), e-payroll ($\beta = 0.487$; $p < 0.05$),

and e-recruitment ($\beta = 0.589$; $p < 0.05$) systems and overall organizational performance. Based on these findings, the study concluded that all four HRIS components had a favorable impact on performance at IBM Kenya. Key recommendations included enhancing the e-appraisal system's online ranking features, improving accessibility to detailed and timely payroll information, and optimizing the applicant tracking system and digital resume management functions.

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LIST OF ABBREVIATIONS AND ACRONYMS

CNBC:	Consumer News and Business Channel
HRIS:	HRIS
IBM:	International Business Machines Corporation
IS:	Information systems
NACOSTI:	National Commission for Science, Technology and Innovation
SAP:	Systems Application and Products
SPSS:	Statistical Package for the Social Sciences
TAM:	Technological Acceptance Model
TPB:	Theory of Planned Behaviour
TRA:	Theory of Reasoned Action

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Organizational performance is linked to profitability, efficiency, productivity, and earning capacity. This connection drives the continuous improvement of entities, prompting a need for a clearer and more precise definition of performance. Performance reflects the specifics of each individual or firm and is based on a model that integrates various segments and elements (Pillai & Sivathanu, 2022). A successful organization achieves the objectives set by its management, rather than merely meeting past goals. Therefore, performance influences future outcomes. Unlike other authors, this writer emphasizes the difference between performance and being performant. Performance is measured against a higher standard than previous achievements. Key indicators of performance include profitability and employee performance. Performance can be either good or poor and is often identified by past results (Pillai & Sivathanu, 2022).

Organization performance is influenced by HRIS. HRIS consists of e- recruitment system, e-training system, e- appraisal system and payroll information system. This recruitment application will affect expertise and abilities that new workers have. Additionally, by using prescribed codes of training to ensure reasonable practices of workers (Abbasi et al., 2022). This is shown when highly skilled employees are produced from e- recruitment system thus increasing monetary gains of an organization hence positive organizational performance.

E-training enables flexibility in learning where an individual can learn anywhere at any time. This leads to increase number of interactions among learners. Furthermore, e-training provides opportunity for ease of registration and faster payments methods (Abro et al., 2024). This enables employees to earn expertise thus affecting performance. E-appraisal system enable

review of performance of employees using e-tools. This enables the human resource management to evaluate the contribution of employees towards the organization performance. A payroll information system involves keeping electronic records of employee payments within an organization. This data is utilized by the human resources department to assess the impact on organizational performance. Organizational performance is influenced by systems such as e-recruitment, e-training, e-appraisal, and payroll information systems. Performance has been defined in various ways. Initially, it should be evaluated by each department within the constraints of the workplace (Mohamad et al., 2020). For example, a company's performance should be assessed within the business sectors it operates in. Additionally, performance is often linked to the goals set by the organization. Thus, an organization compares its performance with internally set and accepted goals rather than those imposed by external bodies. Finally, performance is broken down into relevant elements. Therefore, the study uses different definitions of performance that should be evaluated from multiple perspectives.

According to Abd-Elrahman, Kamel, and Said (2024), there are three main ways to measure an organization's performance. One is financial, which includes metrics like profitability, asset returns, and investment returns. The second is market performance, which includes metrics like sales volume and market share. Lastly, there is returns to shareholders, which includes monetary value creation and total returns. Digital platforms for handling HR-related activities, such as employee assessments, are known as HRISs (HRIS). These systems help organizational leaders make educated choices about how to allocate resources. As a result, this might directly affect the entire functioning of the organisation. Based on the work of Bilgic (2020),.

A HRIS is a software program designed to input and track data related to a company's human resource management and financial activities. It operates through a database and serves two

primary functions: regulatory and strategic. Initially, it consolidates employee records for daily administrative tasks. Strategically, it aids in decision-making by using regulatory data to evaluate an employee's value to the business, which is essential for the human resources department (Bali, 2019). HRIS enhances communication between the organization and its employees, improving the efficiency of all HR functions. By accurately tracking compensation, it boosts employee morale. Additionally, HRIS reduces costs and time spent on manual data compilation, allowing HR managers to focus on decision-making rather than paperwork. The system also assists management in planning and enhancing employee training and skill development (Bah, Duramany-Lakkoh, & Udeh, 2022)

Regionally, HRIS has been adopted by most countries in the region. HRIS has been widely used in the health sector and banking sector. South Africa has adopted HRIS in the health sector to manage deployment of health workforce data during an emergency thus facilitating prompt decision making. This is as a result of all information of health workers being managed within one registry of health workforce in the country. Nigeria has adopted HRIS in the banking sector where all transactions are tracked and recorded so that the client can receive information immediately when a transaction is done. This has led to enhance the security of an account within the bank.

HRIS is used in institutions in Kenya to improve services. HRIS was developed in 1984 commonly called the IS. The GHRIS was developed to maintain accurate and consistent personnel data in public service. This includes e-appraisal system that is used to administer staff, use human resources, and ultimately improve performance. This is available from rating scales and discussions in e- appraisal meetings that help to set employee goals thus improving performance (Miganda, & Kandiri, 2023). Several studies have been done in relation to e-recruitment, e- training and payroll information system and how it impacts performance in

corporations. Kucherov and Tsybova (2022) and Alateyah (2019) elaborate a direct relationship between e-recruitment and performance.

IBM established its presence in Kenya in the early 2010s, with a focus on leveraging technology to address local challenges. In 2013, IBM launched its first African research lab in Nairobi, marking a significant investment in the region. This lab was part of a $10 million public-private partnership with the Kenyan government (Marwala, 2022). Over the past decade, IBM Research-Africa has been at the forefront of technological innovation in Kenya. The lab has focused on various projects, including healthcare, financial inclusion, and agriculture. For instance, IBM's research in water resource management has had a tangible impact on local communities.

IBM's investment in Kenya has not only driven technological advancements but also contributed to the local economy. The company has created numerous job opportunities, employing around 205 researchers at its Nairobi lab. Additionally, IBM's presence has attracted other tech firms to the region, further boosting the local tech ecosystem. While specific financial figures for IBM Kenya are not publicly disclosed, IBM globally invests approximately $6.5 billion annually in research initiatives. (Isic, (2024). A portion of this investment supports the operations and projects of IBM Research-Africa in Nairobi. In recent years, IBM has continued to expand its influence in Kenya. The company celebrated the 10th anniversary of its Nairobi research lab in 2023, highlighting a decade of innovation and impact. IBM's ongoing projects in digital transformation, AI, and cloud computing continue to drive growth and development in the region.

IBM Kenya has been at the forefront of integrating digital technologies into HR practices. By leveraging AI and cloud-based solutions, IBM has modernized HR functions, providing real-time access to actionable insights. This transformation has enabled HR teams to better support reskilling, cultural transformation, and new ways of working. IBM Kenya places a strong

emphasis on continuous learning and skills development. The company has implemented programs to identify and close skills gaps, ensuring that employees are equipped with the necessary competencies to drive innovation and growth. This focus on lifelong learning fosters a culture of continuous improvement and adaptability (Vizcaíno, & Aguilar Ruiz, 2024).

The Nairobi office serves as the operational headquarters for IBM in the region, overseeing activities in eight countries: Tanzania, Uganda, Burundi, Rwanda, Ethiopia, South Sudan, and Djibouti. IBM offers a comprehensive range of services, software, and systems designed to deliver exceptional price performance, manageability, and user-friendliness. The company has developed a local business partner network with expertise across various industries, providing affordable and customizable solutions informed by industry insights.

IBM have developed technology to improve performance. Online recruitment systems such as system application and products (SAP) has greatly improved recruitment of employees in IBM. Quality of staff has maintained excellent services thus having a positive effect on performance. SAP has enabled ease of collection of data and therefore effective decision making in recruitment. Furthermore, the flexibility that SAP offer enable employees to determine which areas they can access. This enables efficient data collection hence ease in recruitment. IBM has used information systems in training of employees. This has been significantly affected through offering staff with courses in cyber security, structured cabling and computer skills. Online learning resources have offered performance support and skills improvement.

1.2 Statement of the Problem

In today's cutthroat business environment, firms are relying on digital solutions to enhance their performance and efficiency. The HRIS is one such invention that has grown in importance as a tool for HR strategy management. Despite HRIS's popularity, especially among bigger companies, there is a dearth of studies that really look at how it affects business

results, especially for multinational corporations like IBM that operate in developing countries. Like any other private profit-making institution, organizational performance is a key concern and is often quantified in sales and revenue (Pillai & Sivathanu,2022). In the last 10 years, the company has successfully maintained its position in the market in terms of revenue but has seen a reduction in the volumes sold to the customers year on year. The company reported a 1.5% annual increase in total revenue, based on its latest statement. However, it posted a net loss of $330 million, translating to a loss of 36 cents per share, in contrast to a net profit of $1.70 billion, or $1.84 per share, during the same quarter the previous year (Consumer News and Business Channel (CNBC) October, 2024). This is a major concern as business is about profits maximization.

IBM has had a HRIS system for since 2020. Apart from the reduction of administrative tasks, little has been done to understand what value it could add to the organization. Considering the system is an expensive resource, the company needs to evaluate the competitive advantage that the HRIS adds to the organization and if the system if currently being utilized fully. Considering the company's strategic objective to automate more processes, there is need to evaluate if the current system and its suitability with a focus on the role it plays in improving efficiency, supporting the management to make data driven decisions and in fostering employee engagement levels. Research findings suggest that when effectively adopted and applied, HRISs (HRIS) can serve as a valuable strategic asset. However, there has been limited attention directed toward its application within Kenya's retail sector. This study seeks to explore the influence of HRIS components specifically e-training management, e-performance management, e-payroll management, and e-recruitment on IBM's organizational performance. It particularly examines the system's role in enhancing operational efficiency, supporting strategic decision-making, and contributing to overall performance improvements.

1.3 Purpose of the Study

The purpose of this study was to analyze effect of HRIS on performance of International Business Machines Corporation Kenya.

1.4 Specific Objectives

The research was guided by the following specific objectives;

i. To examine effect of e-training management on performance of IBM Kenya.

ii. To establish effect of e-appraisal management on performance of IBM Kenya.

iii. To determine the effect of e-payroll management on performance of IBM Kenya.

iv. To determine effect of e-recruitment management on performance of IBM Kenya.

1.5 Research Questions

The study sought answers to the following research questions

i. What is the effect of e-training management on performance of IBM Kenya?

ii. To what extent does e-appraisal management affect performance of IBM Kenya?

iii. How does e-payroll management affect performance of IBM Kenya?

iv. What is the of e-recruitment management on performance of IBM Kenya?

1.6 Significance of the Study

The study will be useful to the following:

1.6.1 Significance to IBM Kenya

Firstly, administration of IBM will benefit by using the appropriate strategies in the HRIS to improve performance. The strategies will be integrated in the workflow process thus boost performance for the organization.

1.6.2 Significance to Policy Makers

Secondly, the policy makers will benefit from the research by formulating policies that will facilitate use of information systems for better performance. The policy makers will make policies that will be adopted by the organization thus improve performance.

1.6.3 Significance to Researchers

Further, this study will help researchers in the future when they need to access data from the HR database. As they delve into their own fields of study, scholars and academics will find this to be an invaluable resource.

1.6.4 Significance to IBM Employees

The study benefits the employees in IBM. The employees will be informed about the HRIS available in the organization.

1.7 Scope of the study

The study took place at the Nairobi offices of IBM Kenya. Because it is the nerve centre of the company's activities in the area, this site is perfect for the research. In order to provide a complete picture of how HRIS affects the whole company, the research focused on several divisions including HR, IT, finance, and operations. The research spanned the years 2020–2025. With more time to collect data, we were able to examine how implementing an HRIS affected productivity in the short and long term. The research is able to find patterns and trends that shorter studies could miss by looking at data over a longer period of time.

The target population included all employees of IBM Kenya. To ensure the findings were representative, a stratified random sampling technique was employed. This method selected participants from different departments and job levels, providing a diverse and comprehensive sample. Such an approach ensured that the results were generalizable across the entire organization. Statistical approaches were used to analyse quantitative data in order to find patterns and correlations. Thematic analysis was used to discover hidden patterns and insights in the qualitative data. The combination of these techniques allowed for a comprehensive analysis of the connection between HRIS and productivity in the workplace.

One possible weakness that the research pointed out is that it relies on self-reported data, which might be biassed. The results could perhaps only apply to IBM Kenya and not to other

companies or areas. These limitations were considered when interpreting the results. Ethical guidelines were strictly followed throughout the study. Confidentiality and informed consent were ensured for all participants, and data was anonymized to protect respondents' privacy. These measures upheld the integrity and ethical standards of the research.

1.8 Limitations of the study

The research looked at how IBM's performance was affected by the HRIS, or HRIS. Due to the multi-faceted nature of HRIS, it was not possible to investigate all aspects of the system that impact productivity in this study. This limitation was addressed by selecting the major factors of HRIS, which included the online recruitment system, online training system, appraisal information systems, and payroll information system. Other factors that affect performance can be used as research topics in future studies.

The study focused on IBM in Nairobi; other branches were not considered in this study. This challenge was overcome by ensuring that all questionnaires were distributed to all departments of IBM that had similar workflow activities with other branches in Kenya. Further research should focus on other branches in the country as a basis for research.

Another limitation included incomplete answers in the questionnaires, where some respondents may be suspicious of the research study. Confidentiality was assured among the respondents to overcome this limitation.

1.9 Delimitations of the Study

This research looked specifically at how IBM Kenya's HRISs (HRIS) affected the company's productivity. To provide a thorough and context-specific examination of HRIS adoption and its influence on organizational performance, the research intended to confine its focus to this particular organisation. This research only looked at IBM's activities in Kenya. The study did not take IBM's global or regional standards outside of Kenya into account, despite the fact that IBM is a worldwide organisation with standardized processes throughout its branches. This

restriction ensured that the study remained focused and relevant to the Kenyan context, avoiding the complexities of cross-border variations in HRIS implementation and organizational performance.

Functionally, the research explored the use of HRIS in specific areas of human resource management, including e-recruitment, e-payroll management, e-employee performance appraisal, and e-training systems. These functions represent critical aspects of HRIS application within IBM Kenya. By focusing on these areas, the study aimed to understand how the system enhances operational efficiency and supports the organization's strategic goals.

1.10 Assumptions of the Study

This study was based on the basic assumptions that;

i. IBM Kenya has implemented a HRIS that is actively utilized in its HR operations. It also presumes that the HRIS is functional, reliable, and capable of performing core HR tasks such as recruitment, payroll management, performance appraisals, and training and development.

ii. The use of HRIS directly or indirectly influences key organizational performance metrics, such as operational efficiency, accuracy of HR processes, cost-effectiveness, and employee satisfaction.

iii. IBM Kenya's employees and management are sufficiently knowledgeable about the HRIS and its functionalities. It presumes that staff members have received adequate training to use the system effectively and that their feedback will provide Mingful insights into the relationship between HRIS usage and organizational performance.

1.11 Operational Definition of Terms

HRIS An integrated software solution that combines human resource management practices and IT to streamline the collection, storage, retrieval, and management of employee-related data within an organization.

Organization Performance Involves comparison with real outputs compared with intended outputs. This is shown in profitability and employee productivity.

E-Recruitment system this is an online platform or software solution designed to automate and streamline the process of attracting, sourcing, screening, and hiring candidates for job positions.

E-Appraisal system This is a digital platform or software solution used to facilitate, manage, and automate the employee performance evaluation.

Systems Application and Products (SAP) It is an enterprise resource planning (ERP) software solution designed to integrate and manage core business processes across an organization.

E-Training system It is a web based online training portal that is used by IBM employees. E-training provides a wide range of employee's resources that enables employees to explore a variety of learning resources. This includes online modules, mobile learning and online testing.

E-Payroll System It is an information system designed to keep track of all employee payment such as employee wages, withholding taxes and commission. This system consists of system accuracy and budget control.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this literature study, we look at what others have found about how HRISs have affected IBM's productivity in the workplace. Previous research on the topic of HRIS and its impact on business results is reviewed and summarized in this chapter. Additionally, the conceptual framework outlines the study's key variables, distinguishing between the dependent and independent elements.

2.2 Empirical Review

The continuous growth of business competition has led organizations in the 21st century to develop ways to maintain good performance. This has led to several studies conducted about what contributes to good performance in an organization. Studies ranging from recruitment, training, appraisal system and payroll have been investigated and their impact on performance. The study was guided by empirical research work of various authors that are presented in the next section.

2.2.1 HRIS

HRIS a computer-based information system designed to administer human asset cycles and procedures, recruitment, appraisal information system including performance. This provides organization with choices in relation to allocation of resources hence affecting performance (Bah, Duramany-Lakkoh, & Udeh, 2022). Performance appraisal system includes analyzing the worker for his or her work. The management then provides result to the worker on his performance. Performance appraisal system is measured by different methods such as 360°feedback, management by objectives and graphic rating scales. 360 ° feedback include taking into account the results and productivity of workers from the people. This includes supervisors and colleagues. Graphic rating scales include rating employee performance in

specific areas like decision making. Management by objectives involve employees and management working together to determine how performance will be measured. Payroll information system is type of system used to keep track of all employee payments such as wages, taxes and commissions.

Recruitment as a HRIS affects performance of the organization. It is known that bad selection affects productivity hindering business productivity and limit's goal achievement. Moreover, good selection improves productivity and enhances performance Bilgic (2020). A recruitment application includes deriving the most qualified person for a job, from large group of individuals (Kucherov & Tsybova, 2022). E-recruitment system includes company website, applicant tracking and social websites. This recruitment application will affect expertise and abilities that new workers have. Additionally, by using prescribed codes of training to ensure reasonable practices of workers (Alateyah, 2019). E-recruitment as a component of human resource system is used to finding new talent, keeping them engaged and eventually affecting organization performance. It is a system, which is made to fulfill the employee information needs of the company. Accordingly, the significance of management of HRIS is complex, beginning from operational in gathering and arranging data for reports, simplifying and increasing the speed of activities and decreasing employee expense during recruitment (Mideksa, 2023). E-recruitment is measured by time to hire, employee retention, manager satisfaction, number of contracts per given period and renewal of contracts (Alateyah, 2019). In addition, it allows for confidentiality for both employer and employees, candidates can apply for jobs while keeping named of the current employer confidential (Olaniyan & Hemlata, 2023).

Company website is used as an e-recruitment method in IBM. SAP is indicated in the company website. SAP improves and drives control of the social recruitment processes in the company website. The application gives creative access to career coaching and promotes company-wide

collaboration including applicant tracking. This can be adjusted to adopt to specific regions, employees, supervisors, and recruiters to the information they need to act on their duties (IBM , 2020). E-recruitment system also includes social websites such as IBM power care in Facebook, twitter and WhatsApp media.

The e-training system includes SkillPort, which is utilized by IBM employees. SkillPort offers a wide range of resources that allow employees to explore various learning materials. It can be accessed through e-modules and mobile learning, enabling access to learning materials both within the organization and remotely. SkillPort is used to create and monitor training plans developed by employees and their supervisors, and it also facilitates e-testing. E-training provides flexibility, allowing individuals to learn anytime and anywhere, which increases interactions among learners. Additionally, e-training simplifies registration and payment processes (Epebinu & Abiola-Oke, 2023). E-training allows employees to gain the necessary expertise, whether at an entry level or a more advanced position, in an organized manner tailored to their needs (Albaz, 2022).

Further studies by Balogun and Enemuo (2022) indicate that technological trends, such as the use of computers and mobile devices, have increased the number of e-training users, as more people have access to these devices. This is supported by live seminars and videos that facilitate interaction with expert instructors. It also allows for instant surveys and registration form submissions at the user's convenience. Payments can be made through electronic methods like PayPal and other e-payment systems.

The e-appraisal system enables the review of employee performance using electronic tools, allowing human resource management to evaluate employee contributions to organizational performance through real-time feedback, e-ranking, and communication. The payroll information system involves maintaining electronic records of employee payments within an organization, ensuring system accuracy and budget control. This information is used by the

human resources department to assess the impact on organizational performance (Bitrián et al., 2023).

2.2.2 Organization Performance

Organization performance consist of investigating a company's results against its objectives and goals. In a global perspective, organization performance involves measuring actual yields compared to targeted yields. It concentrates on three items; shareholders value, financial and market performance. Financial performance involves gauging output of firm policies and operations in money related terms indicating productivity. Regionally, organization performance is measured by profitability and product diversification. Examples include MTN Group, MTN Group is a telecommunication giant with headquarters in Johannesburg, South Africa providing internet connectivity (data and voice). MTN is ranked among the organization with good performance with approximately 15 billion revenues annually.

In Kenya, organization performance is indicated by profitability and employee productivity. Profitability can be used to show results. Financial results include indicating an organization financial stability over a period indicating its profitability. These outcomes are used to look at comparative organization within the enterprise or different enterprise. An example is Safaricom. Safaricom has the most extensive network coverage in Kenya with variety of services. Safaricom is ranked among the best performing organization in Kenya with yearly increased profits. This is shown in the income statement and financial balance sheet (Verna, 2019). The market performance involves measuring how well a product yields in the business environment. When a product market share has increased, this improves market share and therefore performance. Improved performance implies enriching the shareholders' value.

Organization performance can also be measured using employee productivity. HRIS used in e- recruitment system, e- training system and e- appraisal systems show positive impact in financial performance. A recruitment application includes deriving the most qualified person

for a job, from large group of individuals (Lagat, 2006). This recruitment application will affect expertise and abilities that new workers have. Additionally, by using prescribed codes of training to ensure reasonable practices of workers (Mina, Mehdi & Yaser, 2012). This is shown when highly skilled employees are produced from e- recruitment system thus increasing monetary gains of an organization hence positive organizational performance.

E-training enables flexibility in learning where an individual can learn anywhere at any time. This leads to increase number of interactions among learners. Furthermore e- training provides opportunity for ease of registration and faster payments methods (Galanaki, 2002).This enables employees to earn expertise thus affecting performance. E-appraisal system enables review of performance of employees using e- tools. This enables the human resource management to evaluate the contribution of employees towards the organization performance. Payroll information system involves maintaining e- records of employees' payments in an organization. This information is used by human resource department to evaluate effect of organization performance. Organization performance is affected by e- recruitment system, e-training information system, e- appraisal system and payroll information system. This system influences product performance hence organization performance. Therefore, this study used profitability and employee productivity to measure performance.

2.2.3 E- training and Organization Performance

Al Haziazi (2020) conducted a study to examine how electronic Human Resource Management (e-HRM) systems, particularly e-training, impact organizational performance. The research involved distributing a structured questionnaire to 154 participants from different organizations across the Sultanate of Oman. Various statistical methods were used to evaluate the connections between the studied variables. The results demonstrated a strong positive link between components of the e-HRM system and employee satisfaction. Furthermore, the study applied multiple regression analysis to determine the predictive power of e-training on

organizational performance, revealing that e-training significantly contributes to explaining variations in the dependent variable.

A study conducted by Farouk (2022) examined the influence of various dimensions of the E-Training System namely; Efficiency, Methods, and Environment on employee job performance. Utilizing an electronic questionnaire, the research gathered quantitative data from a sample of 103 respondents, all employees from private sector companies within the Egyptian market. The findings indicated that the perceived dimensions of E-Training positively affect employee job performance. Notably, the study highlighted that perceived E-Training efficiency, particularly in relation to content and trainers, emerged as the most significant predictor of employee job performance. While this research concentrated on employee performance within private sector firms in Egypt as an indicator of organizational performance, the current study aims to investigate the organizational performance of IBM in Kenya.

In a related study, Ismail et al. (2022) assessed the extent and effect of electronic training (e-training) on employee performance at Venture Technocom and Sharp Manufacturing Corporation in Johor, Malaysia. Utilizing a quantitative research design, they collected responses from 80 individuals working in human resources and general management through an online questionnaire. The analysis revealed no significant correlations among the examined variables. Nevertheless, the researchers advocated for the adoption of e-training across the manufacturing sector, highlighting the value of utilizing varied e-training platforms to improve employee performance.

Similarly, Epebinu and Abiola-Oke (2023) investigated how e-training, as a form of digital innovation, influences organizational performance in brewery firms situated in southwestern Nigeria. Using a multistage sampling strategy, the study identified 332 participants based on Slovin's (1960) formula for sample size determination. Data were obtained using

questionnaires and analyzed with Partial Least Squares-Structural Equation Modeling (PLS-SEM). The analysis showed a statistically significant and positive link between e-training and organizational performance, with the model results indicating ($\beta = 0.429$, $t = 8.188$, $f^2 = 0.226$, $R^2 = 0.184$, $p < 0.05$).

In Kenya, Rukia and Asuma (2022) explored the role of e-training in enhancing organizational performance at the Communication Authority of Kenya. Their study involved 78 managers and 160 non-managerial employees. Primary data were collected via structured questionnaires, and the analysis incorporated both descriptive statistics (such as Ms, frequencies, and percentages) and inferential techniques, including Pearson correlation and regression analysis. The outcomes indicated a significant and positive impact of e-training on the organizational performance of the authority.

2.3.4 E-appraisal system and Organization Performance

Okoh et al. (2023) examined how electronic performance appraisal systems influence employee productivity in the financial sector, specifically within commercial banks located in Maiduguri, Borno State, Nigeria. The study focused on several components of e-performance appraisal such as procedures, processes, perceptions, challenges, and effectiveness as the independent variables, with employee productivity acting as the dependent variable. The research was structured around clearly defined questions and hypotheses that reflected the study's aims. Using a survey-based methodology, the researchers identified a population of 624 individuals and, through the Taro Yamane formula, determined a sample size of 243. Questionnaires were distributed and fully completed by all participants. Analysis was carried out using SPSS version 23, employing ANOVA to test the relationships. Results indicated a significant and strong positive relationship between e-performance appraisal and employee productivity within the banking sector.

The impact of online evaluation tools on the productivity of private colleges in the South-South Region of Nigeria was the subject of research by Mpi and Gabriel (2021). They counted all thirteen private colleges in the region using a cross-sectional survey methodology. The data was mostly gathered using structured questionnaires, and the findings were analysed through the use of percentages and tabulations. The researchers used SPSS version 22 and the Spearman Rank Order Correlation Coefficient to test their hypothesis. Electronic evaluations and university performance measures were shown to have a strong and statistically significant positive correlation. While this study focused on the education sector, the present research shifts attention to IBM in Kenya, thus exploring a different organizational context.

Similarly, Nyamai and Minja (2023) explored how employee appraisal practices influence organizational performance within the Kenya Revenue Authority (KRA). Their research emphasized planning and target setting as core elements of performance appraisal. Utilizing a descriptive design, the study offered a detailed assessment of appraisal impacts on KRA's performance. From a total population of 447 employees, a randomly selected sample of 103 was used. Primary data came from surveys, while secondary data came from KRA audit reports and performance papers covering five years. We used descriptive statistics like averages and SDs to examine the quantitative data, and inferential techniques like F-tests, T-tests, correlation, and multiple regression to find out how strong and what kind of associations there were. Data that were deemed qualitative were analysed using content analysis. Tables and charts showed that there was a favourable correlation between KRA performance, good planning, and establishing goals.

Nwokeocha (2024) explored the challenges of performance appraisal and their impact on organizational growth at Heritage Polytechnic in Nigeria. The study employed a qualitative research approach, relying on secondary data from scholarly journals and utilizing equity and goal-setting theory as an analytical framework. The findings indicated that performance

appraisal significantly enhances organizational performance and is essential for assessing employee capabilities, skills acquisition, and experience, all of which contribute to organizational growth. The paper concluded that organizations striving for effectiveness actively engage in ongoing performance appraisals to address deviations and improve overall performance.

2.3.5 E-Payroll Information System and Organization Performance

Researchers Kumari (2020) in Sri Lanka looked into how various companies in the Kandy district fared after using computerized payroll management systems. A total of 240 supervisors and managers in human resources were polled using questionnaires. The adoption of electronic payroll systems was shown to be significantly correlated with better organizational outcomes, according to regression analysis.

The impact of electronic accounting and payroll systems on the efficacy of internal controls was examined in a different research by Wibawa et al. (2022). The research encompassed all 57 employees within the studied organization, using a census method and structured questionnaires for data collection. Multiple regression analysis, conducted through IBM SPSS software, revealed that both systems separately and together had a statistically significant impact on enhancing internal control mechanisms.

Olumoh, Sanni, and Babalola (2024) explored the role of electronic payroll systems in driving performance within University Teaching Hospitals (UTHs) in Kwara State, Nigeria. Adopting a survey approach, they gathered responses from 178 participants using a structured questionnaire. Both descriptive and inferential statistical tools were used to test the hypotheses. Their analysis found that accounting and web-based payroll systems ($\beta = 0.040$, $p = 0.000$; $\beta = 0.071$, $p = 0.000$) significantly influenced institutional performance, leading to the conclusion that these systems serve as reliable indicators of UTH performance.

Mushumba and Nyirenda (2024) investigated the relationship between HRIS functions and organizational efficiency in Zambia's Air Force (ZAF). The study examined elements such as payroll processing, recordkeeping, and staff mobility management. Using a mixed-methods approach, the researchers gathered quantitative data from 105 personnel through questionnaires and supplemented this with qualitative insights from interviews with key informants in IT and HR. Stratified random sampling ensured diverse representation. While HRIS improved administrative tasks, the analysis showed that these gains did not significantly influence overall performance metrics at the 0.05 level. Regression results showed that HRIS functions accounted for roughly 49% of performance variability, indicating a moderate relationship.

The impact of electronic payroll on the efficiency of many Kenyan government agencies was studied by Chavuya (2021). The research, which had its foundation in positivism, analysed the replies of 271 employees from six different ministries using a cross-sectional survey method. Through the use of proportional stratified sampling, a total of 162 personnel from HR, ICT, and Finance were selected. These individuals represented senior, mid-level, and operational jobs. A combination of secondary sources and self-administered questionnaires was used to gather data. The statistical significance of the association between e-payroll systems and organisational performance was confirmed via the use of descriptive and inferential statistics, such as multiple regression and correlation analysis.

Lastly, Njeru and Muchelule (2024) studied how HRIS practices, particularly e-recruitment and e-payroll management, influence employee performance in the Kenya Police Service. Utilizing a descriptive design that combined both qualitative and quantitative methods, the research targeted 220 management staff in Nairobi. Data were collected using questionnaires, and stratified sampling ensured a balanced representation. Thematic analysis was applied to qualitative data, while SPSS version 25 was used for quantitative analysis. The findings

highlighted a strong positive association between the use of HRIS functions and improved employee performance in the police service.

2.2.6 E-Recruitment and Organization Performance

Irshad et al. (2024) carried out a quantitative study to evaluate the effectiveness of e-recruitment within organizations. The research involved 362 participants selected using systematic stratified random sampling, with 268 valid responses collected via self-administered questionnaires. The analysis employed SPSS 22 and AMOS 24, incorporating both Exploratory and Confirmatory Factor Analyses to verify reliability, validity, and model fit. Structural Equation Modeling (SEM) was later used to examine the interrelationships among the study variables. The results revealed that key e-recruitment benefits—such as cost reduction, faster hiring processes, and improved applicant quality and volume—serve as indicators of organizational cost-efficiency.

Sultana (2023) explored the role of e-recruitment in enhancing performance at Hishabee Technology Limited. This qualitative investigation involved employee interviews and direct observations during an internship. The findings highlighted e-recruitment as a vital component of human resource strategies, significantly contributing to the organization's overall performance and success.

Daniel (2019) investigated how electronic recruitment systems influence the performance of Nigerian commercial banks. Utilizing qualitative methods, the study gathered data from two banks. Analytical techniques included regression analysis and the Pearson correlation coefficient, processed via SPSS. The findings emphasized that e-recruitment is not only a critical part of HR practices but also a cornerstone of organizational efficiency and achievement.

At AEON ORANGE COMPANY LIMITED, Myint (2024) assessed how e-recruitment practices impact organizational outcomes. The research targeted 81 management-level

employees using a census sampling method and online surveys. Through descriptive statistics and linear regression, the study found that e-recruitment positively and significantly affects organizational performance.

Similarly, Jatto (2022) studied various dimensions of e-recruitment in Nigeria, focusing on cost efficiency, time savings, and the caliber and quantity of applicants. Drawing from secondary sources and guided by a theoretical model, the research concluded that these e-recruitment aspects positively influence overall organizational effectiveness.

In Kenya, Ronkoine, Nzioki, and Kiama (2024) examined the effect of e-recruitment on employee performance within the Kajiado County Government, applying a technology acceptance framework. The descriptive study targeted 1,689 employees and utilized stratified random sampling to select 313 respondents. Data were collected via questionnaires. Statistical and thematic analyses revealed a significant positive relationship between e-recruitment practices and employee performance (β=0.287, p=0.000).

Mosonik, Sang, and Rop (2022) investigated the connection between recruiting and performance at a few Nakuru City commercial banks. This comparative study included all 105 bank workers who used computerised HR systems. It was guided by the Resource-Based View philosophy. Data were analysed using descriptive and inferential statistics using SPSS after being acquired by questionnaires using a census technique. Findings showed a negative relationship between traditional recruitment and performance (β = -0.361, p = 0.000), whereas post-automation, the correlation became strongly positive (β = 0.907, p = 0.000).

2.3 Theoretical Literature Review

Included in this is a review of related but distinct body of prior research. Technological Acceptance Model, Theory of Reasoned Action, and Theory of Acceptance Behaviour were used in the study's theoretical evaluation. Major theory underpinning the study include theory

of reasoned action developed by Martin Fischbein. This theory indicates a person is influenced by the final outcome, thus if the final outcome is positive the higher the chances of a user to utilize a HRIS.

2.3.1 Technological Acceptance Model (TAM)

Organisations are seeing the importance of IT as a strategic tool to boost efficiency, creativity, and overall performance in today's fast-paced, globally competitive business environment. It is crucial to comprehend the elements that impact the acceptability and utilisation of technical solutions by users in this setting. The TAM, first suggested by Davis (1989), is a popular paradigm used for this purpose. The goal of developing TAM was to better understand and foretell how users will interact with and make use of information technologies. Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are the main concepts discussed here. These two factors have a significant impact on people's attitudes towards using, behavioural intentions to use, and actual system usage.

A large chunk of the variation in users' intentions to adopt a system may be explained by these two beliefs, PU and PEOU, as Davis (1989) showed. Many studies evaluating technology adoption in different industries continue to use TAM as a basic model because of its high level of empirical support. The empirical robustness, theoretical foundation in the Theory of Reasoned Action (TRA), and simplicity of TAM are some of its key characteristics. Specifically, when it came to practical applicability and predictive capacity, Mathieson (1991) discovered that TAM offered a more concise and effective explanation of users' choices to acquire spreadsheet software compared to rival theories like Theory of Planned Behaviour (TPB).

Subsequent studies by Taylor and Todd (1995) reaffirmed the value of TAM, concluding that the model explained a greater proportion of variance in user intention, attitude, and behavior than alternative models. These findings provided further empirical support for the model's

utility in predicting and understanding user acceptance of technology. As such, the selection of TAM in this study is justified based on its proven reliability, theoretical clarity, and extensive validation in the context of IT adoption. Moreover, its constructs have been standardized, allowing researchers to use well-established measurement scales, thus avoiding the time, cost, and complexity involved in developing new instruments from scratch.

Lee (2010) further reinforced the position of TAM as a robust predictive model for evaluating technology acceptance, particularly highlighting its relevance in organizational and public sector contexts. According to Lee, TAM offers a strong model fit when applied to real-world data, thus making it particularly useful in policy and implementation studies related to technology. The model's explanatory power and replicability across diverse systems and user environments enhance its generalizability and practical relevance.

In the present study, TAM serves as the theoretical framework to investigate user acceptance of online recruitment systems within IBM Kenya, specifically analyzing how perceived usefulness, perceived ease of use, and attitude toward using the system influence public sector performance outcomes. The research employs these core TAM constructs to examine the behavioral intentions and actual usage of IBM's e-recruitment platform among HR practitioners and system users. Given the increasing digitization of HR functions and the growing importance of user engagement in successful technology deployment, TAM provides a logical and empirically grounded framework for assessing the system's acceptance and its implications for organizational performance.

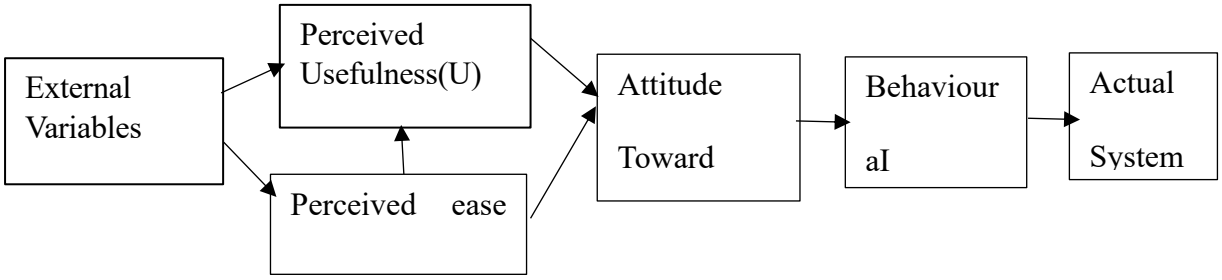

Figure 1: TAM Model

Source: Davis et al (1989)

The TAM suggests that perceived ease of use (PEOU) and perceived usefulness (PU) are key factors in shaping users' attitudes, which in turn influence their intention to adopt and ultimately use information systems. TAM views behavior as a result of behavioral intention, which stems directly from the user's attitude toward using the technology. The model primarily seeks to illustrate how external factors influence internal perceptions, beliefs, attitudes, and behavioral intentions, as noted by Mathieson (1991). It is used to diagnose system problems in recruitment before the user uses them. TAM is also used to diagnose problems in the training and performance appraisal systems before the user uses it.

The TAM will serve as a theoretical framework for interpreting how the HRIS impacts IBM's performance. Earlier research has demonstrated that perceived usefulness has a direct influence on how effectively users believe they can utilize a system. Additionally, perceived usefulness also affects perceived effective use indirectly by shaping users' behavioral intentions. Mathieson (1991) shows that the perception of usefulness that mainly affected the intention to utilize technology depended on how simplified the technology was. This shows that the simplicity of the e-training system, e-appraisal and e-payroll information system is based on the system's beliefs, attitudes and intentions. As a result, the simplicity of the e-recruitment and e-training systems leads to more users, affecting employee productivity and the organization's profitability. Users in e-appraisal systems and e-payroll information system creates accurate evaluations for employees and fair rewarding systems, thus affecting employee productivity and the profitability of an organization.

Although the TAM offers useful understanding of how users adopt and interact with new technologies in organizational settings, it has its limitations. Specifically, it does not adequately account for shifts in attitudes and behaviors, especially when applied to Human

Resource Management Information Systems (HRMIS) (Chandio, Burfat, Abro & Naqvi, 2017). To overcome these shortcomings, this study integrates findings from prior research to present a more thorough and well-rounded analysis.

2.3.2 Theory of Reasoned Action (TRA)

TRA was made in the late 1960s by Martin Fischbein modified, extended by Fishbein and Icek Ajzen later. It focuses on a individual's aim to act in a specific way. An intention is a belief that someone will act in a certain way. In order to comprehend behavioral intent, which is seen as the main component of conduct, the TRA observes a person's or people attitudes towards that behavior. According to TRA, our attitudes toward a particular behavior are affected by a dual factor: our beliefs about the outcome of the behavior (positive or negative) and our assessment of the result (is the outcome favorable or unfavorable).

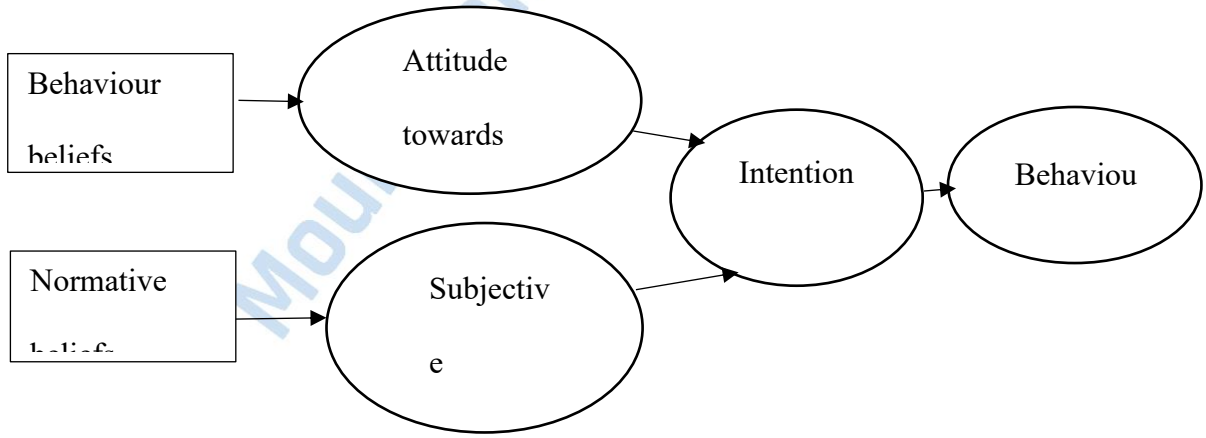

Figure 2: TRA MODEL

Source: Martin Fishbein (1960)

The theory was also used by Otieno (2016) in his work. The author noted that theory of reasoned action was established to be appropriate in dealing with information system studies.

The theory is able to predict behavioral intention towards using the online recruitment information system, online training system, appraisal system and payroll information system. The theory is of importance to this study as it explains when a user believes that the outcome of online recruitment and online training system is positive, the higher the possibility of the user to utilize the system thus influencing profitability. Moreover, when a user believes that the outcome of e-appraisal system and e-payroll system is positive, the higher chances of the user to use the system thus influencing employee productivity hence affecting performance.

2.3.3 The Theory Planned Behavior (TPB)

The key ideas of Fishbein and Ajzen's 1975 Theory of Reasoned Action (TRA), which has had a major impact on behavioural research, form the basis of this theory. Perceived behavioural control (PBC) and the desire to carry out a behaviour are the two main factors that influence voluntary human behaviours, according to the Theory of Planned Behaviour (TPB). A person's attitude towards the behaviour, their perception of social pressure (subjective norms), and their perception of control over the behaviour are the three factors that impact intention, according to the theory. The extent to which PBC has a direct effect on behavior, rather than acting through intention, is thought to depend on how much actual control an individual has over their actions.

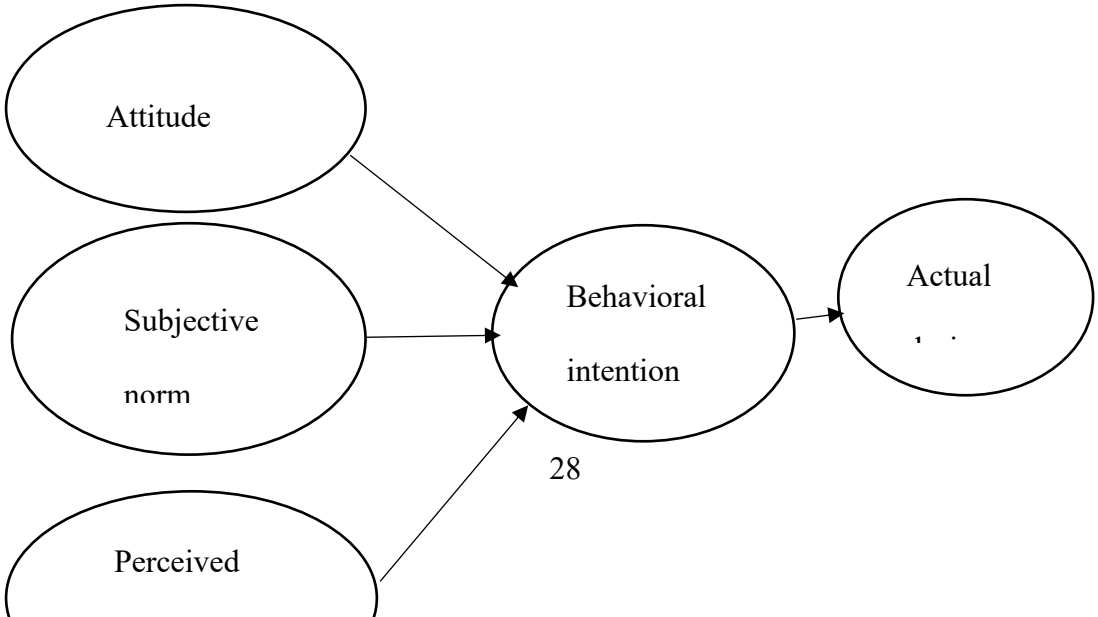

Figure 3: TPB Model

Source: Fishbein and Azjein (1985)

In their research on using the theory of planned behaviour to predict the intention to eat Indigenous cuisine in Africa, Gacobo, Jere, and Griffith (2016) used the aforementioned results. Their findings demonstrated how crucial it is for marketers to gauge product consumption behaviour by determining customer intentions. The importance of attitudes in shaping customer purchase choices is shown by this.

This theory is applicable to the present investigation since it focusses on attitudes, which are well-informed views of actions. An individual is likely to adopt a positive outlook if they anticipate a favorable outcome from engaging in a particular behavior.

A large chunk of the variation in users' intentions to adopt a system may be explained by these two beliefs, PU and PEOU, as Davis (1989) showed. Many studies evaluating technology adoption in different industries continue to use TAM as a basic model because of its high level of empirical support. The empirical robustness, theoretical foundation in the Theory of Reasoned Action (TRA), and simplicity of TAM are some of its key characteristics. Specifically, when it came to practical applicability and predictive capacity, Mathieson (1991) discovered that TAM offered a more concise and effective explanation of users' choices to acquire spreadsheet software compared to rival theories like Theory of Planned Behaviour (TPB).

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Thus, when a person maintains a positive disposition towards utilizing an e-recruitment and e-training system, there is a greater likelihood of system adoption. Similarly, positive sentiments toward e-appraisal and e-payroll systems correspond with an increased likelihood of their use. Furthermore, a rise in the number of users of e-recruitment, e-training, e-appraisal, and e-payroll systems can enhance employee productivity and performance, ultimately affecting the profitability of the organization as well.

2.4 Conceptual Framework

One way to examine the interconnections between various factors is with the use of a conceptual framework. According to Varpio et al., (2020), it acts as a visual depiction of the primary concepts within a study. This representation typically takes the form of a schematic diagram that highlights key relationships, specifically outlining how dependent and independent variables interact.

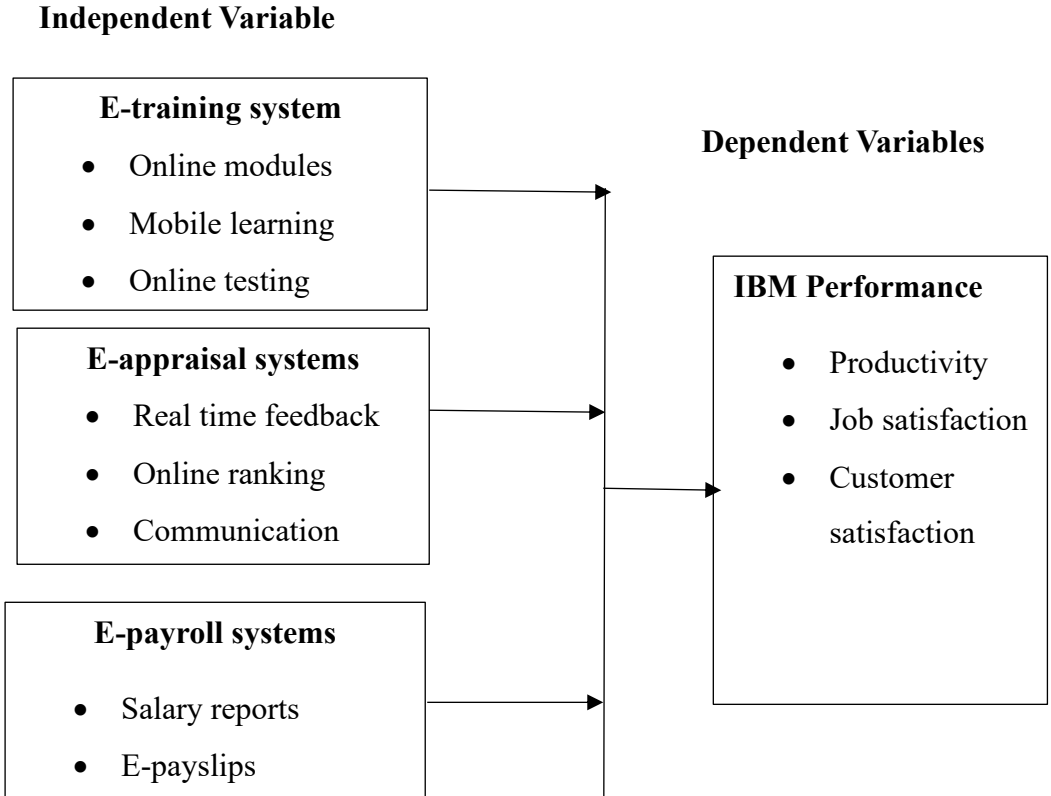

Figure 4: Conceptual Framework

Source: Researcher (2024)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section details the research strategy that was used to conduct the study. Included are the research design, the population of interest, the sampling strategy, the sample size determination, the data collection tools, the procedures for data collection, the analysis and presentation of the data, the diagnostic evaluations, and the ethical guidelines that were adhered to during the research.

3.2 Research Design

The study adopted a descriptive research design, which focuses on collecting information that characterizes specific phenomena and subsequently organizing and summarizing that data (Pandey & Pandey, 2021). Tools such as charts and graphs were utilized to visually represent the data, making it easier to interpret patterns and distributions. One of the main advantages of using a descriptive design is its ability to simplify large datasets into more manageable formats. This research approach is particularly suitable when the objective is to examine potential cause-and-effect relationships among multiple variables.

3.3 Target Population

The target group was an entire group of individuals that the researcher was interested in generalizing conclusions about (Marlow, 2023). Therefore, data for this study was generated from employees who were in the human resource, financial, customer care, engineering field, and technological categories at IBM, Nairobi. This population was chosen because these departments were used the HRIS in their daily tasks, making it an appropriate population for this study. This study targeted a total of 205 employees.

Table 1: Target Population

Categories	Target population	Percent

Top Level Management Staff	37	18
Middle-Level Management Staff	68	33.2
Operational Staff	100	48.8
Total	**205**	**100**

Source: Human Resource Office Department (2025)

3.4 Sampling Technique and sampling Size

The researchers in this study used a stratified random sampling method. To maintain the sample's objectivity, we randomly picked individuals from each of the three strata, which we created by dividing the population in half. Our method kept proportionate representation throughout. Every stratum had an equal chance of being included in the sample because, as stated by Mugenda and Mugenda (2013), a consistent sampling ratio was used across the board, irrespective of size variations (Latpate et al., 2021).

The choice of proportionate stratified random sampling was based on its ability to enhance the accuracy and reliability of the sample. This method also enabled the use of tailored sampling strategies within different strata, ensuring that the sample truly reflected the broader population (Iliyasu & Etikan, 2021). Additionally, this technique effectively blends randomization with structured categorization, making it suitable for gathering both qualitative and quantitative data for comprehensive analysis.

3.5 Sample Size

Yamane (1967) suggested the following formula for sample size determination:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = is the proposed sample size of the study, N = target population (205),

e = the projected margin error at 5%, and e is the calculated confidence level at 95%.

$$n = \frac{205}{1 + 205(0.05)^2}$$

$$= \frac{205}{1 + 0.5125}$$

$$= \frac{205}{1.5125}$$

$$= 136 \text{ Respondents}$$

Table 2: Sample Size

Categories	Target population	Sample size
Top level management staff	37	25
Middle-Level Management Staff	68	45
Operational Staff	100	66
Total	**205**	**136**

Source: Researcher (2025)

The 136 people that made up the observation unit were chosen from several areas like HRM, finance, customer service, engineering, and information and communication technology. Managers of all levels, from operational to upper and middle management, were part of this group. We selected these individuals because of their extensive knowledge of human resources issues; as a result, we know they would be able to provide insightful criticism of the HRMIS and IBM Nairobi County's overall performance.

3.6 Data Collection Instrument

3.6.1 Questionnaire

The study collected data through a self-administered questionnaire, chosen for its simplicity, efficiency, and cost-effectiveness (Mugenda & Mugenda, 2003). A standardized Likert scale was utilized, ranging from 5 (strongly disagree) to 1 (strongly agree). The questionnaire was organized into six distinct sections, all consisting of closed-ended questions. Section A gathered demographic information about the respondents. Section B addressed aspects of

electronic training systems, while Section C focused on electronic appraisal systems. Section D included items related to electronic payroll systems, and Section E explored electronic recruitment practices. Finally, Section F examined the study's dependent variable organizational performance. To enrich the data, the questionnaire also included open-ended questions, allowing participants to share additional opinions and recommendations.

3.6 Pilot study

The researcher was able to get the correct questions and procedures for data collecting because of this. Fifteen participants from seven seas technologies' Nairobi County headquarters participated in the pilot project. The choice of the company was informed by the fact that they shared the same business idea and they are both IT multinational companies. This enabled to ascertain the reliability of data collection instruments. Questions found to be ambiguous were left out and where adjustment needed was done.

3.7 Validity and Reliability of Research Instrument

The study conducted tests to measure validity and reliability of the research instrument to ensure its applicability and suitability.

3.7.1 Validity of Research the Instrument

According to Kothari (2008), the validity test determines if a research instrument measures the variables it claims to. Researchers must conduct a validity test to ascertain if their research questions adequately address important topics and to assist them choose the most relevant questions to utilize. The research instrument's content validity was evaluated using a pilot test. Ensuring content validity ensures that the surveys include all relevant aspects. This evaluation was performed by raters who are scholars and supervisors from Mount Kenya University. These experts possess the necessary knowledge and familiarity with the relevant constructs. As a result, they provided recommendations for improvements, which was incorporated to enhance the final instrument's content.

3.7.2 Reliability of the Instrument

Questionnaires and interviews are examples of data gathering instruments that must undergo reliability testing in order to assess their correctness, consistency, and dependability (Sürücü & Maslakci, 2020). The reliability of a research instrument is ensured when it can be utilised by various people or repeated over time to provide consistent and Mingful findings (Emerson, 2024).

In order to determine how reliable the questionnaire was, researchers in this study used Cronbach's Alpha. Fifteen participants filled out a 48-item questionnaire as a pilot study to determine the total alpha coefficient. Reliable research conclusions are regarded to be possible with a reliability coefficient (α) of 0.7 or above, as stated by Cronbach (1951).

3.8 Data Collection Procedure

Before beginning data collecting, we had to get the go-ahead from NACOSTI and get a formal letter of introduction from Mount Kenya University's Directorate of Postgraduate Studies. Both the participants and the administration of the participating institution provided the researcher with written permission. Participants were selected from the Human Resource Management, Information and Communication Technology, and Finance departments using stratified random selection.

Primary and secondary sources of information were also used in the study. We used self-administered surveys to collect primary data, and we combed through academic books, journals, newsletters, articles, websites, and official government documents including annual reports and strategy plans to find secondary data. Previous empirical research was also used into the study.

With the help of three qualified research assistants, we were able to gather more data. Before being assigned to a stratum, each assistant received a briefing on research ethics. To ensure maximum participation, 162 questionnaires were delivered utilising a drop-and-pick-later

method. With the help of regular follow-ups via phone calls and in-person visits, the filled-out forms were recovered within two or three days. About 2.5 months were devoted to gathering and analysing all of the data.

3.9 Data Analysis and Presentation

In order to summarize the obtained information, data analysis used descriptive statistics. The results were presented in the form of frequency tables, Ms, and other indicators of central tendency. There was also the use of inferential statistics, specifically a regression model, to assess the relationship between the independent variable—organizational performance—and the dependent variable—HRIS. By using regression analysis, the researcher was able to determine and generalize the kind of link between IBM's performance and the adoption of HRIS. The statistical analysis was carried out using SPSS, which stands for the Statistical Package for the Social Sciences. To understand how the data was distributed, SD was used.

For qualitative data, content analysis was the chosen method. This technique helped identify and interpret the occurrence and context of particular terms or concepts within the qualitative dataset (Bergin, 2018). Responses were grouped into specific thematic categories informed by the study variables and previous literature. Through thematic coding, data were distilled into broader patterns or themes, making it possible to draw Mingful conclusions about the research subjects, as outlined by Braun and Clarke (2022). The findings from the qualitative data were presented narratively to convey the emerging insights clearly.

The regression equation to be used:

$Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+e$

Where:

$\beta 0$=regression coefficient

β_1, β_2, β_3 and β_4, slopes of the regression equation

Y= Performance in IBM

X_1 = E-training system

X_2 = E-appraisal system

X_3=E- Appraisal system

X_4=E- recruitment system

e = error term

3.10 Ethical Considerations

The study upheld the principles of voluntary and informed consent, which were secured through the approval of IBM's management. Participation was voluntary during the distribution of questionnaires. The researcher prioritized clear data presentation, recognizing that poor presentation could involve incomplete results or tables. Every effort was made to ensure clarity in the data provided. The researcher adhered to ethical guidelines by actively avoiding biases in the research process, which was accomplished by designing the research to directly address the stated problem. Furthermore, the researcher guaranteed that all questionnaire responses were treated confidentially and utilized solely for the purpose of the study. Prior to conducting the research, approvals were obtained from both Mount Kenya University and NACOSTI.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

The results and discussion of the conclusions drawn from the data analysis are presented in this chapter. Here you may find the descriptive and inferential statistics, together with the response rate and demographic information from the survey.

4.2 Response Rate

The researcher obtained 128 completed questionnaires from the 136 distributed, achieving a response rate of 94.1%. This level of participation is considered highly satisfactory, aligning with Mugenda and Mugenda's (2003) recommendation that an 80% or higher response rate is ideal for studies in the social sciences.

Table 3: Response Rate

		Frequency	Percent
Valid	Responses	128	94.1
	Non-Responses	8	5.9
	Total	**136**	**100.0**

Source: researcher (2025)

4.3 Demographic Information

The study collected basic demographic information from the participants, such as their age, gender, education level, occupation, and years of work experience. This data was crucial for determining the reliability and applicability of the study's findings.

4.3.1 Gender of the respondents

The purpose of the research was to determine whose gender the participants were. The results may be shown in Table 4.

Table 4: Gender of the respondents

		Frequency	Percent
Valid	Male	70	54.7
	Female	58	45.3
	Total	**128**	**100.0**

Source: Researcher (2025)

Table 4 displays the gender distribution of the survey respondents. Out of a total of 128 participants, 70 (54.7%) were male and 58 (45.3%) were female. The close proportions indicate that the data collection process was not biased towards one gender and provided a fairly balanced representation of both genders. However, the results also suggest that there is a slight majority of males in the firm's workforce.

4.3.2 Age of the respondents

The study sought to establish the age of respondents. The findings are illustrated in Table 5.

Table 5: Age of the respondents

		Frequency	Percent
Valid	18 – 28 years	17	13.2
	29 -38 years	42	32.8
	39- 45 years	41	32.4
	46 – 55 years	20	15.7
	above 55 years	8	5.9
	Total	128	100.0

Source: Researcher (2025)

The findings in Table 5 reveal the age distribution of the respondents. The majority of participants fell within the 29–38 years 42(32.8%) and 39–45 years 41(32.4%) age brackets, suggesting that the workforce is largely composed of individuals in their early to mid-career

stages. This may reflect a demographic that is professionally active, experienced, and likely to be in managerial or technical roles within the firm. Respondents aged 46–55 years accounted for 20(15.7%), indicating a moderate representation of late-career individuals, while those aged 18–28 years constituted 17(13.2%), representing the entry-level segment of the workforce. The smallest proportion, 8(5.9%), comprised individuals above 55 years, pointing to a relatively low presence of near-retirement or post-retirement age employees in the organization.

4.3.3 Academic qualification of the respondents

The primary objective of the research was to determine the participants' greatest level of education. The results may be shown in Table 6.

Table 6: Academic qualification of the respondents

		Frequency	Percent
Valid	Certificate	7	5.9
	Diploma	28	21.6
	Degree	64	50.0
	Postgraduate	29	22.5
	Total	**128**	**100.0**

Source: Researcher (2025)

Table 6 presents the educational qualifications of the respondents. The findings show that 7(5.9%) of respondents held a certificate, 28(21.6%) possessed a diploma, 64(50%) had attained a bachelor's degree, and 29(22.5%) had completed a postgraduate qualification. According to these findings, the company's staff is mostly college educated, with a bachelor's degree being the most common level of education. The respondents' high degree of academic achievement lends credence to the data obtained since it suggests they were well-informed and could grasp the study aims.

4.3.4 Working experience

The study sought to establish the duration that the respondent had worked at the company. The findings are illustrated in Table 7.

Table 7: Working experience

		Frequency	Percent
Valid	below 3 years	23	17.6
	4 to 7 years	43	34.3
	8 – 11 years	40	31.4
	above 12 years	22	16.7
	Total	128	100.0

Source: Researcher (2025)

The results of the study showed that the largest portion of respondents, 43 individuals (34.3%), had been employed at the company for between 4 and 7 years. Another 40 respondents (31.4%) reported working there for 8 to 11 years. Additionally, 23 participants (17.6%) had been with the company for under 3 years, while 22 respondents (16.7%) had over 12 years of service. These findings suggest that most participants had substantial experience within the organization, making them well-positioned to provide informed insights on the use of HRIS in company management processes.

4.3.5 Current job position of the respondents

Finding out what the respondent's current role was at the organisation was one of the primary goals of the research. Table 8 displays the results.

Table 8: Current job position

		Frequency	Percent
Valid	Management	31	24.5
	Non management	97	75.5

Total	128	100.0

Source: Researcher (2025)

Table 8 shows that out of the total number of respondents, 97 (or 75.5% of the total) were not in managerial roles, while 31 (or 24.5% of the total) were. The responders had a solid grasp of the company's management procedures, regardless of the job classifications.

4.4 Descriptive Statistics

To measure the impact of electronic training, evaluation, payroll, and recruiting on IBM Kenya's performance, this research used a Likert scale to collect data from participants. With 5 being very agree, 4 being agree, 3 being neutral, 2 being strongly disagree, and 1 being very disagree, the Likert scale might be used to collect data.

4.4.1 E-Training Management and Organizational Performance

The purpose of this research was to analyse how IBM Kenya's performance was affected by their e-training management system. You may see the results in Table 9.

Table 9: Descriptive statistics for E-training management

Statement	N	Min	Max	M	SD
The availability of structured online training modules has improved employee productivity.	128	1.00	5.00	4.25	0.842
The use of online training modules has enhanced employees' ability to apply learned skills in their job roles.	128	1.00	5.00	3.98	0.831
Mobile learning has increased employees' access to training materials, leading to improved performance.	128	1.00	5.00	4.093	0.713
The flexibility of mobile learning allows employees to complete training at their convenience, enhancing their efficiency at work.	128	1.00	5.00	4.06	0.713

Online testing effectively assesses employees' understanding of training content	128	3.00	5.00	3.94	0.765
The instant feedback from online tests helps employees improve their skills and knowledge application in their roles.	128	2.00	5.00	4.11	0.7079
Valid N (listwise)	128				

Source: Researcher (2025)

Table 9 shows that respondents strongly agreed that having access to organised online training modules is a major factor affecting employee productivity, with a M score of 4.25 and a SD of 0.842. Employee output, a measure of organisational success, is favourably impacted by training materials that are both organised and easy to use, according to the results. This is consistent with Bangur and Faiz, (2024), who argued that structured e-learning improves knowledge retention and on-the-job application, ultimately leading to enhanced productivity. The use of online training modules was found to moderately enhance employees' ability to apply learned skills in their job roles, with a M of 3.98 and a SD of 0.831. Although slightly lower than other indicators, this result underscores the importance of practical, job-relevant content in training programs. Clark, and Mayer (2023) supports this view, emphasizing that training modules which simulate real work scenarios are more likely to result in effective skill transfer to the workplace.

Mobile learning also emerged as a critical component of e-training, with a M score of 4.093 and a relatively low SD of 0.713, indicating a strong and consistent positive response. Respondents agreed that mobile access to training materials improved their performance by increasing the ease and frequency of access. The adaptability of mobile learning is closely tied to this. Employees value the flexibility to complete training at their own pace, as shown by a M score of 4.06 and a SD of 0.713 for this element. Not only does this allow for more efficient work, but it also promotes self-paced learning. According to Ulanday et al. (2021), mobile

learning's flexibility accommodates a wide range of learning styles and time constraints, which leads to more effective training results.

With an average score of 3.94 and a SD of 0.765, online testing was likewise deemed an effective technique for evaluating comprehension of training material. This was one of the lower scores, but it still shows that people have a positive impression of online tests. The immediate results of online assessments were statistically significant (M = 4.11, SD = 0.7079). Workers felt that they were able to hone their abilities and put their knowledge to greater use in their jobs after getting timely feedback. This lends credence to the findings of Surapaneni (2024), who discovered that timely, helpful criticism is critical for boosting retention and directing growth.

4.4.2 E-Appraisal Management and Organizational Performance

The purpose of the study was to determine how IBM Kenya's performance was affected by the implementation of an e-appraisal system. Table 10 summarizes the results.

Table 10: Descriptive statistics for e-appraisal management

Statements	N	Min	Max	M	SD
Real-time feedback through e-appraisal management helps employees improve their performance promptly.	128	3.00	5.00	4.09	0.871
The availability of instant performance reviews enhances employee motivation and productivity.	128	1.00	5.00	4.05	0.783
Online ranking in e-appraisal management provides a fair and transparent evaluation of employee performance.	128	1.00	5.00	3.95	0.804
The visibility of performance rankings encourages employees to strive for excellence in their job roles.	128	1.00	5.00	3.93	0.747

E-appraisal management has improved communication between employees and managers	128	3.00	5.00	4.15	0.848
The use of digital appraisal systems enhances clarity in performance expectations and goal setting.	128	2.00	5.00	4.20	0.707
Valid N (listwise)	128				

Source: Researcher (2025)

With a M score of 4.20 and a SD of 0.707, suggesting high levels of agreement and consistency across respondents, Table 10's findings suggest that digital assessment systems improve clarity in performance expectations and goal setting. When objectives are clearly communicated, workers are better able to meet those expectations, which in turn leads to improved performance. Consistent with the findings of Agarwal (2021), who emphasized that effective performance management systems should clearly define job expectations and align individual objectives with organizational goals. Respondents agreed that on the role of e-appraisal in improving communication between employees and managers (M=4.15, SD=0.848). The digital platform appears to have bridged the traditional communication gaps in performance appraisal processes, making interactions timelier and more constructive. According to Armstrong (2014), open and continuous communication between supervisors and subordinates enhances trust and facilitates better performance outcomes. In the case of IBM Kenya, the adoption of e-appraisal tools seems to foster such communication, creating a more collaborative performance culture.

Real-time feedback through e-appraisal management was also positively rated (M=4.09, SD= 0.871). The timely nature of feedback enables employees to adjust their behavior and performance promptly, rather than waiting for traditional, periodic reviews. This supports the findings of Pulakos et al. (2015), who highlighted the value of continuous feedback in helping employees correct performance issues early and reinforce positive behavior. The availability

of instant performance reviews was similarly valued (M=4.05, SD=0.783). Respondents agreed that immediate access to appraisal outcomes enhances motivation and productivity. This suggests that when employees are aware of their performance status in real-time, they are more likely to take proactive steps toward improvement. Research by Dessler (2017) supports this, asserting that timely performance information empowers employees to self-regulate and maintain high levels of engagement.

Online ranking mechanisms within the e-appraisal system received a moderately high M score of 3.95, SD of 0.804, indicating that employees perceive the system as a fair and transparent way of evaluating performance. Fairness and transparency are critical to the credibility of any appraisal system. As noted by Grote (2011), when employees believe that appraisal results are based on objective and equitable criteria, they are more likely to accept feedback and engage positively with performance improvement initiatives. The visibility of performance rankings was rated with a M of 3.93 and a SD of 0.747. Although slightly lower than the other factors, this finding still reflects a positive perception. The competitive element introduced by visible rankings appears to motivate employees to strive for better performance. This aligns with expectancy theory as discussed by Vroom (1964), which posits that individuals are driven to perform when they see a clear connection between effort and outcomes.

4.4.3 E-Payroll Management and Organizational Performance

The study third objective sought to determine the effect of e-payroll management on performance of IBM Kenya. The findings are as indicated in Table 11.

Table 11: Descriptive statistics for e-payroll management

Statements	N	Min	Max	M	SD
The automated salary reports generated by the e-Payroll system improve payroll accuracy and reduce errors.	128	1.00	5.00	3.97	0.847

Access to timely and detailed salary reports enhances financial planning and decision-making for employees.	128	1.00	5.00	3.84	1.016
The availability of e-pay slips improves transparency in salary processing and employee trust in payroll management.	128	1.00	5.00	4.02	0.931
E-pay slips provide employees with easy and secure access to their salary details, reducing payroll-related inquiries.	128	1.00	5.00	3.89	0.956
The integration of attendance data in the e-Payroll system ensures accurate salary computation and minimizes disputes.	128	1.00	5.00	3.94	0.924
Real-time tracking of attendance through the e-Payroll system enhances workforce management and productivity.	128	1.00	5.00	3.89	0.893
Valid N (listwise)	128				

Source: Researcher (2025)

There is a high agreement among respondents that automation has decreased human error in payroll processing, as seen in Table 11, which shows that respondents agreed that automation of salary reporting enables accuracy of payroll (M=3.97, SD=0.847). This is consistent with findings by Nurbani and Meiyanti (2019), who noted that system quality particularly in terms of accuracy and reliability is a key determinant of user satisfaction and improved organizational performance. Also, there was consensus among the respondents that availability of e-pay slips improves transparency in salary processing and employee trust in payroll management (M=4.02, Std Dev=0.931). Transparency in payroll builds trust between employees and management, a factor that has been noted by Armstrong and Taylor (2014) as essential in fostering a positive organizational culture and enhancing performance. When employees are confident that their compensation is handled fairly and accurately, their morale and trust in leadership are likely to improve.

With a M score of 3.84 and a somewhat larger SD of 1.016, access to thorough and timely compensation reports is another important result. Despite the fact that this shows somewhat different reactions, the general impression is still pleasant. The idea here is that workers are better able to prepare for and make educated choices about their money when they have quick and easy access to their financial information. Additionally, the integration of attendance data into the e-payroll system was seen to contribute positively (M=3.94, SD=0.924). Respondents agreed that linking attendance with payroll calculations reduces disputes and ensures accuracy in salary computation. This integration aligns with the principle of data centralization, which according to Stair and Reynolds (2017), enhances operational efficiency by eliminating redundancy and promoting consistency across functions.

The study also found that real-time tracking of attendance via the e-payroll system plays a role in improving workforce management and productivity (M=3.89, SD=0.893). This indicates that the system not only serves administrative purposes but also acts as a performance monitoring tool. The use of e-payslips to provide secure and convenient access to salary details was positively rated (M=3.89, SD=0.956). This has the effect of reducing payroll-related inquiries and administrative burden, freeing up human resource teams to focus on more strategic tasks. As suggested by Kavanagh et al. (2015), digital HR systems contribute to operational efficiency by streamlining repetitive tasks and enabling employees to self-serve their information needs.

4.4.4 E-Recruitment Management and Organization Performance.

The final goal of the research was to find out how IBM Kenya's performance was affected by e-recruitment management. Table 12 displays the results.

Table 12: Descriptive statistics for e-recruitment management

Statements	N	Min	Max	M	SD

The e-recruitment system on the company website has improved the efficiency of attracting qualified job applicants.	128	3.00	5.00	4.15	0.721
The availability of job postings on the company website enhances company's ability to reach a diverse talent pool.	128	1.00	5.00	4.11	0.896
The application tracking system streamlines the recruitment process, reducing hiring time and improving efficiency.	128	1.00	5.00	3.80	0.882
The automated tracking of applications ensures fair and transparent candidate evaluation and selection.	128	1.00	5.00	4.18	0.813
The e-recruitment system effectively stores and retrieves e-resumes, facilitating quick access to potential candidates.	128	3.00	5.00	3.86	0.934
The digital record-keeping of e-resumes enhances workforce planning and talent management	128	2.00	5.00	4.01	0.862
Valid N (listwise)	128				

Source: Researcher (2025)

From table 12, respondents agreed with the statements that efficiency of attracting qualified applicants through the company's website-based e-recruitment system (M=4.15, SD=0.721). Similarly, the availability of job postings on the company website was rated highly, with a M of 4.11 and a SD of 0.896, suggesting that the organization is better positioned to reach a diverse talent pool. These findings align with the findings of Wesolowski (2016), who emphasized that web-based recruitment enables organizations to attract a broader and more qualified pool of applicants by reducing geographical and logistical barriers. According to Wijaya et al. (2023), e-recruitment platforms enhance the employer brand and expand reach to both active and passive job seekers, which is critical in a competitive labor market.

Also, respondents agreed that application tracking system (ATS) reflects a positive perception of the system's efficiency in reducing hiring time and streamlining the recruitment process (M=3.80, SD=0.882), respondents further agreed that automation supports fairness and transparency in candidate evaluation (M=4.18, SD=0.813). By removing subjective biases and standardizing the selection process, e-recruitment contributes to equity and accountability in hiring. This supports the view of Chapman and Webster (2003), who emphasized the role of technology in ensuring consistent and justifiable recruitment decisions.

Moreover, the study highlighted the effectiveness of e-resume storage and retrieval (M=3.86, SD=0.934). This suggests that respondents appreciate the convenience and efficiency of having digital access to candidate profiles. This capability reduces administrative burden and speeds up the shortlisting process.

Adawiah, and Putra (2024) found that e-recruitment systems that maintain structured applicant databases enhance recruiters' ability to match candidates with emerging roles quickly and effectively. The role of digital record-keeping in workforce planning and talent management was well acknowledged (M=4.01, SD=0.862). The findings indicate that IBM Kenya's e-recruitment system plays a strategic role beyond hiring by supporting long-term talent planning. The data derived from applicant records can inform workforce analytics and succession planning. As highlighted by Škudienė, Vezeliene, and Stangej (2020), integration of e-HRM tools into strategic HR planning helps organizations align recruitment with broader business objectives.

4.4.5 Organizational Performance

The researchers at International Business Machines set out to determine how their HR information system affected the company's productivity. Kenya.

Table 13: Descriptive Statistics for Organizational Performance

Statements	N	Min	Max	M	SD

Current level of employee productivity is high	128	1.00	5.00	4.25	0.794
There has been changes in profit of the organization due to application of human resource system	128	1.00	5.00	3.73	0.976
There has been changes in revenue of the organization as a result of HRIS.	128	1.00	5.00	4.01	0.893
There has been reduction in risks due to application of HRIS.	128	1.00	5.00	4.04	0.963
Provision of services is timely in the organization due to HRIS.	128	1.00	5.00	3.93	0.931
Quality of services has varied due to application of HRIS.	128	1.00	5.00	4.05	0.912
Valid N (listwise)	128				

Source: Researcher (2025)

From table 13, respondents indicated a strong agreement among respondents that employee output has significantly improved (M=4.25, SD=0.794). This implies that the HRIS has optimized routine HR processes such as attendance tracking, leave management, and performance monitoring, thereby allowing employees to focus on value-adding activities. According to Ball (2001), HRIS enhances efficiency and decision-making by automating administrative functions and enabling HR departments to play a more strategic role in driving performance.

Respondents also agreed that application of HRIS has influenced organizational profit levels (M=3.73, SD=0.976), suggesting moderate agreement and some variability in perception. The study explored the effect of HRIS on organizational revenue, respondents concurred with the statement (M=4.01, SD=0.893). The implication is that better workforce planning and talent deployment made possible by reliable HR data can drive revenue growth. HRIS systems offer

real-time analytics and dashboards, enabling management to align HR strategies with revenue-generating business goals. According to Barach (2025), real-time access to employee metrics can help firms anticipate human capital needs, avoid talent gaps, and respond more agilely to market demands.

Regarding risk reduction, the application of HRIS was reported to have a notable impact (M=4.04, SD=0.963). This indicates a widespread perception that HRIS has minimized operational risks, particularly those associated with compliance, payroll accuracy, and data security. respondents further agreed that HRIS contributes to more timely service delivery (M-3.93, SD=0.931) This is consistent with the argument by AbdulKareem e al. (2024) that technology-enabled HR service delivery through employee self-service portals and process automation reduces delays, eliminates bureaucratic inefficiencies, and improves responsiveness. Respondents also agreed with the statement that Quality of services has varied due to application of HRIS (M=4.05, SD=0.912). This underscores the contribution of HRIS to improving the consistency and accuracy of services offered by the HR department, such as performance reviews, benefits administration, and training management.

4.5 Inferential Statistics

The research used inferential analysis to determine the nature of the link between the two variables. A multiple regression model was employed to establish the relationship between organizational performance and the dependent variable, human capital management, and to find the direction and strength of the relationship using Pearson correlation coefficients.

4.5.1 Correlation analysis

This research set out to determine how each independent variable related to the dependent one.

Table 14: correlation analysis

		e-training	e-appraisal	e-payroll	e-recruitment	Performance
e-training	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	128				
e-appraisal	Pearson Correlation	0.000	1			
	Sig. (2-tailed)	0.228				
	N	128	128			
e-payroll	Pearson Correlation	0.024	0.025	1		
	Sig. (2-tailed)	0.001	0.000			
	N	128	128	128		
e-recruitment	Pearson Correlation	0.551	0.212*	0.010	1	
	Sig. (2-tailed)	0.000	0.048	0.003		
	N	128	128	128	128	
Performance	Pearson Correlation	0.471	0.527	0.499	0.626	1
	Sig. (2-tailed)	0.000	0.000	0.007	0.000	

N	128	128	128	128	128

***. Correlation is significant at the 0.05 level (2-tailed).**

Source: Researcher (2025)

The results presented in Table 14 show that e-training information systems and performance have a favorable and statistically significant association ($r=0.471$; $p<0.05$). Because of the convenience and adaptability of online learning, this data reveals that e-training programs may boost productivity in the workplace. The research also found a strong correlation between e-appraisal information management systems and overall productivity, highlighting the importance of digital appraisal systems in improving performance assessments and giving timely feedback ($r=0.527$; $p<0.05$). Efficient electronic payroll systems ensure that salaries are processed accurately and promptly, leading to increased employee satisfaction and performance ($r=0.499$; $p<0.05$). The research also found that e-recruitment is positively correlated with organizational effectiveness ($p < 0.05$, beta coefficient = 0.626). The results show that online recruiting is a great tool for efficiently locating and hiring new employees. These results were in line with those of a research conducted by Chege (2023) on the Kenyan Judiciary. That study also indicated that e-training, by cutting down the time and money needed for conventional training techniques, greatly increased organizational performance. According to Kariuki (2023), medium-sized manufacturing enterprises in Nairobi County, Kenya, who use e-recruitment systems, are able to hire more efficiently and with higher quality. According to the research, digital recruiting tools made it possible to acquire talent more quickly and accurately. Likewise, Ngetich (2024) discovered a strong correlation between e-recruitment systems and organisational performance in a few Nakuru City commercial banks, suggesting that these technologies are vital for improving the quality of the personnel and the efficiency of institutions as a whole.

4.5.2 Diagnostics Test

Diagnostic tests were performed before hypothesis testing to confirm the accuracy and dependability of the study's findings. These tests included assessments for linearity, multicollinearity, autocorrelation, heteroscedasticity, and normality.

Linearity Test

Scatter plots showing comparisons between the dependent variable and the standardised predicted values are shown in Figure 4. The premise of linearity, that all independent variables should have a straight line connection with the result variable, was tested using this graphic.

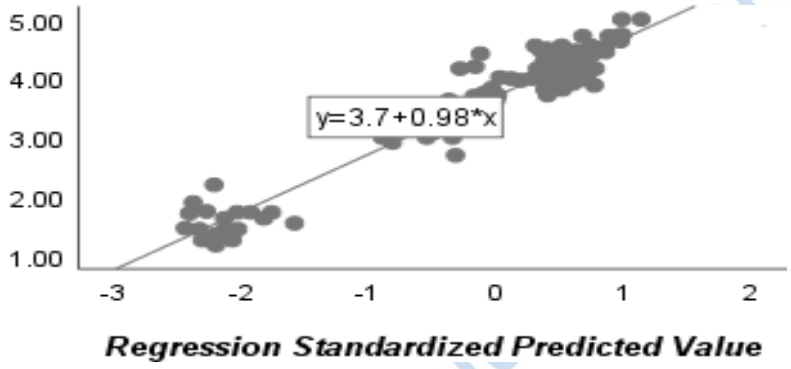

Figure 4: Linearity model

Source: researcher (2025)

HRIS and the standard projected regression values are clearly associated in a linear fashion, as shown by the scatter plot. Hence, the linearity assumption is satisfied by the model.

Normality Test

The distribution of the regression standardized residuals is shown in Figure 5, which is a histogram. Holcomb (2017) states that a near-normal distribution is indicated when the histogram form is very close to a bell curve. The results of the study's statistical analysis are supported by the finding that the standardized residuals follow a normal distribution.

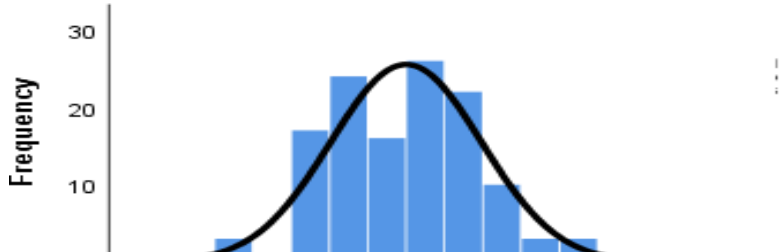

Figure 5: Normality histogram model

Source: Researcher (2025)

The measures for skewness and kurtosis for the main variables of the study are outlined in Table 15.

Table 15: Skewness and kurtosis for normal distribution

Skewness				Kurtosis		
Variables	Statistic	Std. Error	Z Value	Statistic	Std. Error	Z Value
Y	0.100	0.250	0.400	2.950	0.550	5.360
X1	-0.200	0.200	-1.000	2.100	0.400	5.250
X2	0.050	0.300	0.170	2.500	0.600	4.170
X3	-0.150	0.275	-0.550	3.200	0.500	6.400
X4	0.000	0.225	0.000	2.000	0.320	6.250

Table 15 clearly shows that the skewness and kurtosis z-values fall within the acceptable range of -1.96 to 1.96, aligning with the criteria for normal distribution. Furthermore, the kurtosis values, which range between 2.1 and 3.2, indicate a mesokurtic distribution suggesting a close approximation to normality. These results confirm that the variables in the study were normally distributed.

Multicollinearity Test

As seen in Table 19, Variance Inflation Factors (VIFs) were calculated for every independent variable in order to determine whether multicollinearity was present. A VIF value more than 1 indicates a degree of correlation among the predictors, while a VIF value less than 1 indicates

no multicollinearity (Field, 2018). VIF values exceeding 10 are generally viewed as a sign of serious multicollinearity. The results presented in Table 19 indicate that all VIF values are below 10, suggesting that while some multicollinearity exists, it is not at a problematic level.

Autocorrelation

Table 4.14 shows that the Durbin-Watson test in this investigation produced a score of 1.976, which is within the acceptable range of 1 to 3. Field (2018) states that if the number is near to 2, it indicates that the dataset has low or no autocorrelation. Therefore, the results indicate that the data did not exhibit significant autocorrelation, supporting the reliability and impartiality of the regression estimates.

Test for heteroscedasticity

To see how the residuals varied throughout the whole range of the independent variables' values, we put them through Levine's test. The test findings are summarized in Table 16.

Table 16: Test for heteroscedasticity: Levene's test

Variables	Statistic	df1	df2	Sig.
e-training	5.204	3	128	.054
e-appraisal	3.841	3	128	.087
e-payroll	2.030	3	128	.157
e-recruitment	1.705	3	128	.194

According to Field (2018), all of the independent factors that were associated with organisational success had p-values above than the 0.05 threshold, as shown in Table 16. Given that the residual variances were not significantly different between the groups, we may conclude that the variances were homogeneous. The diagnostic tests confirmed that none of the key assumptions were violated, validating the use of parametric testing methods. As a result, the statistical analyses performed can be considered reliable and accurate, providing a strong basis for confidence in the findings.

4.5.3 Multiple Regression Analysis

Finding out how IBM Kenya's HRIS affected their productivity was the driving force for this research. The four independent variables—e-training, e-appraisal, e-payroll, and e-recruitment—were subjected to a multiple linear regression analysis after a statistically significant positive correlation was found. Table 17 contains the model summary, Table 18 the ANOVA analysis, and Table 19 the entire regression model, all of which give the findings.

Table 17: Model summary

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate	Durbin- Watson
1	.873[a]	.763	.734	.27455	0.676

A correlation value of R = 0.873 was found in the research, which Ms that the independent factors are good predictors of the dependent variable. According to the regression model, 76.2% of the variance in organizational performance can be explained by e-training, e-appraisal, e-payroll, and e-recruitment (coefficient of determination: $R^2 = 0.762$). It is probable that variables outside the purview of this investigation account for the remaining 23.8% of the variance. Based on these results, it seems that the HRIS components have a significant beneficial impact on organizational performance.

Table 18: ANOVA Model

Model		Sum of Squares	df	M Square	F	Sig.
1	Regression	119.763	4	29.941	397.213	.000[b]
	Residual	9.121	124	.075		
	Total	128.884	128			

a. Dependent Variable: Performance

b. Predictors: (Constant), e-training, e-appraisal, e-payroll, and e-recruitment

We used an ANOVA to check whether the regression model was a good match for the dataset. The study's F-value was 397.213 (df = 124, 4) and p-value was less than 0.05, indicating a statistically significant association between the dependent and independent variables. The results show that the regression model accurately portrayed the data. Electronic training, evaluation, payroll, and recruiting were all parts of the HRIS that were shown to significantly affect organizational performance according to the findings of the ANOVA. International Business Machines Corporation Kenya's performance is highly impacted by these independent factors, according to the research.

Table 19: Coefficients

Model		Unstandardized Coefficients		T	Sig.	Collinearity Statistics	
		B	Std. Error			Tolerance	VIF
1	(Constant)	0.578	103	-.406	685		
	e-training	0.414	.093	6.966	.000	.074	2.3435
	e-appraisal	0.518	.123	1.387	.008	.047	1.2343
	e-payroll	0.487	116	1.882	.042	.050	2.0112
	e-recruitment	0.589	.068	.007	.049	.147	4.0796

a. Dependent Variable: organizational performance

The results of the regression study show that e-management systems for training, evaluation, payroll, and recruiting may predict organizational success. At the 0.05 level of significance, the independent variables provide a substantial contribution to the model, according to the coefficients in table 19.

To explain the regression analysis; the regression function $Y = \beta 0 + \beta 1X1+\beta 2X2+\beta 3X3+\beta 4X4 + \varepsilon$ was used whereby,

β0=regression coefficient

β1, β2, β3 and β4, slopes of the regression equation

Y= Performance in IBM

X1 = E-training system

X2 = E-appraisal system

X3=E- Appraisal system

X4=E- recruitment system

e = error term

The findings from the regression model were interpreted as

Y=0.578+0.414X1+0.518X2+0.487X3+0.589X4

In other words, with all other factors held constant, an increase of one unit in e-training management leads to a 0.414 point boost in organizational performance, an increase of one unit in e-appraisal management leads to a 0.518 point boost, and an increase of one unit in e-payroll management would result in a 0.487 point boost. Organizational performance would also rise by 0.589 points for every additional unit of e-recruitment management.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

This section provides a synopsis of the study's results as well as its conclusions, suggestions, and calls for more research.

5.2 Summary

To determine how International Business Machines Corporation Kenya's HR information system affected the company's productivity, this study used a descriptive research strategy. All management and non-management staff members at IBM Kenya were considered part of the study's target group. A structured questionnaire was used to gather data; 128 out of 136 questionnaires were actually collected. Presented below is a dispassionate synopsis of the results.

5.2.1 E-Training Management and Organizational Performance

The study found that structured online training modules boost staff productivity, with respondents strongly agreeing. Such training improved staff production by offering organized and accessible content. Although less highlighted, using learned abilities in employment responsibilities also received positive comments, demonstrating the relevance of relevant and practical information. Mobile learning was essential to e-training. Due to convenience and accessibility, respondents said mobile training materials improved their performance. The flexibility of mobile learning allowed employees to train at their own pace, which improved work efficiency. Though rated lower than other components, online testing was deemed a good way to measure training content understanding. However, rapid feedback from online exams helped employees improve their skills and apply knowledge more effectively. The study revealed a statistical relationship between e-training information systems and performance, which is positive and significant ($r=0.471$; $p<0.05$).

4.2.2 E-Appraisal Management and Organizational Performance

The study revealed that e-appraisal systems improve performance expectations and goal planning, according to the research. Respondents highly agreed that these approaches promote job objective understanding and staff performance. E-appraisal systems also improved employee-manager communication, bridging feedback gaps and encouraging collaboration. Respondents liked receiving real-time feedback from e-appraisal systems. This instant feedback helps staff grow and reinforces good conduct. Since rapid performance reviews keep employees informed and interested, they were also found to motivate. Ratings for online ranking mechanisms were mixed but positive. They were seen as fair and transparent performance evaluation methods by employees, boosting appraisal credibility. Performance rankings, however lower in score, were considered as constructive competition that encouraged staff to perform better. The study established a positive significant relationship between e-appraisal information management system ($r=0.527$; $p<0.05$).

5.2.3 E-Payroll and Organizational Performance

Survey respondents agreed that salary report automation improves payroll processes by reducing human error. E-payslips also improve openness and trust in payroll management by reassuring employees of their pay's fairness and accuracy. Access to timely and detailed wage information was likewise well perceived, with slightly mixed reactions. This implies that while most employees prefer rapid access to financial details, experience may vary. Overall, employees' financial planning and decision-making appear to have improved. Attendance data integration with the payroll system improves accuracy and reduces payroll disputes by ensuring accurate attendance records. In addition, real-time attendance tracking improved labor management and staff productivity. Finally, e-payslips were praised for their secure and convenient wage information access and reduced payroll-related questions. This improves operational efficiency by allowing HR departments to concentrate on strategic responsibilities.

Results showed a favourable and statistically significant correlation between e-payroll systems and ($p<0.05$; $r=0.499$).

5.2.4 E-Recruitment and Organizational Performance

Survey respondents strongly agree that the company's website-based e-recruitment approach attracts quality applicants. The corporate website's job advertisements were also well-rated, indicating that the company can reach a diversified prospect pool. The application tracking system (ATS) was praised for speeding up hiring. Automation reduces prejudice and ensures consistency, which respondents said makes applicant evaluation fair and transparent. The study also concluded that digital resume storage and retrieval is convenient and efficient for applicant information management. This function streamlines shortlisting and reduces administrative work. Also noted was the e-recruitment system's assistance of workforce planning and talent management. Participants agreed that digital record-keeping improves long-term strategic HR responsibilities including workforce analytics and succession planning, making it a valuable tool beyond hiring. The study further established a positive correlation between e-recruitment and organizational performance ($r=0.626$; $p<0.05$).

5.3 Conclusion

5.3.1 E-Training and Organizational Performance

The study concludes that structured online training modules play a pivotal role in enhancing employee productivity. Respondents strongly agreed that when training materials are well-organized and easily accessible, they significantly support knowledge acquisition and practical skill application in the workplace. This emphasizes the importance of investing in comprehensive e-learning programs that are aligned with job requirements. Additionally, mobile learning and instant feedback from online assessments further contribute to improved performance by offering flexibility, continuous engagement, and timely skill reinforcement.

5.3.2 E-Appraisal and Organizational Performance

The study concluded that adopting digital appraisal systems greatly improves the understanding of performance expectations and the process of goal setting. Effective communication of objectives is crucial for team members to grasp their expectations, which directly enhances overall performance. Furthermore, the implementation of e-appraisal tools enhances communication between employees and managers, enabling more prompt and constructive feedback. Immediate feedback, especially, enables individuals to swiftly modify their performance, resulting in enhanced motivation and productivity. Moreover, the clarity and equity provided by the digital appraisal system contribute to establishing trust and responsibility, which are essential for nurturing a cooperative and high-achieving work environment.

5.3.3 E-Payroll and Organizational Performance

The study concluded that e-payroll improves salary management systems' accuracy, transparency, and efficiency. Most respondents agreed that salary report automation lowers human error, enhancing payroll processing dependability. Transparency and confidence between management and employees are enhanced by electronic pay slips. Transparency improves employee morale and organizational culture. The ability to access fast and detailed salary reports helps employees make informed financial decisions. Attendance data integration into the e-payroll system minimizes conflicts and improves wage computation. It also improved staff management and productivity by tracking attendance in real time. E-payslips' ease and security reduce administrative strain, letting HR professionals focus on strategic responsibilities.

5.3.4 E-Recruitment and Organizational Performance

The study concludes that the website-based e-recruitment system significantly enhances recruitment efficiency by attracting a diverse pool of qualified applicants. The system’s job

postings improve reach to both active and passive job seekers, while the application tracking system (ATS) reduces hiring time and streamlines processes. The automation of candidate evaluation ensures fairness and transparency, supporting objective decision-making. Additionally, e-resume storage and retrieval offer convenience and reduce administrative burdens, while digital record-keeping aids in long-term talent management and workforce planning.

5.4 Recommendation

The study recommends enhancing the practical application of online training modules by making them more job-relevant and aligned with real-world scenarios. Incorporating interactive elements and simulations could improve skill transfer. Additionally, mobile learning should be further integrated with real-time tasks to better connect training with daily responsibilities. Finally, providing more detailed and personalized feedback on online tests could strengthen the learning process, helping employees improve their skills and performance.

Also, the study recommended that the organization focus on enhancing the online ranking mechanisms within the e-appraisal system, as this area received the lowest score. While employees view the system as fair and transparent, there is an opportunity to increase its effectiveness. To address this, the organization could ensure that the ranking system is communicated more clearly, highlighting the criteria used to evaluate performance. Additionally, offering more personalized insights or feedback on performance rankings could help employees better understand their position and how they can improve. This would further motivate employees by clarifying the connection between their efforts and outcomes, reinforcing the competitive element while enhancing overall engagement and performance.

The study further recommends focusing on improving access to timely and detailed salary reports. While the overall perception of the e-payroll system is positive, the slightly varied

responses suggest there may be inconsistencies or delays in accessing detailed reports. To address this, the organization could enhance the system's user interface to ensure that salary reports are easy to access and download in a timely manner. Additionally, providing employees with more comprehensive details in their reports, such as breakdowns of deductions and overtime, could help improve clarity and confidence. Streamlining the process for generating and retrieving these reports would not only support employees in making informed financial decisions but also reduce payroll-related inquiries, ultimately improving operational efficiency.

Additionally, the study recommends enhancing the application tracking system (ATS) and e-resume storage and retrieval. Improving the ATS by integrating it with other HR systems, enhancing search functionality, and adding better reporting features could streamline the recruitment process. Additionally, implementing advanced algorithms or AI-based tools for better candidate-role matching could further improve efficiency and ensure a better alignment between candidates' skills and job requirements.

5.5 Suggestions for Further Research

The impact of IBM Kenya's human resource management system on the company's performance was the focus of this research. In order to confirm whether the beneficial outcomes shown in IBM Kenya are transferable to other settings, the study recommends that future research examine the impact of HRIS implementation on employee happiness and retention in a different industry.

REFERENCES

Al Haziazi, M. (2020). The role of digital HR systems in shaping corporate performance in Oman. *Oman Journal of Administrative Studies*, *11*(8), 446–458.

Albaz, M. (2022). The impact of virtual learning programs on employees' work-life experience: A practical investigation. *Journal of Workplace Innovation and Organizational Practices*, *2*(2), 55–70.

Balogun, J. E., & Enemuo, C. F. (2022). Evaluating web-based staff training among HR officers in institutional development centers. *Review of Human Capital Advancement*, *2*(2), 123–130.

Bergin, T. (2018). Essentials of mixed methods research: A comprehensive guide for integrated analysis. *Torrossa Academic Resource Center*.

Bitrián, P., Buil, I., Catalán, S., & Hatfield, S. (2023). Enhancing staff interaction with digital learning through game-based approaches. *Journal of Leadership and Employee Learning*, *21*(3), 100892.

Braun, V., & Clarke, V. (2022). Structuring and applying thematic methods in qualitative inquiries. *Journal of Interpretive Psychological Research*, *9*(1), 3–15.

Chavuya, K. J. (2021). Effects of HR IT systems on ministerial efficiency in Kenya. [Doctoral dissertation, Kenyatta University]. *Kenyatta University Digital Repository*.

Daniel, C. O. (2019). How e-recruitment strategies support better business results. *International Business and Strategy Research Journal*, *3*(3), 195–206.

Emerson, R. W. (2024). Ensuring consistency and soundness in research measurements. *Journal for Visual Impairment Research*, *118*(4), 280–281.

Epebinu, O., & Abiola-Oke, E. (2023). Post-pandemic digital learning and its influence on organizational outcomes in Nigeria. *Journal of Technological Advancements and Research Impact*, *8*(6), 1296–1305.

Farouk, D. A. (2022, October). Digital learning systems and employee efficiency: An impact analysis. In *Proceedings of the 30th RAIS Global Conference on Humanities and Social Research* (pp. 30–41). Scientia Moralitas Institute.

Iliyasu, R., & Etikan, I. (2021). Understanding the differences between quota and stratified sampling in statistical research. *International Biostatistics Review*, *10*(1), 24–27.

Irshad, M., Iftikhar, A., Jabeen, M., & Jabeen, N. (2024). Organizational efficiency gains from digital hiring platforms: A data-driven analysis. *Global Journal of Corporate Education and Administration*, *4*(2), 79–97.

Isic, N. (2024). Innovation-led mergers: Evaluating acquisition targets in tech giants like Google and IBM. *University of Jyväskylä Digital Library*.

Ismail, F., Hazwani, N., Kee, K. Y. S., & Yussof, M. (2022). Linking digital training platforms to workforce productivity. *Journal of Business Technologies and Performance Insights*, *3*(1), 207–218.

Jatto, M. A. (2022). How online recruitment tools affect firm productivity. *Journal of Human Resource Value Creation*, *1*(1), 19–35.

Kumari, M. B. (2020). Human capital information systems and their influence on company success in Sri Lankan industries. [Doctoral dissertation, Eastern University, Sri Lanka].

Latpate, R., Kshirsagar, J., Kumar Gupta, V., & Chandra, G. (2021). Advanced perspectives on layered sampling strategies. In *Modern Sampling Theory* (pp. 37–53). Springer.

Marlow, C. R. (2023). Research techniques for generalist practice in social sciences. *Waveland Professional Research Press*.

Marwala, T. (2022). Leveraging Africa's potential through the fourth industrial revolution. *Pan Africa Digital Transformation Press*.

Mosonik, G. C., Sang, H., & Rop, W. (2022). An evaluation of online hiring and performance outcomes in Kenyan commercial banks. *Journal of Human Capital and Strategy*, *4*(2), 48–57.

Mpi, L. D., & Gabriel, J. M. (2021). Reviewing e-performance evaluations in Nigeria's private universities. *Strategic and Digital Business Review*, *6*(1), 87–102.

Mushumba, A., & Nyirenda, M. (2024). Evaluating HR information systems in Zambia's public sector: A focus on the Air Force. *African Journal of Public Sector Management*, *13*(1), 24–40.

Myint, C. Z. (2024). Organizational outcomes of digital recruitment platforms in AEON ORANGE Company. [Doctoral dissertation, MERAL Portal].

Njeru, E., & Muchelule, Y. (2024). HRISs and their effect on police efficiency in Kenya. *Journal of Public Service Performance and Reform*, *8*(3), 45–60.

Nwokeocha, I. M. (2024). Organizational expansion through modern appraisal strategies. *International Journal of Applied Education and Business Practice*, *2*(1), 18–31.

Nyamai, E. K., & Minja, D. (2023). Staff appraisal effects on KRA's organizational performance. *International Journal of Leadership and Governance Studies*, *1*(3), 272–287.

Okoh, J. I., Mijinyawa, A. A., Amahi, F. U., & Chukwuto, N. (2023). Electronic staff evaluations and productivity in Nigerian financial firms. *Journal of Banking Workforce Studies*, *2*(2), 137–152.

Olumoh, Y. A., Sanni, M., & Babalola, F. (2024). Payroll automation's impact on university hospitals in Nigeria. *Nigerian Financial Systems and Management Review*, *3*(1).

Pandey, P., & Pandey, M. M. (2021). Tools for conducting academic investigations. *Bridge Research Texts and Manuals*.

Pillai, R., & Sivathanu, B. (2022). HR analytics metrics and organizational growth trajectories. *International Review of Workforce Metrics and Efficiency*, *71*(7), 3009–3029.

Ronkoine, P. S., Nzioki, S., & Kiama, M. (2024). Influence of electronic hiring on performance at Kajiado County. *Journal of Public Sector Recruitment and Leadership*, *4*(2), 48–57.

Rukia, D. B., & Asuma, M. N. (2022). How digital learning tools influence output at the Communications Authority of Kenya. *Journal of Technology and Institutional Effectiveness*, *4*(2), 91–98.

Sultana, S. (2023). The digitization of hiring processes and its effects on Hishabee Technology's efficiency. *South Asian Journal of Organizational Advancement*.

Bangur, R. M., & Faiz, M. A. (2024). Effects of virtual employee development on job performance in the UAE's service sector. *Journal of Contemporary Human Resource Strategy*, *13*(3).

Clark, R. C., & Mayer, R. E. (2023). Scientific principles for effective e-learning design. *Instructional Design Series, Wiley Publishing*.

Ulanday, M. L., Centeno, Z. J., Bayla, M. C., & Callanta, J. (2021). Digital learning in the post-pandemic era: Student adaptability and engagement. *Asian Distance Learning Review*, *16*(2).

Surapaneni, K. M. (2024). Key strategies for effective learner feedback in group settings. *International Journal of Physiology Education*, *48*(4), 752–755.

Agarwal, A. (2021). Performance management through balanced scorecard using QFD techniques. *Journal of Strategic Business Systems*, *18*(3), 353–367.

Nurbani, K., & Meiyanti, F. (2019). Linking system functionality and user outcomes. *Journal of Business Information and Analytics*, *21*(2).

Wesolowski, P. (2016). Online hiring platforms and applicant fairness perceptions in Canadian public jobs. [Doctoral dissertation, University of Ottawa].

Wijaya, C. N., Mustika, M. D., Bulut, S., & Bukhori, B. (2023). Digital hiring and employer branding impact on Indonesian millennials. *Psychology and Career Development Journal*, *13*, 1062525.

Adawiah, A., & Putra, A. H. P. K. (2024). Job seekers' perception of transparency and efficiency in digital hiring. *International Management and Human Capital Review*, *14*(5), 126–139.

Škudienė, V., Vezeliene, G., & Stangej, O. (2020). E-HRM strategies for value generation in global enterprises. In *Handbook of HR Innovation Management* (pp. 140–166). Edward Elgar Publishing.

Sürücü, L., & Maslakci, A. (2020). Assuring measurement reliability and credibility in quantitative research. *International Journal of Business Research Methods*, *8*(3), 2694–2726.

Ullah, Z., Ahmad, N., Scholz, M., Ahmed, B., Ahmad, I., & Usman, M. (2021). Digital performance appraisal credibility in nonprofits: A case from the developing world. *Sustainability Studies Journal*, *13*(4), 2109.

Varpio, L., Paradis, E., Uijtdehaage, S., & Young, M. (2020). Clarifying the use of theory and frameworks in research writing. *Academic Research and Methodology*, *95*(7), 989–994.

Vizcaíno, A. D. J., & Aguilar Ruiz, A. (2024). How purpose-driven innovation mediates autonomy and experimentation culture. *Journal of Experimental Organizational Management*, *25*(53), 123–154.

Wibawa, H. W., Ali, H. M., Permada, D. N. R., & Yasin, V. (2022). Exploring digital payroll systems and their role in strengthening internal oversight. *Global Review of Information Systems and Controls*, *1*(1), 78–101.

APPENDICES

Appendix I: Informed Consent

EFFECT OF HRIS ON ORGANIZATIONAL PERFORMANCE: A CASE OF INTERNATIONAL BUSINESS MACHINES CORPORATION (IBM) KENYA

Dear Participant,

You are invited to take part in a research study titled *"Effect of HRIS on Organizational Performance: A Case of International Business Machines Corporation (IBM) Kenya."* I am currently pursuing a Master of Business Administration at Mount Kenya University and am conducting this study as part of my final research project.

The purpose of this research is to look at IBM Kenya and how their performance has changed after they implemented an HRIS. In order to collect information on HRIS procedures and how they impact organisational results as a whole, we have included a questionnaire.

Anyone may choose not to take part in this research if they so choose. You are not obligated to answer any questions or participate in any way if you do not choose to. Outside of what one might encounter when going about one's regular day, no dangers are apparent. Complete anonymity and confidentiality will be maintained for all replies. No personally identifiable information will be revealed; all data will be retained securely and evaluated in aggregate form. Personal information will remain confidential and only accessible to the research staff.

Your participation will not directly benefit you, but it has the potential to shed light on HR practices and guide research and analysis in future organisational settings like yours.

Please make every effort to fill out the survey completely if you want to participate. It is estimated that the survey will need about 35 minutes of your time. Please submit the completed form as soon as possible to help us finish this study on schedule.

For any questions or further clarification, feel free to contact the principal investigator, Samuel Mutugi Gichuru, at +254 731 940278. For concerns regarding your rights as a participant, you may contact the Chairperson, Ethical Review Committee, Mount Kenya University, P.O Box 342-01000, Thika.

Thank you for considering participation in this important study.

Consent to Participate

I have had the chance to ask questions and have read and comprehended the material that has been supplied. It is my understanding that my involvement is entirely optional and that I am

free to withdraw at any time without cause or blame. I acknowledge that a hard copy of this permission form will be sent to me.

I thus provide my informed consent to take part in this research by signing below.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

Appendix II: Questionnaire

Part A: Demographic Characteristics

1. Gender

   [ ] Male [ ] Female

2. Age

   [ ] 18-28. [ ] 38-45. [ ] Above 55 years

   [ ] 28-38. [ ] 45-55

3. Working experience in IBM?

   [ ] Under 5 years [ ] 11 years or more

   [ ] 6-10 [ ] 11-15 years

   [ ] over 15 years

4. Position in IBM? …….

Part B: e-Training System

5. Kindly indicate your level of agreement with the following statements by ticking (✓) the correct response. 1- strongly disagrees, 2-disagree, 3 -neither agree nor disagree, 4-agrees, 5-strongly agree.

Statements	**5**	**4**	**3**	**2**	**1**
The availability of structured online training modules has improved employee productivity.					
The use of online training modules has enhanced employees' ability to apply learned skills in their job roles.					
Mobile learning has increased employees' access to training materials, leading to improved performance.					

The flexibility of mobile learning allows employees to complete training at their convenience, enhancing their efficiency at work.					
Online testing effectively assesses employees' understanding of training content					
The instant feedback from online tests helps employees improve their skills and knowledge application in their roles.					

Part D: E-Appraisal system

6. Kindly indicate your level of agreement with the following statements by ticking (✓) the correct response. 1- strongly disagrees, 2-disagree, 3 -neither agree nor disagree, 4-agrees, 5-strongly agree.

Statements	**5**	**4**	**3**	**2**	**1**
Real-time feedback through e-appraisal management helps employees improve their performance promptly.					
The availability of instant performance reviews enhances employee motivation and productivity.					
Online ranking in e-appraisal management provides a fair and transparent evaluation of employee performance.					
The visibility of performance rankings encourages employees to strive for excellence in their job roles.					

E-appraisal management has improved communication between employees and managers					
The use of digital appraisal systems enhances clarity in performance expectations and goal setting.					

Part E: e-Payroll Information System

7. Kindly indicate your level of agreement with the following statements by ticking (✓) the correct response. 1- strongly disagrees, 2-disagree, 3 -neither agree nor disagree, 4-agrees, 5-strongly agree.

Statements	**5**	**4**	**3**	**2**	**1**
The automated salary reports generated by the e-Payroll system improve payroll accuracy and reduce errors.					
Access to timely and detailed salary reports enhances financial planning and decision-making for employees.					
The availability of e-pay slips improves transparency in salary processing and employee trust in payroll management.					
E-pay slips provide employees with easy and secure access to their salary details, reducing payroll-related inquiries.					
The integration of attendance data in the e-Payroll system ensures accurate salary computation and minimizes disputes.					
Real-time tracking of attendance through the e-Payroll system enhances workforce management and productivity.					

Part E: e-Recruitment System

8. Kindly indicate your level of agreement with the following statements by ticking (✓) the correct response. 1- strongly disagrees, 2-disagree, 3 -neither agree nor disagree, 4-agrees, 5-strongly agree.

Statements	**5**	**4**	**3**	**2**	**1**
The e-recruitment system on the company website has improved the efficiency of attracting qualified job applicants.					
The availability of job postings on the company website enhances company's ability to reach a diverse talent pool.					
The application tracking system streamlines the recruitment process, reducing hiring time and improving efficiency.					
The automated tracking of applications ensures fair and transparent candidate evaluation and selection.					
The e-recruitment system effectively stores and retrieves e-resumes, facilitating quick access to potential candidates.					
The digital record-keeping of e-resumes enhances workforce planning and talent management					

Part F: IBM PERFORMANCE

9. Kindly indicate your level of agreement with the following statements by ticking (✓) the correct response. 1- strongly disagrees, 2-disagree, 3 -neither agree nor disagree, 4-agrees, 5-strongly agree

Statements	**5**	**4**	**3**	**2**	**1**

employees effectively utilize technology and resources to enhance overall productivity.					
The company's work processes and automation have significantly improved employee efficiency and output.					
Workers are content with their work setting and the possibilities for advancement it provides.					
The organization provides adequate support and incentives to enhance employee morale and job satisfaction.					
consistently meets customer expectations through high-quality products and services.					
Customer feedback is effectively used to improve service delivery and overall customer experience.					

10. Based on what you've read thus far, what further thoughts do you have on IBM's performance?

……

……

……

11. If you could make one more proposal to boost IBM's efficiency, what would it be?

……

……

……

Appendix III: ERC Certificate

Mount Kenya University

REF: **MKU/ISERC/4902** Date: 03 April 2025
TO: **SAMUEL MUTUGI GICHURU**
REG: **MBA/2022/32928**

Dear Sir/Madam,

RE: EFFECT OF HUMAN RESOURCE INFORMATION SYSTEM ON ORGANIZATIONAL PERFORMANCE: A CASE OF INTERNATIONAL BUSINESS MACHINES CORPORATION (IBM) KENYA

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **3624.** The approval period is **03/04/2025 - 02/04/2026.**

This approval is subject to compliance with the following requirements;

i. Only approved documents including informed consents, study instruments, MTA will be used
ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
v. Clearance for export of biological specimens must be obtained from relevant institutions
vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://research-portal.nacosti.go.ke and also obtain other clearances needed.

Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

MOUNT KENYA UNIVERSITY
ETHICS REVIEW COMMITTEE
P. O. Box 342 - 01000,
THIKA

Main Campus, General Kago Road, P.O. Box 342-01000 Thika.
Tel: +254 20 287 8000, Cell: +254 709 153 000
Email: info@mku.ac.ke, Web: www.mku.ac.ke
Chartered and ISO 9001 : 2015 Certified

Appendix IV: Introduction Letter

Mount Kenya University

DIRECTORATE OF GRADUATE STUDIES

MBA/2022/32928

3rd April, 2025

National Commission for Science Technology & Innovation (NACOSTI)
Off Waiyaki Way, Upper Kabete,
P.O Box 30623- 00100
NAIROBI, KENYA

Dear Sir/Madam,

RE: SAMUEL MUTUGI GICHURU – REGISTRATION NO. MBA/2022/32928

The purpose of this letter is to introduce the above named student who is pursuing **Master of Business Administration** in the department of **Accounting and Finance** in the school of **Business and Economics.**

The title of the research is **"Effect of Human Resource Information System on Organizational Performance: A Case of International Business Machines Corporation (IBM), Kenya."** It has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **April, 2025 and June, 2025.**

Any assistance accorded to the student will be highly appreciated.

Thank you.

Mount Kenya University
P.O. Box 342 - 01000, THIKA
Office of the Director,
Graduate Studies

Dr. Samuel M. Karenga, PhD
Director, Graduate Studies
Enc.

Appendix V: Researcher Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 552039

Date of Issue: 10/May/2025

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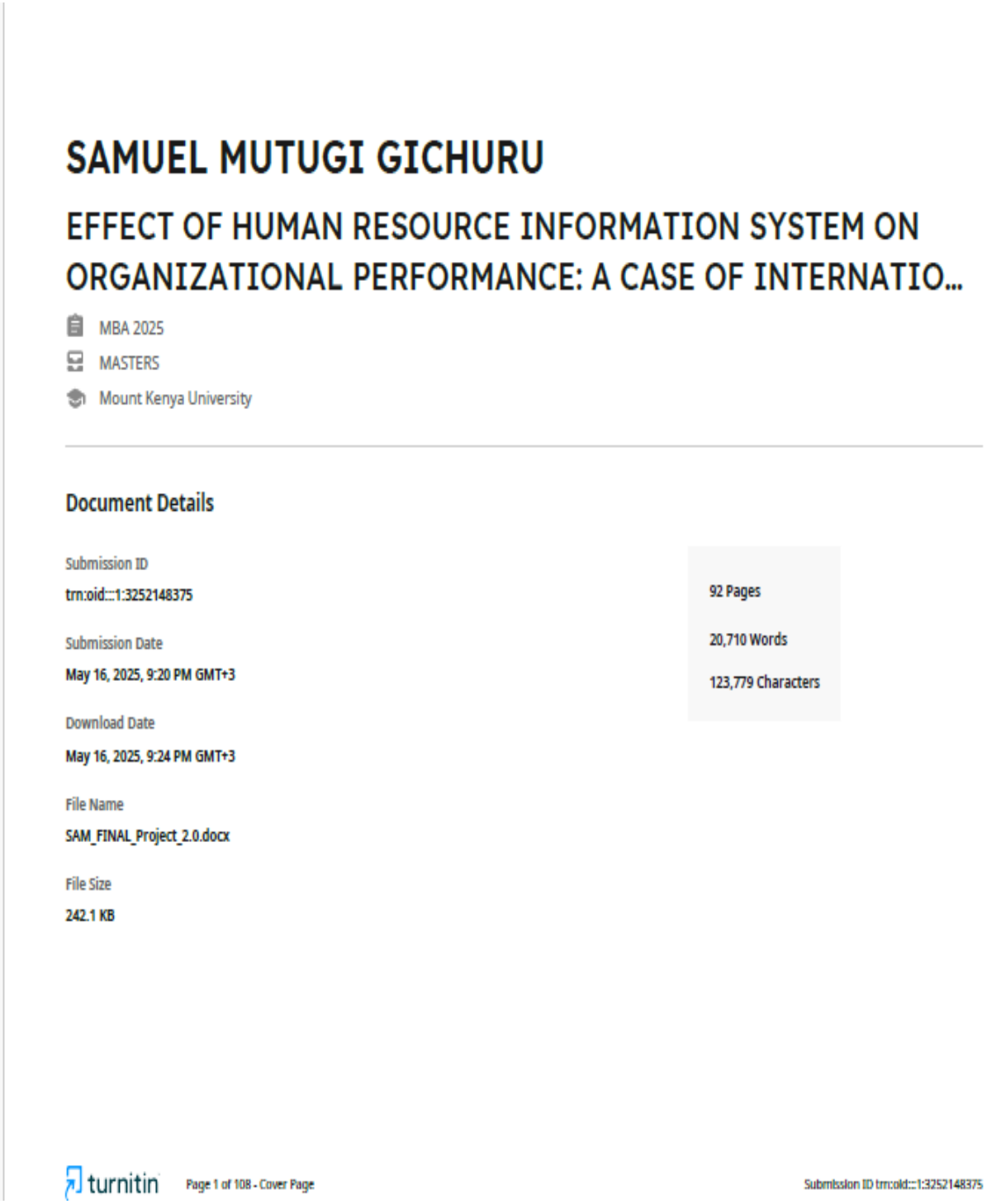

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