EFFECT OF ICT COMPETENCY ON EMPLOYEES' PERFORMANCE AT HIGHER EDUCATION STUDENT'S LOAN BOARD IN TANZANIA

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION

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CERTIFICATION

The undersigned certifies that they have read and hereby recommends for acceptance by The Open University of Tanzania a dissertation titled: **"Effect of ICT Competency on Employees' Performance at Higher Education Student's Loan Board",** in partial fulfilment of the requirements for the Degree of Master of Business Administration of the Open University of Tanzania.

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DECLARATION

I, **Sussie R Mahunnah,** declare that the work presented in this dissertation is original. It has never been given to any other University or Institution. Where other people's works have been used, references have been provided. It is in this regard that I declare this work as originally mine. It is hereby presented in partial fulfilment of the requirements for the Degree of Master of Business Administration of the Open University of Tanzania

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Signature

…………………………

Date

DEDICATION

I dedicate this dissertation to my darling husband Stephen Shayo and my children Lorence, Lorraine and Lorah.

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ABSTRACT

This study determined the effect of ICT competency on employees' performance at higher education student's loan board in Tanzania. The study was guided by three objectives; to determine the relationship effect of information management, digital communication and internet skills competencies on employee performance at HESLB. The resource-based view theory and technological acceptance model were employed. Positivist research and quantitative approach were applied in this study. Explanatory research design was equally used. A sample of 103 respondents was stratified random sampled from a population of 134 higher education student loan board members in Tanzania. Data collection was conducted only through structured questionnaires. Descriptive statistics and multiple regression analysis served as instruments for data analysis. The study revealed that all independent variables information management competency, digital communication competency, and internet skills competency exhibited a positive and significant correlation with employee performance at HESLB. In conclusion, the study highlights that ICT competency plays a significant role in enhancing employee performance at the Higher Education Student's Loan Board emphasizing the need for targeted training and infrastructure improvements to foster greater efficiency and effectiveness in organizational operations. Therefore, the study recommends that HESLB should invest in targeted information management training programs. Also, HESLB should prioritize digital communication skills training to improve employees' proficiency. Lastly, HESLB should focus on enhancing employees' internet skills competency.

Keywords: ICT Competency, Information Management Competency, Digital Communication Competency, Internet Skills Competency, employee performance.

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LIST OF ABBREVIATIONS

DCC	Digital Communication Competency
EP	Employees Performance
HCMIS	Human Capital Management Information System
HESLB	Higher Education Students' Loans Board
HQ	Headquarters
HROs	Human Resource Officers
ICT	Information and Communications Technology
IMC	Information Management Competency
ISC	Internet Skills Competency
IT	Information Technology
LMS	Loan Management Solution
OLAs	Online Loan Application and Management System
PEOU	Perceived Ease of Use
PU	Perceptions of Perceived Usefulness
RBV	Resource Based View
SEM	Structural Equation Modelling
SEM PLS	Structural Equation Modeling - Partial Least Square
SPSS	Statistical Package for Social Scientists
TAM	Technology Acceptance Model

CHAPTER ONE

INTRODUCTION

1.1 Chapter Overview

This chapter presents contextual information and articulates the problem statement that initiated the study. Additionally, it delineates the research aims, research hypothesis, and significance of the study, concluding with an overview of the proposal's organization.

1.2 Background of the Study

Employee performance constitutes a critical element to consider in discussions of organizational performance, however it is not the sole determinant (Asbari et al., 2021; Tashtoush et al., 2022). Employee performance is essential to the overall success of the firm across several sectors. Employee performance refers to an individual's capacity to achieve work-related objectives and meet expectations in alignment with established work standards (Abireza & Faris, 2022). Nawafleh (2018) defines employee performance as the efficiency and effectiveness of employees in attaining company goals and objectives. Employee performance is crucial as it enables firms to attain their objectives and foster a healthy work environment (Salihu et al., 2021).

Employee performance management is crucial for both enterprises and employees (Budur & Poturak, 2021). Consistent employee performance enhances organizational effectiveness. Conversely, it enables employees to recognize their development, fostering a sense of satisfaction over their advancement over time. It

additionally assists them in establishing new objectives (Narayanamurthy & Tortorella, 2021). Employee performance within a business is predominantly influenced by the extent of employees' Information and Communications Technology (ICT) proficiency (Emami et al., 2019).

ICT competency significantly contributes to enhancing employee performance (Oyedipe & Popoola, 2019). It encompasses individuals' capacity to effectively utilize digital technology, communication tools, and networks to address information challenges and achieve business objectives (Emami et al., 2019). Global scholarly research indicates that ICT competency influences employee performance via Information Management Competency, Digital Communication Competency, and Internet Skills Competency (Marsh, 2021; Emami et al., 2019; Oyedipe & Popoola, 2019). These parameters are based on the Technology Acceptance Model (TAM) (Emami et al., 2019). Within the framework of the Higher Education Students' Loans Board (HESLB), staff performance continues to improve (Ngowo, 2020).

Employee performance is seen as the outcomes of individual contributions inside a business. Nonetheless, the impact of ICT expertise on staff performance at HESLB remains little understood (Mtaita et al., 2021). The study aims to examine how employees' competency in Information and Communication Technology (ICT) influences their performance at the Higher Education Students' Loan Board (HESLB) in Tanzania, with the goal of identifying whether improved ICT skills can enhance efficiency, service delivery, and overall organizational effectiveness.

1.3 Statement of the Problem

In the contemporary landscape of education administration and management, the integration of Information and Communication Technology (ICT) has become a pivotal factor in enhancing operational efficiency, communication, and service delivery (Mtaita *et al.,* 2021; Marsh, 2021). The Higher Education Students' Loan Board (HESLB) plays a critical role in providing financial support to students pursuing higher education, making its operational efficiency and effectiveness paramount. However, as the HESLB transitions towards a more technology-driven approach, it becomes crucial to investigate the extent to which employees' ICT competency influences their performance within the organization.

Empirical evidence reveals a lack of consensus among experts regarding the correlation between ICT competency and employee performance. Several research indicate that cognitive competence, technical proficiency, and ICT proficiency have a positive and significant correlation with employee performance (Marsh, 2021; Emami et al., 2019; Oyedipe & Popoola, 2019). Other scholars indicate that ICT proficiency did not significantly impact employees' performance (Pitafi et al., 2020; Mardiyah & Purba, 2019).

While the potential benefits of ICT implementation are widely acknowledged, challenges related to employees' ICT competency might hinder its optimal realization (Emami *et al.,* 2019; Oyedipe & Popoola, 2019). The problem lies in the uncertainty surrounding how varying levels of ICT competency among HESLB employees affect their job performance and the overall success of the organization's

mission. Consequently, the following specific issues merit investigation: Assessment of Current ICT Competency Levels: Understanding the existing ICT skillset among HESLB employees is vital to identifying gaps that may impede their ability to utilize technology effectively. The extent to which employees are equipped with the necessary ICT skills and knowledge is a critical concern. In light of these concerns, a comprehensive exploration of the effect of ICT competency on employees' performance at the Higher Education Students' Loan Board is necessary (Hentschke et al.,2023).

This study seeks to shed light on the relationship between ICT competency and employee performance, addressing the identified problem areas and ultimately offering insights that can guide strategies for enhancing ICT skills, operational efficiency, and service delivery within the organization. Academics possess differing perspectives on the relationship between ICT competencies and professional achievement. The differing results among experts created a research gap that needed to be addressed. This study aims to investigate the impact of ICT competency on employee performance at the Higher Education Students' Loans Board (HESLB).

1.4 General Objective

The primary aim of this study is to ascertain the impact of ICT competency on employee performance at the Higher Education Students' Loans Board.

1.5 Specific Objectives

i. To determine the relationship effect of information management competency on employee performance at HESLB

ii. To determine relationship effect of digital communication competency on employee performance at HESLB

iii. To determine the relationship effect internet skills competency on employee performance at HESLB.

1.6 Significance of the Study

The study examining the effect of Information and Communication Technology competency on employees' performance at the Higher Education Students' Loan Board holds substantial significance in the context of contemporary education administration and service delivery. The outcomes of this study are anticipated to contribute valuable insights and benefits to multiple stakeholders, including the organization itself, its employees, students, and the broader higher education sector. The significance of the study can be outlined as follows;

The study's findings provided a comprehensive understanding of the impact of ICT competency on employee performance within HESLB. By identifying areas of improvement and understanding how technology proficiency influences operational efficiency, the organization can strategically align its resources to enhance service delivery, streamline processes, and achieve its mission more effectively.

1.7 Scope of the Study

This study examines the correlation between Information and Communication Technology (ICT) proficiency and employee performance at the Higher Education Students' Loan Board (HESLB). The study examined multiple facets of ICT

competency and its impact on employee performance within the particular setting of HESLB. The study involved employees at different levels within HESLB, including administrative staff, customer service representatives, data analysts, and managers. These participants provided insights into various job roles and responsibilities within the organization.

1.8 Organization of the Study

A dissertation examining the impact of ICT competency on employee performance at a higher education student loan board is often structured into five chapters. Chapter one, the introduction, establishes the context by presenting background information on the significance of ICT competency in improving employee performance, articulating the problem, delineating the aim and research questions, and emphasizing the study's importance and scope. Chapter two of the literature review examines existing research on ICT competency and its influence on employee performance, offering both theoretical and empirical analyses, identifying gaps in the current literature, and ultimately presenting the conceptual framework and the formulation of hypotheses.

Chapter three delineates the research methodology, encompassing the research philosophy, approach, design, data gathering methods, and data analysis methodologies employed to examine the correlation between ICT expertise and employee performance. Chapter four delineates the conclusions derived from the data analysis, structured according to the research objectives, and includes a discussion of these findings. Chapter five delineates the summary of findings,

conclusion, and recommendations. Analyzes the results, examines ramifications, and provides recommendations for enhancing employee performance through improved ICT proficiency at the student loan board.

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

This chapter provides a literature review. The document is structured into the following sections: the initial section presents conceptual definitions, succeeded by a theoretical literature review and an empirical literature review, accompanied by a tabular summary. This chapter also delineates the research gap and the conceptual framework of the study.

2.2 Definition of Concepts

2.2.1 ICT Competency

UNESCO (2018) defines ICT competency as the knowledge, skills, and attitudes necessary for the successful utilization of information and communication technology to execute tasks, resolve issues, and communicate proficiently across diverse contexts. Gallardo-Echenique et al. (2015). ICT competency refers to the proficient, critical, and ethical utilization of technology to attain educational and professional goals, while ensuring adjustability to technological advancements. This study defines ICT Competency as the degree to which employees at the Higher Education Students' Loan Board (HESLB) have the skills, knowledge, along with proficiency necessary to utilize Information and Communication Technology (ICT) tools, applications, and platforms effectively and efficiently in their job functions.

2.2.2 Information Management Competency

Oliver and Foscarini (2014) define information management competency as the capacity to systematically organize information and data to discern and elucidate

significant trends, issues, and causes; to compare and synthesize information to uncover fundamental problems; and to strategically plan for both long-term and short-term goals. While Wright, (2013) defines information management competency as the ability to manage data and information effectively, ensuring its accuracy, integrity, and accessibility.

This includes skills in data collection, analysis, storage, and dissemination, as well as the use of information systems and technologies. In this study, Information Management Competency refers to the proficiency and skill set possessed by employees at the Higher Education Students' Loan Board in effectively gathering, organizing, analyzing, and utilizing information within their job responsibilities.

2.2.3 Digital Communication Competency

Falloon (2020) defines digital competence as the confident, critical, and responsible utilization of and interaction with digital technologies for learning, professional activities, and societal participation. Digital competence involves the confident, critical, and creative utilization of ICT to attain objectives associated with employment, employability, education, leisure, inclusion, and societal engagement (Martzoukou, Fulton, Kostagiolas, & Lavranos, 2020). In this study, Information Management Competency refers to the comprehensive set of skills, knowledge, and capabilities possessed by employees at the Higher Education Students' Loan Board to effectively and efficiently handle, process, organize, analyze, and utilize information within the context of their roles.

2.2.4 Internet Skills Competency

Van Deursen and Van Dijk (2010) define Internet skills are categorized into four types: operational skills (basic use of internet technology), formal skills (navigation and orientation on the web), information skills (searching, selecting, and evaluating information), and strategic skills (using the internet to achieve personal and professional goals). While Hargittai (2005) define Internet skills, or web-use skills, as the ability to efficiently and effectively find information online, encompassing both the technical know-how of navigating the web and the evaluative ability to assess the credibility of online content. In this study, internet Skills Competency in relation to Higher Education Students' Loan Board refers to the ability of individuals, particularly students and employees, to effectively use internet-based platforms and tools provided by HESLB to access, manage, and communicate information related to student loans. This competency is critical for navigating HESLB's digital systems, ensuring timely application, monitoring loan status, and interacting with the Board's services.

2.2.5 Employee Performance

According to Bernardin and Russell (2013), employee performance is measured by the results or outcomes that an employee achieves in performing job-related tasks. This includes meeting performance standards, achieving organizational objectives, and contributing to the bottom line. While Armstrong (2006) defines employee performance as the combination of an employee's abilities, motivation, and the work environment that enables them to deliver outcomes that meet or exceed organizational expectations. In this study, Employees' Behavior at the Higher

Education Students' Loan Board denotes the quantifiable and observable results, contributions, and behaviors demonstrated by individuals employed inside the business.

2.3 Review of Theory

2.3.1 Resource-Based View Theory

This study used resource-based theory. The Resource-Based View (RBV) Theory was primarily developed by Jay Barney in 1991. The RBV theory posits that an organization's unique resources and capabilities, when effectively managed, can lead to competitive advantages and improved performance (Barney, 1991). Applying this theory to HESLB, Information Management Competency is a valuable resource that enhances employee capabilities and contributes to organizational success.

The resource-based theory application is that; Employees with strong Information Management Competency possess the ability to gather, analyze, and interpret data accurately (McCartney, Murphy, & Mccarthy, 2021). This enables them to make well-informed decisions that align with organizational goals, leading to improved performance outcomes. Competence in managing information empowers employees to access relevant data efficiently, thereby streamlining tasks, reducing errors, and increasing overall efficiency. Information Management Competency equips employees with the skills to evaluate data and identify trends or patterns. This enhances their problem-solving abilities, enabling them to address challenges more effectively. Employees with strong Information Management Competency produce accurate and reliable reports, contributing to informed organizational strategies and

performance evaluations. The Resource-Based View (RBV) Theory, developed by Jay Barney in 1991, has significant strengths and weaknesses.

One of its key strengths is its focus on internal organizational resources as sources of sustained competitive advantage, emphasizing the strategic value of resources that are valuable, rare, inimitable, and non-substitutable (VRIN) (Barney, 1991). This perspective provides managers with a framework to assess and leverage unique organizational capabilities, offering a departure from traditional industry-centric views. However, the RBV has been criticized for its limited focus on external environmental factors and dynamic market conditions, which are critical in today's rapidly changing business environment (Priem & Butler, 2001). Additionally, operationalizing the VRIN criteria and identifying truly inimitable resources can be challenging in practice, leading to questions about its applicability in real-world strategic decision-making. Despite these limitations, RBV remains a foundational theory in strategic management literature, offering valuable insights into the role of internal resources in achieving competitive advantage.

2.3.2 Social Exchange Theory

The Social Exchange Theory posits that relationships are formed based on the principle of reciprocity, where individuals exchange valuable resources to gain mutual benefits. Applying this theory to HESLB, Digital Communication Competency serves as a resource that facilitates effective communication, collaboration, and relationship-building among employees and with external stakeholders.

2.3.3 Technology Acceptance Model

This study employed the technology acceptance approach. The Technology Acceptance Model (TAM) was created by Fred Davis in 1986. The Technology Acceptance Model asserts that users' acceptance and adoption of technology are determined by perceived ease of use and perceived utility. Applying this theory to HESLB, Internet Skills Competency represents employees' perceived ease of using internet technologies, and Employee Performance relates to the perceived usefulness of these skills in enhancing job-related outcomes. This study employed the Technology Acceptance Model (TAM) to elucidate the impact of ICT competency on employee performance, as suggested by prior research like Emami et al. (2019) and Oyedipe & Popoola (2019).

The Technology Acceptance Model (TAM), developed by Fred Davis in 1986, provides significant strengths and weaknesses in the context of assessing the effect of ICT competency on employees' performance at the Higher Education Student's Loan Board (HESLB). One major strength of TAM is its focus on Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) as key determinants of technology adoption, offering a straightforward framework to evaluate how employees' ICT skills influence their performance in delivering efficient loan processing and service delivery (Davis, 1989). TAM is especially useful in identifying barriers to ICT adoption and developing strategies to enhance employee performance through improved system usability and perceived benefits. However, its weaknesses lie in its limited scope, as it does not account for external variables such as organizational culture, management support, or infrastructure challenges that may influence ICT

adoption at HESLB (Venkatesh & Davis, 2000). Additionally, TAM assumes rational decision-making, often overlooking emotional, social, and behavioral factors that impact technology acceptance. Despite these limitations, TAM remains a valuable tool for understanding how ICT competency affects employee performance in such organizational contexts.

Utilizing the Resource-Based View (RBV) Model and the Technology Acceptance Model (TAM) in a study examining the impact of ICT competency on employee performance at the Higher Education Student's Loan Board (HESLB) establishes a strong theoretical framework. The RBV emphasizes the strategic value of ICT as an internal organizational resource that, when rare, valuable, inimitable, and non-substitutable (VRIN), can drive sustained competitive advantage by enhancing operational efficiency and service delivery (Barney, 1991).

Meanwhile, TAM complements this by focusing on the behavioral aspects of ICT adoption, highlighting how employees' perceptions of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) influence their willingness to effectively utilize ICT systems, which is critical for improving loan processing and customer service (Davis, 1989). Together, these theories provide a dual perspective: the RBV explains the strategic importance of developing ICT competencies as a key organizational asset, while TAM addresses the human factors that ensure successful technology adoption and utilization. This combination is crucial for understanding how ICT competency impacts employee performance at HESLB, particularly in a resource-constrained yet service-intensive environment.

2.4 Empirical Review

2.4.1 The Relationship Effect of Information Management Competency on Employee Performance

Rahimi et al. (2022) conducted a study on modeling referencing competency and individual performance. A quantitative approach was employed, with 292 respondents picked from undergraduate students at a Malaysian local university. Descriptive analysis was conducted utilizing Statistical Package for Social Sciences (SPSS) version 26. Conversely, inferential analysis was conducted utilizing Partial Least Squares Structural Equation Modeling with SmartPLS version 3.2.8. Research indicates that knowledge, skills, and abilities have a favorable and significant impact on individual performance. The study offers significant insights into the correlation between referencing proficiency and individual performance; nonetheless, it would improve with a more diverse sample, better definitions, and a thorough examination of its practical applicability beyond academic contexts.

Wibowo, Muljono, and Sumertajaya (2021) conducted a study analyzing the impact of knowledge management, competency, and innovation on employee performance. The data were collected through a census of 103 employees from the Finance and Equipment Bureau, interviews with appraisal officials and personnel managers, and employee performance evaluations conducted in 2019.The data analysis employs Structural Equation Modeling - Partial Least Squares (SEM PLS) methodology. This study demonstrates that knowledge management substantially influences innovation and competence, while innovation greatly impacts performance. The study offers significant insights into the influence of knowledge management, competency, and

innovation on employee performance; however, it might be improved by including a broader range of industries and using a longitudinal methodology to more effectively assess long-term consequences.

Vijh, Sharma, and Agrawal (2022) conducted a study on the impact of competency on employee performance and the mediating function of commitment: An empirical analysis in the IT sector. A standardized questionnaire was developed and distributed to employees of software companies for this objective. A total of 242 valid replies were obtained from IT businesses. Structural Equation Modeling (SEM) was utilized to investigate the relationship between the analyzed variables and the hypothesis. The investigation determined that the competence factor (knowledge, skills, and work attitude) positively influences employee performance and commitment. Furthermore, employee dedication exerted the greatest influence on employee performance. Hypothesis H7 is accepted, concluding that employee commitment functions as a mediator between employee performance and employee competency. The research significantly contributes by examining the mediating role of commitment in the relationship between competency and employee performance; yet, a more diversified sample could improve its generalizability across various sectors.

Alebiosu et al. (2022) investigated the influence of management abilities on the behavioral outcomes of employees in selected manufacturing firms in Nigeria. The collected data were evaluated via structural equation modeling. Global awareness, communication, self-management, and strategic action competencies were identified

as predictors of employees' behavioral outcomes. The study identified persistent obstacles hindering managerial learning and development, including inadequate leadership motivation, lack of awareness, minimal or absent performance feedback, insufficient cost-benefit analysis, limited budgets and resource allocation, ineffective communication, vague competency specifications, and a rigid bureaucratic framework.

Findings indicate that individual managers must assume greater responsibility for their learning, superiors should enhance their involvement in management development, and senior leaders ought to establish methods to fortify managerial competencies. The study elucidates the influence of managerial competencies on employee behavioral outcomes within Nigerian manufacturing firms, clarifying the correlation between leadership and performance; however, it would gain from an expanded scope that incorporates firms from diverse sectors and regions to enhance the external validity of its conclusions.

Tilahun (2022) examined the impact of the knowledge management system on staff performance in the customer care department of Ethio-telecom. The study employed a quantitative research strategy, focusing on the examination of a scenario or problem to elucidate the link between variables. Employees of the Ethio telecom call center, specifically those working at the 994 contact centers, were selected based on the usability of the knowledge management system, and questionnaires were conducted. Structural equation modeling (SEM) and confirmatory factor analysis (CFA) were employed to examine the link and influence of knowledge management

systems (KMS) on the performance of employees at Ethio Telecom. The analysis reveals that the correlation between Knowledge Acquisition and both operational and quality performance is strong; however, the association between Knowledge Acquisition and innovation is neither supported nor significant. To optimize productivity and performance, the organization's management should prioritize knowledge acquisition initiatives. The research provides significant insights into the influence of knowledge management systems on staff performance within Ethio-telecom's customer service division; nevertheless, the study might be enhanced by include a more varied sample and investigating the long-term implications of knowledge management practices.

Matimbwa and Kamala (2024) examined the impact of system users' abilities on the efficacy of human capital management information systems in Tanzania. This research employed an explanatory cross-sectional design. The study encompassed six regions of Tanzania: Mwanza, Arusha, Dodoma, Morogoro, Iringa, and Kagera, comprising 37 LGAs. A total of 201 Human Resource Officers (HROs) were randomly selected from each sampling district to complete a questionnaire that constituted the majority of the study's data. Among the eight (8) important informants who were interviewed in depth, there were six (6) HRO "approvers" and two (2) directors from the Human Capital Division. Ordered logistic regression and content analysis were employed to examine the data. The research revealed that 21% of the HROs have adequate IT abilities, 52% asserted a profound comprehension of HR, and 56% had 4 to 7 years of experience. The capabilities of system users, encompassing their level of IT proficiency, dedication, and experience, substantially

influence HCMIS performance regarding the completeness, accuracy, and timeliness of information, as indicated by the findings of the ordered logistic model. The study offers significant insights into the correlation between users' competencies and the efficacy of human capital management information systems in Tanzania; however, it could be enhanced by examining a broader spectrum of industries and integrating longitudinal data to evaluate long-term impacts.

2.4.2 The Relationship Effect of Digital Communication Competency on Employee Performance

Alqudah (2023) examined the mediating function of digital competency in the relationship between top management support and the effectiveness of electronic internal audit activities. One hundred twenty-six questionnaires, gathered from managers in these organizations, were examined utilizing the Statistical Package for Social Sciences (SPSS) through descriptive-analytical procedures. The findings indicated a substantial influence of top management support on the digital competence of internal auditors, which subsequently impacted the efficacy of electronic audit activities in these publicly traded organizations. The study indicated that the digital competency of internal auditors serves as a positive mediator in the association between top management support and the efficacy of electronic audit duties. The study effectively underscores the pivotal mediating role of digital competency in augmenting the efficacy of electronic internal audit tasks; however, it could be fortified by investigating additional potential mediators and broadening its analysis to encompass various organizational contexts for greater applicability.

Adenekan and Jimoh (2021) examined the relationship between technological innovation, digital competence, and work performance of secretaries in public tertiary institutions in Ogun State, Nigeria. A survey of secretaries in public tertiary institutions was performed, encompassing selections from the three senatorial districts in the State. Data were gathered by a questionnaire and analyzed using descriptive and inferential statistics. The findings demonstrated a significant degree of technology innovation and digital proficiency among secretaries at the assessed institutions. Technological developments and the digital competency of secretaries significantly influence their performance in technology-driven office and secretarial activities. The study offers a significant addition by analyzing the influence of technological innovation and digital competence on job performance at public tertiary institutions; nonetheless, it would benefit from a bigger sample size and enhanced regional representation to improve its generalizability.

Huu (2023) conducted a comprehensive review on the influence of employee digital competency on the relationship between digital autonomy and innovative work behavior. This systematic literature review conducted in accordance with the PRISMA statement and utilizing scientific publication databases, seeks to provide a contemporary overview of the influence of employee digital competence on the interplay between digital autonomy and innovative work behavior from 2015 to 2022, encompassing definitions, research objectives, methodologies, findings, and limitations. Upon reviewing the selected publications, 18 were analyzed concerning relationship subjects, while 12 addressed effect topics across various tasks. The primary findings underscore the importance of digital competency and autonomy in

fostering employee innovation, learning, and information sharing. The review findings indicate that individuals with increased digital autonomy are more inclined to participate in innovative work, resulting in enhanced job performance and empowerment. The paper provides a thorough systematic evaluation emphasizing the essential significance of employee digital competence in improving innovative work behavior; nonetheless, it might benefit from empirical data to reinforce its theoretical conclusions and practical implications.

2.4.3 The Relationship Effect Internet Skills Competency on Employee Performance

AlHamad et al. (2022) examined the impact of electronic human resource management on the organizational health of telecommunications firms in Jordan. Data were predominantly collected through self-reported questionnaires developed in Google Forms and sent to a purposeful sample of senior managers via email. AMOSv24 was employed to evaluate the study hypotheses. The study's results indicate that EHRM positively influences organizational health. According to the findings, the researchers advise managers and decision-makers in Jordan's telecommunications sector to invest in electronic human resource systems, which will facilitate the comprehensive electronic implementation of human resource practices, yield economic savings, and enhance talent acquisition. The study emphasizes the necessity of prioritizing electronic training and development to enhance individuals' practical skills, hence fostering their creativity. The study offers significant insights into the influence of electronic human resources management on organizational health within Jordan's telecommunications sector, presenting a

pertinent and timely examination of digital HRM practices; nonetheless, it could be improved by incorporating a larger sample size or conducting a comparative analysis across various industries to augment the generalizability of its conclusions.

Marsh (2021) examined the impact of digital literacy on employees' intentions to persist in the digital workplace and their individual performance. Linear regression was employed to examine the conceptual model utilizing survey data from 142 employees of a prominent UK nonprofit organization. The results partially validated the model, indicating that employees' digital competencies influence continuance intentions and individual performance through their views of usability. The findings indicate a significant role for digital literacy, both as a precursor to the broader factors influencing technology adoption and in organizational strategies aimed at promoting digital workplace integration. The study underscores the pivotal importance of digital literacy in influencing employees' intentions to persist in digital environments and their performance; nevertheless, the reliance on self-reported data may introduce bias and constrain the robustness of its conclusions.

Idachaba, Ojokuku, and Unwana (2023) investigated the information and communication technology (ICT) competences and job performance of librarians in selected university libraries in North Central Nigeria. The study population comprises 171 professional and paraprofessional librarians from the libraries of Francis Sarwuan Tarka University and Benue State University. A total of 171 questionnaires were disseminated, of which only 133 were collected. The acquired data were examined using descriptive statistics, with a mean score of 2.5 and above,

and a percentage score of 50% deemed significant. The study indicated that the ICT capabilities held by librarians include digital literacy, professional skills, computer proficiency, and information retrieval abilities.

The study confirmed that ICT competencies positively impact librarians' job performance by enhancing service delivery, facilitating library administration, increasing efficiency, reducing stress, and boosting librarians' confidence in their roles. The study identified challenges in cultivating and implementing ICT competencies related to job performance, including obsolete and insufficient equipment, inadequate ICT skills stemming from a lack of current training, and restricted access to ICT tools due to limited exposure time to certain devices, such as computers. The study underscores the essential influence of digital literacy on employees' intentions to persist in digital environments and their performance; yet, the dependence on self-reported data may introduce bias and constrain the robustness of its conclusions.

Ismail (2022) examined the skills of entrepreneurs and the viability of small and medium firms in Tanzania. The research utilized a cross-sectional design, employing a structured questionnaire to gather data from 384 sampled SMEs. The research employed structural equation modeling (SEM) for confirmatory factor analysis and path analysis. The results indicate that entrepreneurs' competences exert positive and significant influences on entrepreneurial innovations, which in turn have positive and significant implications on the sustainability of SMEs. The research additionally identified partial mediating effects of entrepreneurial innovations on the skills of

entrepreneurs and the sustainability of SMEs. The establishment of SME sustainability results from competencies and innovation. The study offers significant insights into the influence of electronic human resources management on organizational health within Jordan's telecommunications sector, presenting a pertinent and timely examination of digital HRM practices; nonetheless, it would benefit from a larger sample size or comparative analysis across various industries to improve the generalizability of its conclusions.

2.5 Research Gap

Numerous studies have been undertaken about ICT competency and employee performance. Nevertheless, the majority of prior investigations were carried out in affluent nations. The study did not investigate the impact of ICT expertise on staff performance within the Tanzanian HESLB. Empirical evidence reveals a lack of consensus among experts regarding the correlation between ICT competency and employee performance. Certain studies indicate that cognitive competence, technical proficiency, and ICT proficiency exhibit a positive and significant correlation with employee performance (Marsh, 2021; Emami et al., 2019; Oyedipe & Popoola, 2019). Other scholars indicate that ICT proficiency did not significantly impact employee performance (Pitafi et al., 2020; Mardiyah & Purba, 2019).

2.6 Conceptual Framework

The relationship between Information Management Competency, Digital Communication Competency, and Internet Skills Competency as independent variables, and employees' performance at the Higher Education Students' Loans

Board (HESLB) as the dependent variable, is significant. Information Management Competency enables employees to effectively handle and utilize data, supporting informed decision-making and efficient operations .Digital Communication Competency is crucial for clear and effective interactions within the organization, directly influencing performance management processes. Internet Skills Competency allows employees to proficiently navigate online resources and tools, enhancing their ability to perform tasks efficiently. Collectively, these competencies are essential for employees to adapt to technological advancements and meet organizational objectives, thereby

Independent variables   **Dependent Variable**

Information Management Competency
Organizing information
Managing digital information,
Understanding of databases
Data organization

Employees' Performance
Customer satisfaction
Number loan processed
Time used to process
student loans

Digital Communication Competency
Effective use of email
Familiarity with instant messaging
Video conferencing

Internet skills competency
Efficient web browsing,
Using search engines
Understanding web addresses
(URLs)

Figure 2.1: Conceptual Framework

2.7 Hypotheses Development

ICT knowledge refers to the employee's understanding of basic computer operations, software applications, and digital tools necessary for work execution. Employees with strong ICT knowledge can process student loan applications more efficiently, manage digital records accurately, and communicate effectively through digital platforms. According to Agboh (2015), ICT knowledge enhances productivity by reducing time wastage and minimizing errors in task execution. In public institutions like HESLB, where large volumes of data are handled, a knowledgeable workforce can significantly improve operational performance and service delivery (Mtebe & Raisamo, 2014).

H1: There is a positive relationship effect between information management competency and employee performance at HESLB

ICT skills go beyond knowledge and involve the practical ability to use technology tools to complete tasks such as using spreadsheets, databases, automated systems, and communication tools. Employees with strong ICT skills can adapt to system upgrades, troubleshoot basic issues, and utilize available tools to streamline operations. A study by Okolie et al. (2020) in Nigeria found that employees with higher ICT proficiency achieved better performance outcomes in terms of accuracy and speed. At HESLB, ICT-skilled staff are critical in ensuring timely processing of student loans and accurate disbursement of funds, which directly influences organizational credibility and client satisfaction.

H2: There is a positive relationship effect between digital communication competency and employee performance at HESLB

ICT training equips employees with up-to-date skills and confidence to use new technologies effectively. Continuous training ensures that staff remain competent as systems evolve. According to Mwangi and Waiganjo (2015), ICT training significantly impacts employees' ability to adapt to new systems and improve overall work output. In Tanzania's public service institutions like HESLB, where systems such as the Online Loan Application and Management System (OLAMS) are integral to daily operations, training ensures that staff can operate the platforms efficiently, reduce downtime, and provide better service to clients.

H3: There is a positive relationship effect between internet skills competency and employee performance at HESLB.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

This chapter encompasses the study's location, population sample, research design, research philosophy, research approach, data collection processes, data processing and analysis methodologies, research timeframe, and overall budget.

3.2 Research Philosophy

The positivist paradigm constituted the philosophical foundation for this study. The study employed quantitative research to elucidate the causal relationship between personnel planning, recruiting, training, and motivation on organizational performance, thereby applying the positivist paradigm. The positivist research paradigm posits that knowledge is based on objective reality and is not influenced by individual subjective judgment; it is represented quantitatively and possesses explanatory predictive capability (Creswell & Plano Clark, 2011).

3.3 Research Approach

In order to investigate the hypothesis about the impact of human resources management techniques on organizational performance, the study employed a quantitative research approach. According to Saunder et al. (2016), the quantitative approach operationalizes concepts to enable quantitative measurement of facts. Saunders, et al. (2016) argued that using data gathered through statistical features, a quantitative approach can be used to test hypotheses and explain causal links between variables.

3.4 Research Design

Explanatory research approach was utilized in the study to verify a model that can be used to analyze organizational performance and assess the existence of correlations between variables. Because it explains the causal linkages between the several factors information management competency, digital communication competency and internet skills competency - this study is explanatory. Employee's performance is the dependent variable. The adoption of an explanatory research methodology is deemed appropriate to deliver desired results because the study includes numerous variables whose influence and correlations on dependent variable are debatable. The explanatory research approach was envisioned to evaluate the causes and effects of relationships between variables, (Saunders et al. 2018)

3.4.1 Area of the Study

The study was conducted at the Higher Education Students' Loans Board (HESLB) Headquarters located in Temeke Municipality, Dar es Salaam, because this site represents a strategic institution that has extensively adopted digital systems in its operations. HESLB serves as a central agency responsible for managing student loans in Tanzania, and it has significantly integrated ICT tools such as the Online Loan Application System (OLAS), Higher Learning Institutions (HLI) portals, and the Loan Management System (LMS), which are vital for processing, monitoring, and disbursing educational loans (URT, 2023). This digital integration makes HESLB an ideal environment for assessing the relationship between ICT competency and employee performance. From a scientific standpoint, purposive site selection enhances the relevance and contextual accuracy of the study by allowing researchers

to observe ICT-driven workflows in a naturally occurring setting (Creswell & Creswell, 2018). Additionally, the choice of HESLB headquarters offers logistical advantages due to its centralized location and accessibility through reliable public and private transportation networks, minimizing time and cost constraints for data collection (Kothari, 2004). Moreover, using a site where all employees interact directly or indirectly with ICT systems ensures that the sample embodies the technological dynamics under investigation, thereby improving the internal validity and generalizability of findings within public institutions undergoing digital transformation (Mtebe & Raisamo, 2014).

3.4.2 Population of the Study

The study's target demographic comprised all employees at HESLB HQ. The current total of personnel at HESLB HQ is approximately 134. The study population comprised 134 employees. Table 3.1 illustrates population dispersion.

Table 3.1: Population Distribution

Department	Number of Employees	Percentage
Loan recovery and repayment	68	30.6
Finance and administration	25	18.7
Planning, research and ICT	13	9.7
Loan allocation and disbursement	35	26.1
Legal	7	5.2
Procurement management	5	3.7
Internal audit and investigation	8	5.9
Total	134	100.0

Source: HESLB, 2023

3.4.3 Sample and Sampling Techniques

This study utilized diverse recommendations from numerous experts to determine a sample size. Van-Smeden et al. (2019) assert that sample size must be established by

scientific methodologies. Yamane (1967) delineates the calculation of the study's sample size as follows: Consequently, the sample size formula proposed by Yamane in 1967 was employed.

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

Whereby;

n = sample size; N = total number population which is equal to 134; e = margin of error with confidence level of 5%.

$$n = \frac{134}{1 + 134(0.05)^2} = \frac{134}{1 + 134\,(0.0025)}$$

$$n = \frac{134}{1 + 0.3} = \frac{134}{1.3} = 103$$

Therefore, the sample size of the was 103 employees. This research employed stratified random sampling to choose personnel. Stratified sampling is a statistical approach employed in research and data analysis to guarantee the selection of a representative and diversified sample from a population. The process entails segmenting the population into specific subgroups or strata according to particular features or attributes pertinent to the investigation. Subsequently, samples are independently extracted from each subgroup in accordance with their representation among the overall population.

3.5 Data Collection

3.5.1 Primary Data

Data collecting is essential for statistical analysis. Research employs several approaches for information collection, categorized as primary and secondary data

(Ahn & Jung, 2016). This study utilized just primary data. Primary data refers to information gathered for the first time by the researcher.

3.5.2 Data Collection Tools

This study employed a structured questionnaire to gather primary data concerning cognitive proficiency, technical proficiency, ICT proficiency, and employee performance, as suggested by Asbari et al. (2021). This technique was employed due to its appropriateness for data collection from a substantial sample, as indicated by Budur & Poturak (2021).

3.6 Data Analysis

The act of compiling or reconstructing data in a thorough or relevant way is referred to as data analysis. It involves going over the gathered raw data to look for flaws and fix them (Saunder et al., 2012). In order to describe the demographic traits and variables, descriptive statistics was utilized to display data in the form of frequencies, percentages, minimums, maximums, means, and standard deviations. Multiple linear regressions, an inferential statistic, was used to examine the relationships between the variables that affect performance management systems in public institutions. The fact that this study has multiple predictor variables information management competency, digital communication competency and internet skills competency and a single dependent variable employees performance justifies the use of a multiple linear regression model.

3.6.1 Assumptions of the Multiple Linear Regressions

The relationship between employee's performance (the dependent variable) and the effect ICT (the independent variables) were be examined using linear multiple regression models. The following data-related assumptions were made prior to running linear multiple regression models: sample size, multicollinearity, outliers, normality, and linearity (Pallant, 2001).

3.6.2 Regression Model

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + X_3 \beta_3 + X_4 \beta_4 + e$$

Where;

Y = dependent variable representing job performance

X_1, X_2, X_3, X_4, these represents independent variables were

X1= Information Management Competency = X2= Digital Communication Competency, X3= Internet Skills Competency

ß0 represents the constant value of the independent variable. The regression coefficients of the independent variables X in relation to Y are ß1, ß2, and ß3. The error term in a statistical model is denoted by the letter e (residual). It attains statistical accuracy by differentiating between the model's theoretical value and the actual observed outcome (Kenton, Kent, 2019).

3.7 Validity

Validity, according to Borg and Gall (2009), is the extent to which a test captures the intended outcome. In order to ensure that the questionnaires are thoroughly prepared, tested, and the questionnaires' suitability and generalization to the topic is too

validated by respondents, a pre-testing pilot study was carried out in this research. Additionally, the researcher used the SPSS to perform the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity to assess the study's validity. The validity results of the study on the Effect of ICT Competency on Employees' Performance at HESLB confirmed that the research instruments accurately measured the intended variables.

Content validity was ensured through expert reviews from ICT professionals and supervisors to confirm that the questionnaire covered key dimensions such as ICT knowledge, skills, training, infrastructure, and employee performance. Construct validity was tested using factor analysis, where items with factor loadings above 0.5 were retained, and the Kaiser-Meyer-Olkin (KMO) value exceeded 0.7, indicating sampling adequacy. Additionally, convergent validity was confirmed as the Average Variance Extracted (AVE) for each construct was above 0.5, and discriminant validity was achieved using the Fornell-Larcker criterion, confirming that the constructs were distinct. These results demonstrate that the instrument was valid and appropriate for measuring the relationship between ICT competency and employee performance (Bolarinwa, 2015; Hair et al., 2019).

3.8 Reliability

According to Muganda (1999), reliability is a measurement of how consistently a research instrument produces results on data after numerous trials. Reliability is a measure of how consistent test results are, according to Kombo and Tomp (2006). When used repeatedly to gather data from the same population, an instrument is

considered dependable if it consistently yields the same results. The researcher and supervisor double-checked the instruments to confirm their reliability, and Cronbach's alpha formula was also employed (r = () (1 -); where 2 equals the variance of one test item). The KR-20 formula uses additional variables that are the same. The study's results are supported by the acceptable value of O.7, while the opposite is true for values lower than 0.7.

Table 3.2: Reliability Test Results

S/N	Variable	Number of Items	Cronbach's Alpha
1	IMC	8	.851
2	DCC	7	.727
3	ISC	7	.884
4	EP	7	.719

Note: IMC = Information Management Competency, DCC = Digital Communication Competency, ISC = Internet Skills Competency, EP = Employees Performance

3.9 Ethical Considerations

Research ethical considerations are pivotal in ensuring credibility and integrity in a study like the Effect of ICT Competency on Employees' Performance at Higher Education Students' Loan Board (HESLB). Securing formal permission letters from the Open University and HESLB is essential to obtain institutional approval and access was maintained (Bryman, 2016). Confidentiality and anonymity were maintained by securely storing data and ensuring participants' identities remain undisclosed, fostering trust and honest responses (Creswell & Creswell, 2018). Consent was obtained through clear communication of the study's purpose, ensuring participants voluntarily agree and understand their right to withdraw without repercussions (Saunders et al., 2019). Avoiding plagiarism involved proper

attribution of all sources, aligning with academic integrity standards (Bell et al., 2022). These measures collectively safeguard the rights of participants and uphold the quality of research.

CHAPTER FOUR

RESEARCH FINDINGS ANALYSIS AND DISCUSSION

4.1 Overview

Chapter four, research findings, analysis, and discussion provide a comprehensive presentation and examination of the study's results on the Effect of ICT Competency on Employees' Performance at the Higher Education Students' Loan Board (HESLB). This chapter begins by analyzing the demographic characteristics of respondents, offering insights into their backgrounds and how these might influence the findings. It then presents key research findings aligned with the study's objectives, highlighting the relationship between employees' ICT competencies and their performance levels. The chapter integrates both descriptive and inferential statistics, supported by tables and figures, to illustrate patterns, trends, and significant correlations. It further discusses the implications of the results in relation to the theoretical framework and previous studies, providing a critical analysis of how ICT competency enhances operational efficiency, decision-making, and service delivery within HESLB. The chapter concludes by identifying areas of improvement and contextualizing the findings within broader organizational and technological advancements.

4.2 Demogragrahic Characteristics of the Respondents

The demographic characteristics of respondents, including age, gender, education level, and work experience, are analyzed to understand the diverse backgrounds and how these factors influence ICT competency and its impact on employee performance at the Higher Education Student Loan Board (Mackenzie, 2021).

4.2.1 Age Characteristics of the Respondents

The data in Table 4.1 reveals the distribution of respondents' ages in the study on the effect of ICT competency on employees' performance at the Higher Education Student Loan Board. The majority of respondents (34.0%) fall within the age range of 26-35 years, indicating that younger professionals in their early to mid-careers form a significant portion of the workforce. This is closely followed by respondents aged 36-45 years (33.0%), reflecting a substantial representation of mid-career employees. Those aged 46-55 years account for 11.7%, while the youngest (18-25 years) and the oldest age group (above 55 years) each represent 10.7% of the respondents. The findings suggest a balanced workforce with a strong presence of both early-career and experienced employees. This diversity in age distribution likely influences ICT competency, as younger employees may bring familiarity with emerging technologies, while older employees contribute experience and adaptability in integrating ICT into their roles.

Table 4.1: Age Characteristics of the Respondents

		Frequency	Percent
Valid	18-25 years	11	10.7
	26-35 years	35	34.0
	36-45 years	34	33.0
	46-55 years	12	11.7
	Above 55	11	10.7
	Total	103	100.0

Source: Field Data, 2025

4.2.2 Gender Characteristics of the Respondents

Table 4.2 presents the gender distribution of respondents in the study on the effect of ICT competency on employees' performance at the Higher Education Student Loan

Board. The results show a nearly equal representation of genders, with females constituting a slightly larger proportion (51.5%) compared to males (48.5%). This near parity indicates gender inclusivity within the workforce and suggests that both male and female employees have equal opportunities to contribute to and benefit from ICT-related tasks. The balanced gender representation also highlights the potential for equitable development and application of ICT competencies across genders, reflecting a progressive organizational culture that supports diversity and inclusion in technological proficiency and professional roles.

Table 4.2: Gender Characteristics of the Respondents

		Frequency	**Percent**
Valid	Male	50	48.5
	Female	53	51.5
	Total	103	100.0

Source: Field Data, 2025

4.2.3 Educational Level of the Respondents

Table 4.3 depicts the educational qualifications of participants in the study examining the impact of ICT competency on employee performance at the Higher Education Student Loan Board. A substantial proportion of respondents had a bachelor's degree (35.0%), signifying that a considerable segment of the workforce has essential academic credentials requisite for professional positions. Master's degree holders represent 25.2%, reflecting advanced education and potential expertise in specialized areas, including ICT. Diploma holders make up 22.3%, suggesting a solid technical or vocational educational background. PhD holders account for 10.7%, highlighting a presence of highly educated individuals likely

involved in research, leadership, or strategic decision-making. Lastly, certificate holders comprise the smallest group (6.8%), typically representing employees with entry-level qualifications. This distribution suggests that the workforce has a strong academic foundation, which likely enhances the ability to acquire and apply ICT competencies effectively, with higher educational levels potentially correlating with greater ICT proficiency and performance.

Table 4.3: Educational Level of the Respondents

		Frequency	Percent
Valid	Certificate	7	6.8
	Diploma	23	22.3
	Bachelor	36	35.0
	Masters	26	25.2
	PhD	11	10.7
	Total	103	100.0

Source: Field Data, 2025

4.2.4 Experience with HESLB

Table 4.4 outlines the respondents' years of experience working with the Higher Education Student Loan Board (HESLB). The largest group of respondents (30.1%) have 11-15 years of experience, indicating a significant presence of mid-career professionals who have likely developed substantial institutional knowledge and expertise, including ICT competency. Employees with 16-20 years of experience (21.4%) and those with 21-25 years (19.4%) represent a considerable portion of seasoned staff with extensive familiarity with organizational systems and processes, which may enhance their ability to effectively apply ICT skills. Respondents with 6-10 years of experience account for 16.5%, reflecting relatively newer but sufficiently experienced employees. The smallest group (12.6%) consists of those with below 5

years of experience, likely representing newer hires who may still be building their ICT capabilities. This distribution suggests a balanced workforce, where experienced employees can mentor less experienced staff, fostering knowledge transfer and ICT skill development. The mix of experience levels could positively influence overall organizational performance by combining institutional memory with fresh perspectives and adaptability to technological advancements.

Table 4.4: Experience with HESLB

		Frequency	Percent
Valid	Below 5	13	12.6
	6- 10	17	16.5
	11- 15	31	30.1
	16- 20	22	21.4
	21 - 25	20	19.4
	Total	103	100.0

Source: Field Data, 2025

4.3 Descriptive Statistics Results

The descriptive statistics for variables in the study on the Effect of ICT Competency on Employees' Performance at the Higher Education Student Loan Board summarize the levels of ICT competency, employee performance, and their interrelations, highlighting trends and patterns essential for evaluating their impact.

4.3.1 Effect of Information Management Competency Descriptive Statistics Results

The results in Table 4.5 highlight respondents' self-assessment of their information management competencies and the impact on job performance at the Higher Education Student Loan Board (HESLB). The highest mean score (3.28 with

standard deviation of 1.396) pertains to using email effectively for communication and collaboration, suggesting that respondents are confident in this aspect of digital communication, which is critical for efficient teamwork. Similarly, ensuring data accuracy and quality (mean = 3.07) and access to organized information enhancing decision-making (mean = 3.07, SD = 1.165) show moderate proficiency in key information management practices that directly affect performance.

Efficient information management's positive impact on collaboration also scored relatively high (mean = 3.20, SD =1.216), indicating its perceived value in teamwork. Lower mean scores for retrieving information efficiently (mean = 2.48, SD = 1.481) and collaborating via digital tools (mean = 2.54, SD = 1.356) suggest areas for improvement, as these competencies are essential for streamlining operations. The overall results reflect variability in competencies, as indicated by the standard deviations, with room to enhance specific skills like information retrieval and digital collaboration to optimize ICT utilization and employee performance at HESLB.

Table 4.5: Effect of Information Management Competency Descriptive Statistics

Results

	Min	Max	Mean	Std. Dev
My level of Organizing and categorizing electronic documents is very good	1	5	2.83	1.189
My level of Retrieving and searching for information efficiently	1	5	2.48	1.481
My level of ensuring data accuracy and quality is very good	1	5	3.07	1.165
My level of Collaborating and sharing information using digital tools is very good	1	5	2.54	1.356
The use of effective information management practices has improved my overall job performance.	1	5	2.78	1.414
Access to accurate and organized information has enhanced my decision-making abilities.	1	5	3.07	1.165
Efficient information management has positively impacted my collaboration with colleagues and teams.	1	5	3.20	1.216
The level of Using email effectively for communication and collaboration is very good	1	5	3.28	1.396

Source: Data Analysis, 2025

4.3.2 Effect of Digital Communication Competency Descriptive Statistics Results

Table 4.6 presents respondents' self-assessment of their digital communication competencies and their impact on work performance at the Higher Education Student Loan Board (HESLB). The highest mean score (3.47, SD = 1.399) is for proficiency in using digital communication tools, such as messaging apps and video conferencing, reflecting strong capabilities in adopting digital platforms for communication. The ability to use email effectively (mean = 3.28, SD = 1.396) also ranks high, indicating good communication practices within the organization. However, respondents report moderate performance in areas like writing clear and concise digital communication (mean = 3.16, SD = 1.696) and adapting

communication styles to different digital platforms (mean = 2.50, SD = 1.074), suggesting some variability in these essential skills.

Proficient digital communication has positively influenced collaboration (mean = 3.07, SD = 1.1654) and task efficiency (mean = 3.24, SD = 1.368), with both areas showing positive but not overwhelming results. The lowest score (2.75, SD = 1.334) is for the contribution of digital communication skills to problem-solving within teams, indicating room for improvement in utilizing these skills to address challenges collaboratively. Overall, while there is a solid foundation in digital communication tools, there are opportunities for enhancing specific competencies to further boost collaboration and problem-solving in the workplace, as indicated by the moderate mean scores and standard deviations.

Table 4.6: Effect of Digital Communication Competency Descriptive Statistics Results

	Min	Max	Mean	Std. Dev
The level of Using email effectively for communication and collaboration is very good	1	5	3.28	1.396
My level of Proficiency in using digital communication tools (e.g., messaging apps, video conferencing). is very good	1	5	3.47	1.399
My level of Writing clear and concise communication in digital formats (emails, messages, etc.) is very good	1	5	3.16	1.696
My level of Adapting communication style for different digital platforms and audiences is very good	1	5	2.50	1.074
Proficient digital communication has positively influenced my ability to work collaboratively.	1	5	3.07	1.1654
Effective digital communication has improved the efficiency of my tasks.	1	5	3.24	1.368
Digital communication skills have contributed to better problem-solving within teams.	1	5	2.75	1.334

Source: Data Analysis, 2025

4.3.3 Effect Internet Skills Competency Descriptive Statistics Results

Table 4.7 shows respondents' self-assessment of their internet skills competency and its impact on their performance at the Higher Education Student Loan Board (HESLB). The results indicate a high level of proficiency in using digital communication tools, such as messaging apps and video conferencing, with a (mean score of 4.28,SD = 1.216) suggesting strong internet skills in utilizing various platforms. Respondents also reported high proficiency in adapting communication styles for different digital platforms and audiences (mean = 4.15, SD = 1.424), demonstrating an ability to tailor communication effectively in diverse online environments. Both effective digital communication improving task efficiency and proficient digital communication positively influencing collaboration received high mean scores of 4.28, SD = 1.216 and 3.26, SD = 1.572) respectively, highlighting the positive impact of internet skills on job performance and teamwork.

However, the ability to write clear and concise digital communication (mean = 2.62, SD =1.380) is notably lower, indicating room for improvement in conveying information effectively in digital formats. The contribution of digital communication skills to problem-solving within teams (mean = 4.01, SD = 1.192) is also relatively high, suggesting that internet skills are significantly contributing to collaborative problem-solving efforts. Overall, the data reflects strong internet skills among employees at HESLB, especially in using communication tools and improving task efficiency, though there are areas such as writing clarity where further improvement is needed.

Table 4.7: Effect Internet Skills Competency Descriptive Statistics Results

	Min	Max	Mean	Std. Dev
My level of using email effectively for communication and collaboration is very good	1	5	3.28	1.396
My Proficiency in using digital communication tools (e.g., messaging apps, video conferencing) is very good	1	5	4.28	1.216
My level of Writing clear and concise communication in digital formats (emails, messages, etc.) is very good	1	5	2.62	1.380
My level of adapting communication style for different digital platforms and audiences is very good	1	5	4.15	1.424
Proficient digital communication has positively influenced my ability to work collaboratively.	1	5	3.26	1.572
Effective digital communication has improved the efficiency of my tasks.	1	5	4.28	1.216
Digital communication skills have contributed to better problem-solving within teams.	1	5	4.01	1.192

Source: Data Analysis, 2025

4.3.4 Employee Performance at HESLB. Descriptive Statistics Results

Table 4.8 presents descriptive statistics on employee performance at the Higher Education Student Loan Board (HESLB), reflecting various aspects of their work effectiveness. The highest mean score (3.54) with standard deviation of (1.10059) is for the ability to effectively communicate with colleagues and supervisors, indicating strong communication skills within the organization. The next highest score (3.43) with a standard deviation of (.42017) is for understanding job responsibilities and roles, suggesting clarity in expectations and alignment with organizational goals. Employees demonstrate a moderate commitment to upholding HESLB's values and mission (mean = 3.37, SD = .37345), although there is room for improvement. Time management and task prioritization also score reasonably well (mean = 3.11, SD = .63460), indicating effective organizational skills but with potential for further

efficiency. However, the areas of collaboration and teamwork (mean = 2.83, SD = 1.189), seeking professional growth (mean = 2.50, SD = 1.07442), and handling challenges (mean = 2.76, SD = 1.19522) show lower mean scores, suggesting that these competencies could be enhanced for better overall performance. The relatively high standard deviations across these items reflect some variability in employee responses, indicating that while some employees excel in certain areas, others may face challenges or have different perceptions of their performance. Overall, the results suggest that while employees at HESLB demonstrate good communication, time management, and role clarity, there is a need for improvement in areas like collaboration, professional development, and problem-solving.

Table 4.8: Employee Performance at HESLB. Descriptive Statistics Results

	Min	Max	Mean	Std. Dev
I demonstrate strong collaboration and teamwork skills within my department/unit.	1	5	2.83	1.189
I effectively communicate with colleagues and supervisors.	1.00	5.00	3.5437	1.10059
I actively seek opportunities for professional growth and development	1.00	5.00	2.4951	1.07442
I handle challenges and solve problems efficiently in my role.	1.00	4.50	2.7557	1.19522
I effectively manage my time and prioritize tasks to meet deadlines.	2.33	4.00	3.1117	.63460
I am committed to upholding the values and mission of HESLB.	2.57	4.00	3.3689	.37345
I clearly understand my job responsibilities and role within the organization.	2.60	4.20	3.4330	.42017

Source: Data Analysis, 2025

4.4 Regression Assumptions Test Results

Regression analysis is a statistical technique employed to investigate the relationship between one or more independent variables (predictors) and a dependent variable

(outcome). To ensure the validity and reliability of the regression results, various assumptions must be satisfied.

4.4.1 Normality Test Results

Figure 4.1 illustrates the consequences of the normalcy assumption, with the histogram's form offering insights about the data distribution. A symmetrical bell-shaped curve often signifies a normal distribution. A normality test can be utilized to determine if the data displays a bell-shaped feature or conforms to a normal distribution. Many statistical analyses depend on the fulfillment of the normalcy assumption for their validity. Figure 4.1 presents a histogram that depicts the distribution of residuals, exhibiting a tight clustering around zero in both mean and standard deviation, indicating a normal distribution. The histogram demonstrates that all residual values are contained within three limits, indicating no outliers are present. According to Wilkinson (2017), a result over the |3| criterion is deemed anomalous.
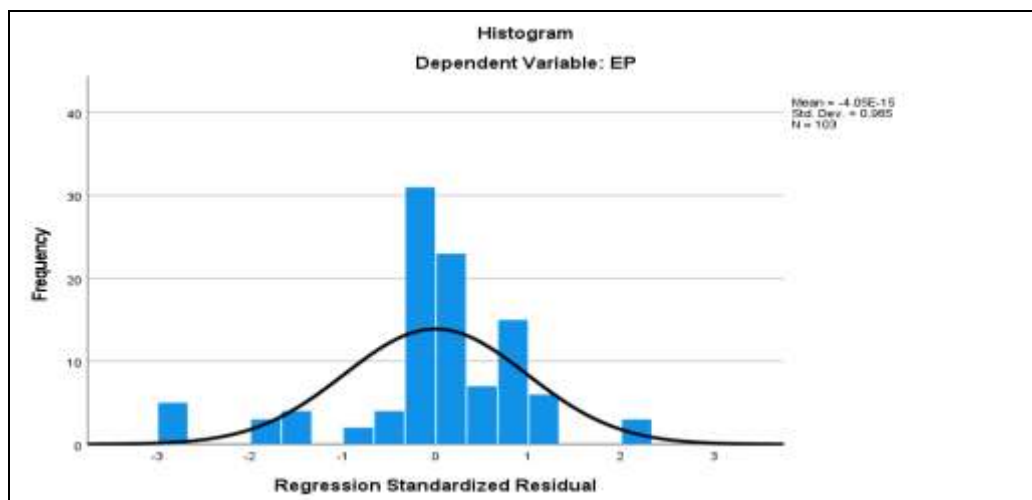
Figure 4.1: Histogram

Source: Data Analysis, 2025

4.4.2 Linearity Test Results

Figure 4.2 illustrates the outcomes of linearity assumptions. A statistical procedure known as the linearity test assesses whether two variables in a regression analysis have a linear relationship (Darlington & Hayes, 2016). In simpler terms, it assesses whether the independent variable (predictor) influences the dependent variable (outcome) linearly. The P-P plot is depicted in this picture, aligned along the diagonal x-axis. The linearity of the data necessitates study.
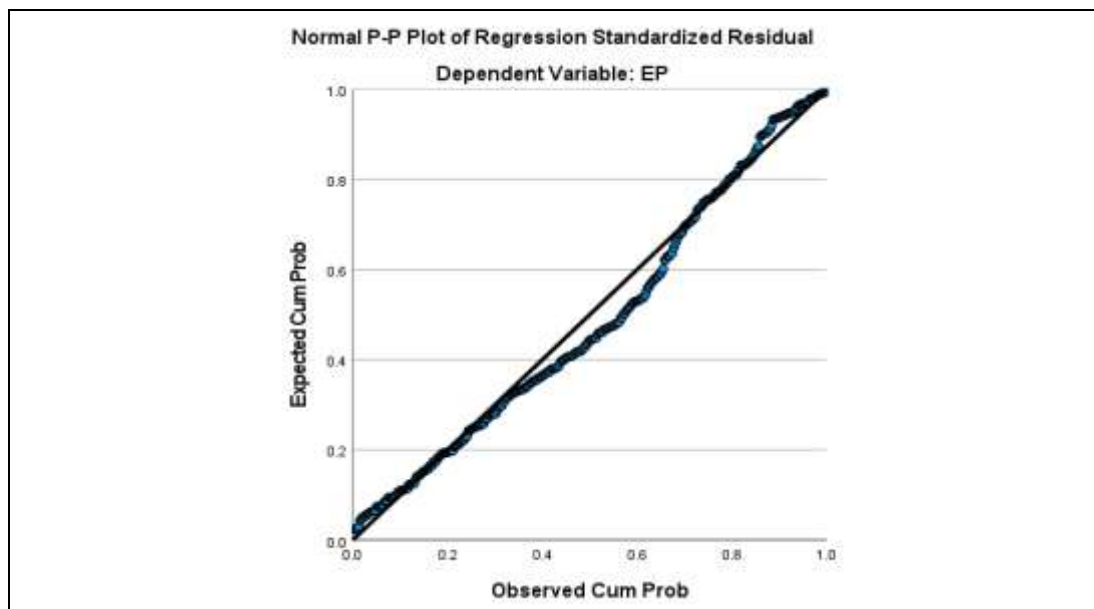
Figure 4.2: P – P -Plot for unstandardized Coefficients

Source: Data Analysis, 2025

4.4.3 Homoscedasticity Test Results

In regression analysis, homoscedasticity, often known as constant variance, is a key assumption. It delineates the condition wherein the variance of the residuals (errors) remains constant across all levels of the independent variables (Astivia & Zumbo, 2019). The dispersion of the residuals should remain approximately uniform across

the range of the predictor variables. The residual dots in the case, distributed in a rectangle around zero (0) in Figure 4.3, appear to exhibit homoscedasticity (equality of variance). Consequently, the heteroscedasticity of the data is not a matter of concern.
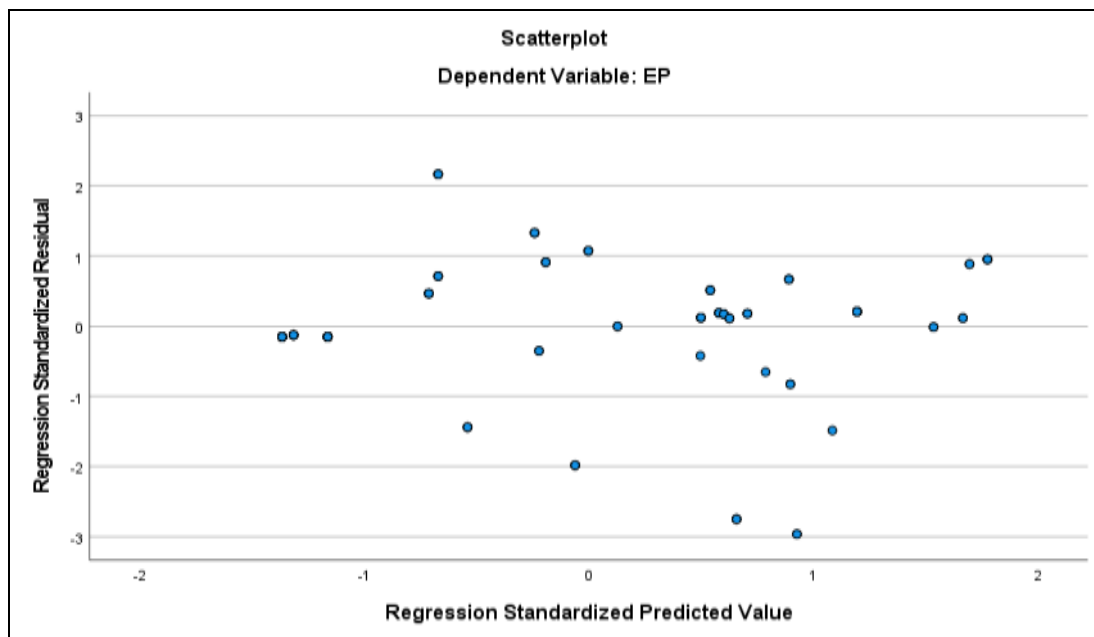
Figure 4.3: Scatter Plots for Unstandardized Residuals

Source: Data Analysis, 2025

4.4.4 Multicollinearity Test Results

Table 4.9 presents the results of the multicollinearity test for the model predicting employee performance (EP) based on ICT competencies at the Higher Education Student Loan Board (HESLB). The test includes tolerance and variance inflation factor (VIF) statistics for the independent variables: Information Management Competency (IMC), Digital Communication Competency (DCC), and Internet Skills Competency (ISC). All tolerance values exceed the common threshold of 0.1, with

IMC at 0.730, DCC at 0.738, and ISC at 0.706, indicating that there is no severe multicollinearity between the independent variables. Additionally, the VIF values are well below the critical value of 10, with IMC at 1.370, DCC at 1.354, and ISC at 1.416. These results suggest that multicollinearity is not a concern in the model, implying that the independent variables are not highly correlated with one another and will provide reliable estimates in the analysis of their effects on employee performance.

Table 4.9: Multicollinearity Test Results

		Tolerance	VIF
1	(Constant)		
	IMC	.730	1.370
	DCC	.738	1.354
	ISC	.706	1.416

a. Dependent Variable: EP

Note: IMC = Information Management Competency, DCC = Digital Communication Competency, ISC = Internet Skills Competency, EP = Employees Performance

Source: Data Analysis, 2025

4.5 Multiple Regression Analysis Results

In the context of the study examining the effect of ICT competencies (Information Management Competency, Digital Communication Competency, and Internet Skills Competency) on employee performance (EP) at the Higher Education Student Loan Board (HESLB), the multiple regression analysis results are used to determine the relationship between the independent variables (IMC, DCC, and ISC) and the dependent variable (EP). The regression coefficients indicate the strength and direction of the relationship between each competency and employee performance.

4.5.1 Model Summary Results

Table 4.10 presents the model summary results of the multiple regression analysis for the effect of Information Management Competency (IMC), Digital Communication Competency (DCC), and Internet Skills Competency (ISC) on employee performance (EP) at the Higher Education Student Loan Board (HESLB).

The R value of 0.834 indicates a strong positive correlation between the predictors (IMC, DCC, ISC) and employee performance, suggesting that the independent variables are highly related to the dependent variable. The R Square value of 0.696 implies that approximately 69.6% of the variability in employee performance can be explained by the model, which indicates a good fit.

The Adjusted R Square value of 0.687 accounts for the number of predictors in the model and suggests that the model is well-suited to the data with minimal over fitting.

The standard error of the estimate (0.23587) reflects the average distance that the observed values fall from the regression line, indicating a reasonable degree of accuracy in predicting employee performance based on the three ICT competencies. Overall, the model provides a strong explanation of employee performance based on the ICT competencies, making it a valuable tool for understanding the relationship between these variables.

Table 4.10: Model Summary Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.834[a]	.696	.687	.23587

a. Predictors: (Constant), ISC, DCC, IMC

b. Dependent Variable: EP

Note: IMC = Information Management Competency, DCC = Digital Communication Competency, ISC = Internet Skills Competency, EP = Employees Performance

Source: Data Analysis, 2025

4.5.2 ANOVA Results

Table 4.11 presents the ANOVA (Analysis of Variance) results for the regression model examining the effect of Information Management Competency (IMC), Digital Communication Competency (DCC), and Internet Skills Competency (ISC) on employee performance (EP) at the Higher Education Student Loan Board (HESLB). The regression sum of squares is 12.621, which represents the variation explained by the predictors. The residual sum of squares is 5.508, reflecting the unexplained variation in employee performance. The F-value of 75.622, which is highly significant ($p < 0.000$), indicates that the model is a good fit for the data, as the predictors (IMC, DCC, ISC) significantly contribute to explaining employee performance. The significant p-value of 0.000 confirms that the overall regression model is statistically significant, meaning that at least one of the predictors has a meaningful relationship with employee performance. The results suggest that the combined effect of the ICT competencies has a strong and statistically significant influence on employee performance at HESLB.

Table 4.11: ANOVA Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.621	3	4.207	75.622	.000[b]
	Residual	5.508	99	.056		
	Total	18.129	102			

a. Dependent Variable: EP

b. Predictors: (Constant), ISC, DCC, IMC

Note: IMC = Information Management Competency, DCC = Digital Communication Competency, ISC = Internet Skills Competency, EP = Employees Performance

Source: Data Analysis, 2025

4.5.3 Regression Coefficients Test Results

Table 4.12 presents the regression coefficient results for the effect of Information Management Competency (IMC), Digital Communication Competency (DCC), and Internet Skills Competency (ISC) on employee performance (EP) at the Higher Education Student Loan Board (HESLB). The constant term (0.595) represents the baseline value of employee performance when all predictors are zero. Among the predictors, IMC has a significant positive effect on employee performance (B = 0.143, p = 0.000), with a standardized beta coefficient of 0.383, indicating a strong relationship between IMC and EP.

DCC also has a significant positive impact on employee performance (B = 0.590, p = 0.000), with a standardized beta coefficient of 0.650, suggesting that digital communication competency is the most influential predictor of employee performance among the three variables. However, ISC does not show a significant effect (B = 0.072, p = 0.348), as the p-value is greater than 0.05, and its standardized

beta coefficient (0.062) indicates a very weak relationship with employee performance. Overall, the results indicate that IMC and DCC significantly influence employee performance, while ISC does not have a statistically significant effect.

Table 4.12: Regression Coefficient Results

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.595	.368		1.616	.109
	IMC	.143	.024	.383	5.904	.000
	DCC	.590	.059	.650	10.077	.000
	ISC	.072	.077	.062	.943	.348

a. Dependent Variable: EP

Note: IMC = Information Management Competency, DCC = Digital Communication Competency, ISC = Internet Skills Competency, EP = Employees Performance

Source: Data Analysis, 2025

4.6 Discussion of the Findings

This study utilized higher education student loan board as case to examine effect of ICT competency on employee's performance. Data were analyzed through descriptive statistics and multiple regression analysis. The discussion elucidates the data analysis findings and juxtaposes them with previous relevant studies, while consistently aligning with the study objectives. Each finding's contribution is summarized, offering a comprehensive explanation of the relationship between ICT competency on employee's performance.

4.6.1 The Relationship Effect of Information Management Competency on Employee Performance at HESLB

Information Management Competency (IMC) is crucial for enhancing employee performance at the Higher Education Students' Loans Board (HESLB). IMC encompasses the skills and knowledge required to effectively manage information resources, ensuring accurate and timely decision-making. This study found that information management technology was positive and siginifcantly related to employees' performance at HESLB.

Similarly, Rahimi et al., (2022) found that knowledge, skills, and ability positively and significantly affect individual performance. Also, Wibowo, Muljono, and Sumertajaya, (2021) found that knowledge management has a significant effect on innovation and competence, whereas innovation significantly affects performance. Moreover, Vijh, Sharma, and Agrawal, (2022), Alebiosu, et al., (2022), Tilahun (2022) and Matimbwa, and Kamala, (2024) had similar findings that knowledge, skills, and ability positively and significantly affect individual performance. All these scholars, share similar findings as they collectively demonstrate that effective knowledge management, alongside the development of knowledge, skills, and abilities, enhances innovation, which in turn significantly and positively impacts individual and organizational performance.

However, while Information Management Competency (IMC) is generally associated with improved employee performance, certain studies have identified contexts where this relationship may be negative or insignificant. For instance, a study by Boma-

Siaminabo (2022) found that in state-owned universities in Rivers State, Nigeria, office managers' competencies in records management and communication did not significantly impact their task and contextual performance. Specifically, records management competencies and communication competencies were found to have no significant effect on task and contextual performance, suggesting that these competencies alone may not enhance job performance in this context.

Also, similarly, research by Kharisma (2021) indicated that competencies had a negative or insignificant effect on employee performance at Bank BPRS Bina Finansia Semarang. This suggests that, in certain organizational settings, the expected positive impact of competencies on performance may not materialize, potentially due to factors such as organizational culture, resource constraints, or misalignment between competencies and job requirements. Therefore, these findings highlight the importance of contextual factors in determining the impact of IMC on employee performance. They suggest that while IMC can be beneficial, its effectiveness may depend on how well competencies align with organizational needs, culture, and the specific demands of the job.

4.6.2 The Relationship Effect of Digital Communication Competency on Employee Performance at HESLB

The relationship between Digital Communication Competency (DCC) and Employee Performance at the Higher Education Students' Loan Board (HESLB) can be explored through various lenses, given the increasing reliance on digital tools for communication in contemporary work environments. In a highly digitalized era,

DCC is vital in improving how employees at HESLB exchange information, collaborate, and carry out their daily tasks. This study found that Digital Communication Competency (DCC) is positive and significantly related to employee performance at the higher education students' loan board.

Similarly, Alqudah (2023) discovered that top management support significantly influences the digital proficiency of internal auditors, which subsequently affects the efficacy of electronic audit jobs in these listed businesses. The study indicated that the digital competency of internal auditors serves as a positive mediator in the relationship between top management support and the effectiveness of electronic audit duties. Adenekan and Jimoh (2021) discovered a significant degree of technology innovation and digital proficiency among secretaries in the examined organizations. Technological developments and the digital competency of secretaries significantly influence their performance in technology-driven office and secretarial activities.

Additionally, Huu, (2023) also, found that employees with greater digital autonomy are more likely to engage in innovative work, leading to improved job performance and empowerment. These scholars have similar findings because they all emphasize the significant role of digital communication competencies in improving employee performance by enhancing communication efficiency, collaboration, and decision-making within organizations. However, while digital communication competencies are generally associated with enhanced employee performance, certain studies have identified contexts where this relationship may be negative or insignificant. For

instance, a study by Garini and Muafi (2023) found that digital competence positively impacts work-life balance and stress but does not significantly affect service performance. This suggests that while digital skills can influence personal well-being, they may not directly enhance job performance in all contexts. Also, additionally, the rapid integration of technology in professional settings has led to techno stress, which adversely affects job performance. A study by Atrian and Ghobbeh (2023) highlights that technostress, arising from constant connectivity and the pressure to adapt to new technologies, can lead to decreased productivity, diminished job satisfaction, and increased turnover intentions. This underscores the importance of managing the negative impacts of digital communication on employee performance.

Furthermore, the implementation of digital communication tools can sometimes disrupt traditional workflows, leading to decreased productivity. An article by Interact Software (2023) discusses how the wrong choice of digital platforms can negatively affect employee productivity, emphasizing the need for careful selection and integration of digital tools to support effective communication. These findings highlight the complex relationship between digital communication competencies and employee performance, suggesting that while digital skills can offer benefits, they may also introduce challenges that need to be managed to optimize performance.

4.6.3 The Relationship Effect Internet Skills Competency on Employee Performance at HESLB.

The relationship between Internet Skills Competency (ISC) and Employee Performance at the Higher Education Students' Loan Board (HESLB) is significant,

given the increasing reliance on the internet for communication, information retrieval, and job-related tasks. Internet skills, which encompass the ability to effectively search for, evaluate, and use online resources, have become indispensable in modern work environments. Employees with strong internet skills are better equipped to handle the digital demands of their roles, such as processing loan applications, accessing student records, and communicating with applicants and stakeholders through email or online portals. As such, internet skills are directly linked to improved task efficiency and organizational effectiveness at HESLB.

Studies have demonstrated that higher internet competency leads to better employee performance by enhancing their ability to navigate and use digital tools effectively. For instance, AlHamad et al. (2022) found that internet skills positively influence employees' productivity and problem-solving abilities in public sector organizations, as employees with higher internet competency can quickly access information, streamline processes, and address issues more efficiently. Similarly, Marsh (2021) highlighted that internet literacy significantly improves work efficiency, especially in digital-first environments, where employees must rely on online platforms to complete their work tasks.

However, the impact of internet skills on performance is not always straightforward. According to Idachaba, Ojokuku, and Unwana (2023), while internet skills are essential, the effectiveness of these skills is contingent upon contextual factors such as the organization's technological infrastructure, employee training, and support systems. Employees may possess advanced internet skills, but if the organization's

technological tools are outdated or not user-friendly, these competencies may not translate into improved performance. This aligns with Ismail (2022), who found that internet skills alone do not guarantee high performance unless they are complemented by proper organizational support, clear guidelines, and appropriate training programs.

In the context of HESLB, where employees are expected to manage large volumes of student loan applications and communication with various stakeholders, internet skills are vital for ensuring tasks are completed efficiently and accurately. However, it is essential that these skills are nurtured within an organizational framework that supports technological adoption and continuous development. For example, without adequate training or access to up-to-date online tools, even employees with high internet competency may struggle to perform optimally.

In conclusion, the relationship between Internet Skills Competency and Employee Performance at HESLB is generally positive but contingent on factors such as organizational infrastructure, employee training, and the integration of digital tools. As demonstrated in the studies by AlHamad et al. (2022), Marsh (2021), Idachaba, Ojokuku, and Unwana (2023), and Ismail (2022), internet competency enhances employee productivity and performance, but it requires complementary support systems to be fully effective.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSION AND

RECOMMENDATIONS

5.1 Overview

Chapter Five provides a comprehensive summary of the findings, conclusions, and recommendations based on the study's objectives and results. It begins with a concise recap of the key findings, highlighting the significant relationships between the variables studied, such as the impact of internet skills competency on employee performance at HESLB. The chapter then draws conclusions from these findings, discussing how internet skills contribute to enhanced employee performance, while acknowledging the contextual factors that influence this relationship. Finally, it offers practical recommendations for HESLB and similar organizations, suggesting strategies for improving internet skills training, integrating advanced digital tools, and providing ongoing support to employees to optimize their performance. These recommendations aim to foster an environment where employees are better equipped to leverage their digital competencies to enhance productivity and achieve organizational goals.

5.2 Summary of the Findings

5.2.1 The Relationship Effect of Information Management Competency on Employee Performance at HESLB

The findings of the study reveal a positive relationship between Information Management Competency (IMC) and Employee Performance at HESLB. Employees with higher IMC demonstrated improved efficiency in managing student loan

records, retrieving relevant data, and supporting decision-making processes. The study highlights that effective information management practices, such as data organization, storage, and retrieval, are critical in enhancing the overall performance of employees. However, it also suggests that organizational factors, such as the availability of proper tools and training, play a crucial role in maximizing the impact of IMC on employee performance.

5.2.2 The Relationship Effect of Digital Communication Competency on Employee Performance at HESLB

he study's findings indicate a positive relationship between Digital Communication Competency and Employee Performance at HESLB. Employees who demonstrated strong skills in digital communication tools, such as email, online platforms, and messaging systems, were able to communicate more effectively with stakeholders, streamline workflows, and enhance collaboration. This competence led to improved task efficiency and better overall job performance. However, the study also suggests that the full potential of digital communication skills is realized when supported by proper training and organizational infrastructure.

5.2.3 The Relationship Effect Internet Skills Competency on Employee Performance at HESLB.

The findings of the study indicate a positive relationship between Internet Skills Competency and Employee Performance at HESLB. Employees with higher levels of internet skills were able to efficiently navigate online resources, manage student loan applications, and access necessary information quickly, leading to improved job

performance. The study also emphasized that internet skills enhanced employees' ability to adapt to new digital tools and platforms, facilitating their productivity. However, it was noted that the effectiveness of internet skills in improving performance also depended on the organization's technological infrastructure and ongoing training support.

5.3 Conclusion

The conclusion of the study on the Relationship Effect of Information Management Competency (IMC) on Employee Performance at HESLB emphasizes that IMC plays a crucial role in enhancing employee performance. The study concludes that employees who possess strong information management skills, such as efficient data organization, retrieval, and analysis, are better equipped to perform their tasks effectively, leading to improved productivity and decision-making. Additionally, the study highlights that while IMC positively impacts performance, its effectiveness is contingent upon factors such as access to proper tools, resources, and organizational support. Therefore, for HESLB to fully leverage the potential of IMC, it is essential to invest in adequate training programs and ensure that employees have the necessary technological infrastructure to apply their competencies effectively.

The conclusion of the study on The Relationship Effect of Digital Communication Competency on Employee Performance at HESLB concludes that digital communication skills significantly enhance employee performance. Employees with strong digital communication competencies, such as proficiency in email, online messaging platforms, and virtual collaboration tools, are able to communicate more

effectively with stakeholders, manage tasks efficiently, and improve collaboration within teams. The study underscores that these skills contribute directly to better performance outcomes by streamlining communication processes and improving workflow efficiency. However, the study also stresses that the positive impact of digital communication competency is maximized when supported by appropriate training, ongoing development, and organizational infrastructure, suggesting that HESLB should prioritize digital communication training and technological support to optimize employee performance.

The conclusion of the study on The Relationship Effect of Internet Skills Competency on Employee Performance at HESLB highlights the essential role that internet skills play in improving employee performance. Employees who possess strong internet skills are more efficient in navigating online resources, accessing relevant information, and managing digital tasks, which ultimately enhances their productivity and effectiveness in their roles. The study concludes that internet skills contribute to better decision-making, faster problem-solving, and improved task completion. However, the effectiveness of these skills is influenced by the organization's technological infrastructure and the availability of ongoing training. For HESLB to fully capitalize on the benefits of internet skills, it is crucial to invest in comprehensive training programs and ensure that employees have access to the necessary digital tools and resources to perform optimally.

5.4 Implication of the Findings

The implications of the study on the effect of ICT competency on employees' performance at the Higher Education Student's Loan Board (HESLB) can be

categorized into policy, institutional, and academic dimensions. The study highlights the importance of ICT competency in enhancing employee performance, suggesting that policymakers should prioritize ICT skill development as part of the national strategy for improving public sector service delivery. Policies should encourage the integration of ICT training and development programs for government employees, particularly in sectors like education and student loan management, where digital transformation can significantly improve efficiency. Furthermore, policies should incentivize continuous ICT education and professional development, ensuring that public institutions, such as HESLB, are equipped with skilled employees who can effectively handle emerging technological challenges.

For institutions like HESLB, the study emphasizes the need for substantial investments in ICT infrastructure and training programs to foster a digitally competent workforce. Institutions should develop and implement comprehensive ICT training programs that are aligned with the specific needs of their operations, enhancing employees' ability to use digital tools for improved decision-making, communication, and task management.

The findings suggest that HESLB should establish clear protocols for updating and maintaining ICT systems to ensure that employees have access to the latest technologies, thus maximizing their performance. Additionally, institutions must create a culture that promotes continuous learning, adaptation, and application of ICT in everyday tasks to maintain high levels of employee engagement and effectiveness. The study provides valuable insights for academia, suggesting that educational

programs should place greater emphasis on equipping students, especially those in public administration, management, and information systems fields, with ICT skills. Universities and training institutions should incorporate ICT competency courses into their curricula to prepare graduates for the demands of modern workplaces.

Furthermore, academic research can explore the link between ICT competency and employee performance across different sectors and regions, offering a deeper understanding of how ICT-related skills influence productivity and organizational success. This would contribute to a growing body of knowledge on ICT in public sector performance, potentially informing future curriculum designs and training programs.

The demographic implications of this study on the Effect of ICT Competency on Employees' Performance at HESLB suggest that factors such as age, education level, work experience, and gender may influence employees' ability to utilize ICT tools effectively. For instance, younger employees or those with higher levels of formal education may demonstrate greater ICT proficiency, adaptability, and willingness to engage with digital systems, aligning with findings by Mtebe and Raisamo (2014) that digital literacy tends to vary across demographic lines. Furthermore, understanding these demographic patterns can help HESLB tailor training programs and capacity-building initiatives to address specific needs, ensuring equitable improvement in ICT competency across all employee groups and ultimately enhancing overall institutional performance.

5.5 Recommendations

5.5.1 The Relationship Effect of Information Management Competency on Employee Performance at HESLB

The study recommends that HESLB should invest in targeted information management training programs to enhance employees' competencies in data organization, retrieval, and analysis. Ensuring access to modern technologies and systems that support information management is crucial for improving task efficiency and decision-making. Additionally, HESLB should foster a culture of continuous learning and provide ongoing support to ensure employees can effectively apply their information management skills. These efforts will contribute to improved employee performance, better service delivery, and more informed decision-making processes at the institution.

5.5.2 The Relationship Effect of Digital Communication Competency on Employee Performance at HESLB

The study recommends that HESLB should prioritize digital communication skills training to improve employees' proficiency in using digital platforms for effective communication and collaboration. This includes offering training in the use of email, video conferencing, and other virtual communication tools, which are essential for maintaining efficient workflows and engagement with stakeholders. Furthermore, HESLB should invest in enhancing its technological infrastructure to support seamless digital communication across all levels of the organization. Encouraging a culture of open, digital-first communication will further enhance team collaboration, streamline decision-making, and ultimately improve overall employee performance.

5.5.3 The Relationship Effect Internet Skills Competency on Employee Performance at HESLB.

The study recommends that HESLB should focus on enhancing employees' internet skills competency through comprehensive training programs that cover essential digital tools, online research methods, and effective internet navigation techniques. This will enable employees to access relevant information quickly, improve task efficiency, and make better-informed decisions. Additionally, HESLB should invest in upgrading its internet infrastructure to ensure that employees have fast and reliable access to online resources. By fostering a culture of digital literacy and providing ongoing support, HESLB can empower its workforce to adapt to the evolving technological landscape, ultimately boosting employee performance and organizational productivity.

5.6 Limitations

One of the key limitations of the study on the effect of ICT competency on employees' performance at the Higher Education Student's Loan Board (HESLB) is the potential lack of generalizability due to its focus on a specific organization, which did represent other institutions within the public sector or higher education context. Additionally, the study relied on self-reported data, which could be influenced by response biases, such as social desirability or inaccurate self-assessment of ICT skills. Another limitation is the cross-sectional nature of the study, which provides only a snapshot of the relationship between ICT competency and performance, without accounting for changes over time or causality. Finally, the study overlooked the influence of external factors such as organizational culture,

leadership, and resource constraints, which could also significantly affect employee performance. These factors limit the comprehensive understanding of how ICT competencies interact with other variables in influencing performance.

5.7 Suggestion for Further Studies

Further studies on the effect of ICT competency on employees' performance at the Higher Education Student's Loan Board (HESLB) could explore longitudinal designs to better understand how ICT skills development impacts employee performance over time. Future research could also examine the role of organizational culture and leadership in moderating the relationship between ICT competency and performance, as these factors may play a significant role in determining the effectiveness of ICT training programs. Additionally, expanding the study to include other public institutions within the education sector could help to enhance the generalizability of the findings. It would also be valuable to investigate how individual factors such as motivation, age, and educational background influence the ability to leverage ICT skills in the workplace. Finally, further studies could assess the impact of advanced ICT tools and innovations on employee performance, examining how emerging technologies shape work processes and productivity in public sector organizations like HESLB.

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APPENDICES

Appendix I Questionnaire

My name is Sussie Mahunnah. I am carrying out research entitled "effect of ict competency on employees performance at higher education student's loan board": the case of national social security fund in Morogoro region, Tanzania" in partial fulfilment of the award of masters of business administration and Human Resource Management degree of the open university of Tanzania. Hereunder is a questionnaire which I would like you to fill up.

This part focus on obtaining personal information of respondent. Name of participant is not mandatory unless the respondent wish to do so.

A: Personal Information		
1. Age of respondent	a. 18-28 ( )	c. 49-58 ( )
	b. 39-48 ( )	d. 59 and above ( )
2. Sex of the respondents	a. Male ( )	b. Female ( )
3. Level of education	a. Primary ( )	b. Secondary ( )
	c. Diploma ( )	d. Advanced diploma ( )
	e. Undergraduate ( )	f. Master's degree ( )
	g. Others (please specify)	
4. What is your job position?	a. Manager ( ) b. Officer ( )	c. Staff ( )
5. Years of Experience	1. Below 5 4. 16- 20 2. 6- 10 5. 21 - 25 3. 11- 15 6. Above 25	

Code	Information Management Competency	SD	D	N	A	SA
IMC1	The level of my competency in information management tasks is highly competent	1	2	3	4	5
IMC2	My level of Organizing and categorizing electronic documents is very good	1	2	3	4	5
IMC3	My level of Retrieving and searching for information efficiently	1	2	3	4	5
IMC4	My level of ensuring data accuracy and quality is very good	1	2	3	4	5
IMC5	My level of Collaborating and sharing information using digital tools is very good	1	2	3	4	5

IMC6	The use of effective information management practices has improved my overall job performance.	1	2	3	4	5
IMC7	Access to accurate and organized information has enhanced my decision-making abilities.	1	2	3	4	5
IMC8	Efficient information management has positively impacted my collaboration with colleagues and teams.	1	2	3	4	5

Code	Digital Communication Competency	SD	D	N	A	SA
DCC1	The level of Using email effectively for communication and collaboration is very good	1	2	3	4	5
DCC2	My level of Proficiency in using digital communication tools (e.g., messaging apps, video conferencing). is very good	1	2	3	4	5
DCC3	My level of Writing clear and concise communication in digital formats (emails, messages, etc.) is very good	1	2	3	4	5
DCC4	My level of Adapting communication style for different digital platforms and audiences is very good	1	2	3	4	5
DCC5	Proficient digital communication has positively influenced my ability to work collaboratively.	1	2	3	4	5
DCC6	Effective digital communication has improved the efficiency of my tasks.	1	2	3	4	5
DCC7	Digital communication skills have contributed to better problem-solving within teams.	1	2	3	4	5

Code	Internet Skills Competency	SD	D	N	A	SA
ISC1	My level of using email effectively for communication and collaboration is very good	1	2	3	4	5
ISC2	My Proficiency in using digital communication tools (e.g., messaging apps, video conferencing) is very good	1	2	3	4	5
ISC3	My level of Writing clear and concise communication in digital formats (emails, messages, etc.) is very good	1	2	3	4	5
ISC4	My level of adapting communication style for different digital platforms and audiences is very good	1	2	3	4	5
ISC5	Proficient digital communication has positively influenced my ability to work collaboratively.	1	2	3	4	5
ISC6	Effective digital communication has improved the efficiency of my tasks.	1	2	3	4	5

ISC7	Digital communication skills have contributed to better problem-solving within teams.	1	2	3	4	5

Code	Employees Performance	SD	D	N	A	SA
EP1	I demonstrate strong collaboration and teamwork skills within my department/unit.	1	2	3	4	5
EP2	I effectively communicate with colleagues and supervisors.	1	2	3	4	5
EP3	I actively seek opportunities for professional growth and development	1	2	3	4	5
EP4	I handle challenges and solve problems efficiently in my role.	1	2	3	4	5
EP5	I effectively manage my time and prioritize tasks to meet deadlines.	1	2	3	4	5
EP6	I am committed to upholding the values and mission of HESLB.	1	2	3	4	5
EP7	I clearly understand my job responsibilities and role within the organization.	1	2	3	4	5

RESEARCH CLEARANCE LETTER

HIGHER EDUCATION STUDENTS' LOANS BOARD

HESLB House, 1 Kilimo Street-TAZARA, Mandela Rd, P.O. Box 76068,
15471 DAR ES SALAAM, Tanzania, www.heslb.go.tz

20 January, 2025.

TO

Director of Postgraduate Studies

The Open University of Tanzania

P.O.BOX 23409

Dar es Salaam

Tanzania

RE: RESEARCH CLEARANCE MS. SUSSIE ROGASIAN MAHUNNAH REG PG202085847

Reference is made to your letter with reference number **OUT/PG202085847** date 13th January, 2025 introducing Ms. Sussie Rogasian Mahunnah, to give her a clearance to conduct research title "Effect Of ICT Competency On Employees Performance At Higher Education Student's Loan Board".

Please be informed that Ms. Sussie Rogasian Mahunnah with registration number PG202085847, pursuing Master of Human Resource management (MHRM) is accepted to conduct research at HELSB as indicated in your mentioned letter above.

Your Sincerely,

Aloyce Alphonce
For: EXCUTIVE DIRECTOR

Copy to Sussie Rogasian