# ICT AND FINANCIAL PERFORMANCE OF SMALL AND MEDIUM SCALE ENTERPRISES: A CASE STUDY OF KIBUKU DISTRICT

BY

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## BU/UP/2021/1262

## A RESEARCH REPORT SUBMITTED TO THE FACULTY OF MANAGEMENT SCIENCES IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR THE AWARD OF A DEGREE OF BACHELORS OF BUSINESS ADMINISTRATION OF BUSITEMA UNIVERSITY

**AUGUST, 2024**

# DECLARATION

## DECLARATION

I certify that this research report titled "ICT and Financial Performance of Small and Medium Scale Enterprises: A Case Study of Kibuku District" is my own work. The work has not been presented elsewhere for assessment. Where material has been used from other sources it has been properly acknowledged / referred.

Signature: ................................................
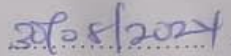
Nyende Cosmas

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# APPROVAL

This research report titled "ICT and Financial Performance of Small and Medium Scale Enterprises: A Case Study of Kibuku District" has been submitted for examination with my approval as a university supervisor and is for the award of a Bachelor's Degree of Business Administration of Busitema University.

...............................          ...........................          30/08/2024.

Supervisor:                        Signature                        Date

Mr. Brian Wadambisha

## DEDICATION

This research report is dedicated to my parents, whose love inspires me and whose tuition has enabled me to study.

I also dedicate it to my brothers and sisters who have given me all the support both morally and spiritually during this demanding time of study.

# ACKNOWLEDGEMENT

I appreciate God, the most gracious, the Most Merciful, for what He has done for me: giving me wisdom, strength to always be courageous for the far I have gone with this research report. I am also thankful to my family because they have given so much inspiration and support to me that I am short of words in expressing my gratitude.

My sincere gratitude in this regard therefore, goes to my supervisor Mr Brian Wadambisha for his efforts, guidance, patience, and all the support and advice she gave me during this exercise.

Great thanks go to Busitema University, Faculty of Management Sciences, Pallisa Campus who through their dedicated teaching that I was able to produce the research report.

A special acknowledgement goes to all my discussion group members for their guidance while preparing this report.

While preparing this report, if any error of fact, omission or emphasis occurs, those are solely my responsibilities.

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# LIST OF ABBREVIATIONS AND ACRONYMS

CRM:   Customer Relationship Management

ICT:   Information Communication Technology

RBV:   Resource-Based View

ROI   Return on investment

SMEs:   Small and Medium Enterprises

UBOS   Uganda Bureau of Statistics

VRIN:   Valuable, Rare, Inimitable, and Non-Substitutable

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# ABSTRACT

The study assessed the relationship between ICT and the financial performance of small and medium-sized enterprises located in Kibuku district. The study utilized a descriptive quantitative design to assess the relationship between ICT and the financial performance of SMEs. Descriptive research design is flexible and allows for a comprehensive exploration of the problem while capturing the characteristics of the target population. Quantitative methods were employed as they offer objectivity and facilitate the investigation of relationships between identified variables. 86 SMEs were considered for the study using nonprobability sampling (purposive). The analysis indicates a positive significant relationship between ICT and SME financial performance. Further research and analysis with a larger sample size or the inclusion of additional variables may be necessary to gain a more comprehensive understanding of the relationship between ICT and SME financial performance. Recommendations were made for SMEs managers to sensitize, educate and train their employees on ICT and the role of individual owner-manager in learning how to use and adopt ICT to enhance value and improve on financial performance.

# CHAPTER ONE

# INTRODUCTION

## 1.0 Introduction

This chapter covers the background of the study, statement of problem, purpose of the study, objectives, scope of the study, significance, conceptual framework and definition of the terms.

## 1.1 Background of the Study

Small and Medium Scale Enterprises (SMEs) are recognized globally as crucial drivers of economic growth, innovation, and employment. Despite their significant potential, many SMEs face persistent challenges that hinder their financial performance. This is particularly evident in Uganda, where SMEs grapple with low profit margins, stagnant revenue growth, and suboptimal return on investment (ROI). This study aims to explore the impact of Information and Communication Technology (ICT) adoption on the financial performance of SMEs, focusing specifically on those in the Kibuku district of Uganda.

Globally, SMEs contribute significantly to economic development. They account for approximately 90% of businesses and more than 50% of employment worldwide (World Bank, 2020). However, SMEs often struggle with financial performance due to various challenges, including limited access to finance, high operating costs, and inadequate technological adoption. Studies indicate that SMEs often operate with thin profit margins due to high operational costs and limited access to finance (Beck et al., 2018). For instance, research shows that SMEs in various contexts report average profit margins as low as 5% (Beck et al., 2018). Still on the global stage, SMEs struggle with stagnant revenue growth rates, limiting their ability to expand and innovate (Joshua Abor & Quartey, 2016).

In Africa, SMEs play a vital role in economic development, contributing about 80% of jobs across the continent and representing about 90% of all businesses (African Development Bank Group, 2019). However, African SMEs often face greater challenges compared to their counterparts in other regions, including poor infrastructure, limited access to finance, and inadequate use of modern technologies. SMEs struggle with low profit margins, stagnant revenue growth, and suboptimal ROI due to factors such as inadequate infrastructure and high costs of borrowing (Adegbite et al., 2020).

Within East Africa, SMEs are a backbone of the economy, contributing to job creation and economic diversification. Despite their importance, SMEs in East Africa face numerous challenges that impede their financial success. A report by the East African Community (EAC 2020) indicates that SMEs in the region struggle with issues such as high operational costs, market access difficulties, and limited technological adoption. The integration of ICT has been suggested as a way to overcome these challenges, potentially enhancing their financial performance by increasing efficiency and market reach.

In Uganda, SMEs contribute significantly to the national economy, accounting for over 90% of the private sector and employing more than 2.5 million people (Uganda Investment Authority, 2020). However, the financial performance of Ugandan SMEs remains subpar, characterized by low profit margins and slow revenue growth. (Nyawata & Bird, 2019) reported that Ugandan SMEs have an average profit margin of only 5%, significantly below the industry benchmark. Additionally, (Uganda Investment Authority, 2023)found that the average annual revenue growth rate for SMEs in Uganda is around 3%.

The Kibuku district, like many other regions in Uganda, relies heavily on SMEs for economic activities. Despite their critical role, SMEs in Kibuku face numerous challenges, including inadequate market access, high operational costs, and limited use of ICT. This study focuses on Kibuku to provide a detailed analysis of how ICT adoption can influence the financial performance of SMEs in this specific context, offering valuable insights for local stakeholders.

The study anchored on the Resource-Based View (RBV) theory. This theory suggests that firms can achieve a competitive advantage through the acquisition and management of valuable, rare, inimitable, and non-substitutable resources (Barney, 1991). ICT can be considered a strategic resource that enhances SME performance.

Several studies have explored the relationship between ICT adoption and SME performance. For instance, a study by Tan et al. (2019) found that ICT adoption significantly enhances the operational efficiency and financial performance of SMEs in Malaysia. Similarly, Alemayehu and Belay (2020) reported that Ethiopian SMEs that adopted ICT experienced substantial improvements in their profit margins and revenue growth.

In Uganda, (Nyawata & Bird, 2019) highlighted the poor financial performance of SMEs and suggested that ICT adoption could be a potential solution. However, empirical studies

specifically focusing on the impact of ICT on SME financial performance in Uganda, particularly in regions like Kibuku, remain scarce.

Despite the existing research, there are notable gaps that this study aimed to fill. Most studies focus on urban areas or national-level analysis. This study provided insights specific to the Kibuku district, a rural area with unique challenges and opportunities.

In conclusion, this study thought to bridge these gaps by providing a comprehensive analysis of the relationship between ICT adoption and the financial performance of SMEs in Kibuku district, Uganda. By focusing on this specific context, the study aimed to offer valuable insights and practical recommendations for enhancing the financial performance of SMEs through effective ICT integration.

## 1.2 Statement of the Problem

In Uganda, Small and Medium Scale Enterprises (SMEs) are grappling with poor financial performance, evident through several key indicators such as low profit margins, stagnant revenue growth, and suboptimal return on investment (ROI) (Omondi & Jagongo, 2018). Despite their potential to drive economic growth and employment, many SMEs in Uganda struggle to generate significant profits, with profit margins often remaining thin due to high operating costs and limited economies of scale (Gulesci et al., 2020). Moreover, these enterprises experience sluggish revenue growth rates, reflecting challenges in accessing new markets, inadequate marketing strategies, and limited product innovation (Kigozi, 2023). According to recent studies, SMEs in Uganda reported an average profit margin of only around 5%, which is well below the industry benchmark (Omondi & Jagongo, 2018). Additionally, data indicates that the average annual revenue growth rate for SMEs in Uganda has remained at around 4%, suggesting a lack of significant expansion (Okumu & Buyinza, 2020). Furthermore, the ROI for many SMEs in Uganda is below expectations, with research suggesting that a substantial portion of SME investments fail to yield adequate returns (Gulesci et al., 2020). This underperformance could be partly due to the failure of SMEs to effectively utilize Information and Communication Technology (ICT) in their operations. Therefore, this study assessed the relationship between ICT and the financial performance of small and medium-sized enterprises located in Kibuku district.

## 1.3 Purpose of the Study

The general objective of this study examined the relationship between information and communications technology (ICT) adoption/usage and the financial performance of small and medium enterprises (SMEs) in Kibuku district, Uganda.

## 1.4 Research Objectives

- To evaluate the impact of ICT adoption on financial performance of SMEs in Kibuku district.
- To determine the effects of ICT infrastructure on financial performance of SMEs in Kibuku District, Uganda.
- To establish the effects of ICT technical capacity on financial performance of SMEs in Kibuku District, Uganda.

## 1.5 Research Questions

- What is the impact of ICT adoption on financial performance of SMEs in Kibuku district?
- What are the effects of ICT infrastructure on financial performance of SMEs in Kibuku District, Uganda?
- What are the effects of ICT technical capacity on financial performance of SMEs in Kibuku District, Uganda?

## 1.6 Scope of the Study

### 1.6.1 Content Scope

The study focused on the ICT usage in line with financial performance of small and medium sized in Kibuku district, Uganda. It assessed the level of ICT adoption and its impact on financial performance indicators such as profit margins, revenue growth, and ROI. Data collected from a representative sample of SMEs in the district through surveys and interviews with business owners and managers.

### 1.6.2 Geographical Scope

The geographical scope of this study was limited to the Kibuku district in Uganda. Kibuku district is a rural area that relies heavily on SMEs for economic activities. By focusing on this

specific region, the study aims to provide detailed insights and recommendations tailored to the unique challenges and opportunities faced by SMEs in Kibuku district.

### 1.6.3 Time Scope.

The study was conducted over a four-month period, from May 2024 to August 2024. During this timeframe a comprehensive data collection, analysis, and interpretation was carried out, ensuring that the findings reflect the current ICT adoption trends and their impact on the financial performance of SMEs in Kibuku District during this specific period.

### 1.7 Significance of the Study

This study is significant because it aimed to provide empirical evidence on the role of ICT in enhancing the financial performance of SMEs in Uganda, specifically in the Kibuku district. Understanding this relationship can help policymakers and business owners make informed decisions regarding ICT investments and strategies. Improved financial performance of SMEs can contribute to economic growth, job creation, and poverty alleviation in the region.

### 1.8 Conceptual Framework

The study assessed the effects of ICT adoption on financial performance of SMEs, adoption of ICT relates to incorporation of various technologies that ease in generation of business-related information and enhance communication within the business environment. While these technologies have increased productivity, promoted improved quality of service offered by SMEs and increased effectiveness and management of SMEs, they have their involved costs which may otherwise harm performance of SMEs. ICT infrastructure, technical capacity and the adoption patterns plays a key role in improving profitability and growth of SMEs. SMEs operations relate to activities that define a firm's value and supply chain. It encompasses interaction of all stakeholders involved and resources employed both in internal and external environments of a firm. Resources employed range from financial, time, human, expertise and IT.

**ICT**



| ICT ADOPTION: | | FINANCIAL PERFORMANCE |
| --- | --- | --- |

**ICT ADOPTION:**

- ICT tools
- ICT integration

**ICT INFRASTRUCTURE:**

- Hardware
- Software

**ICT TECHNICAL CAPACITY**

- Training on use of IT
- Human resource capacity

**FINANCIAL PERFORMANCE**

- Profit margins
- Revenue growth rates
- Financial efficiency
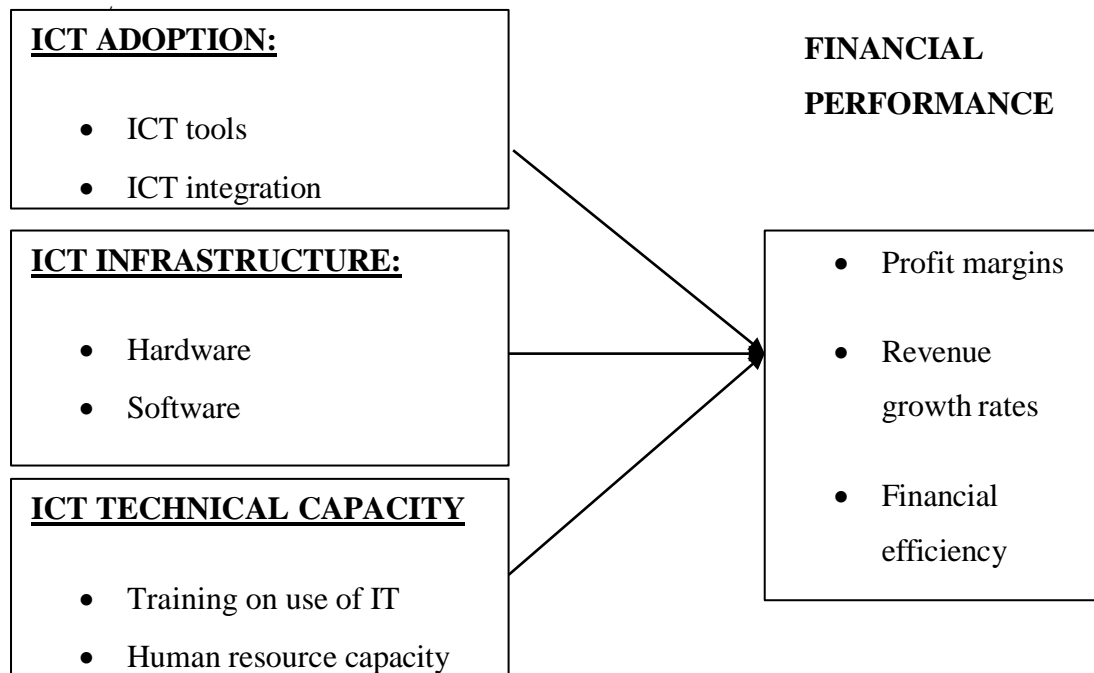
**Figure 1. 1: Conceptual Framework**

**1.9 Definition of Key Terms**

**ICT**

ICT is a broad term that encompasses all the technologies and systems that enable the creation, processing, storage, and exchange of information and data.

**Financial performance**

Financial performance refers to how current assets of a firm can be utilized optimally in the course of normal business activities and raise income for the business. Financial performance is a sign of the financial stability for a given period of time for a firm. Performance also refers to an ongoing process that involves managing the criteria for which an institution, agency or project can be held accountable (Turyahebwa & Sunday, 2019).

**Small and Medium Scale Enterprises (SME's)**

In the Ugandan context, SMEs (Small and Medium Enterprises) are defined based on the number of employees and annual turnover. Micro enterprises have 1-4 employees and up to UGX 10 million in annual turnover, small enterprises have 5-49 employees and UGX 10-100 million in annual turnover, and medium enterprises have 50-100 employees and UGX 100-360 million in annual turnover. These businesses, often family-owned, span various sectors including agriculture, manufacturing, and services.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.0 Introduction

Poor financial performance is a pervasive problem among Small and Medium-sized Enterprises (SMEs), hindering their growth and survival. This section highlights the specific issue of poor financial performance in SMEs, and sets the stage for the literature review to explore the potential role of ICT in addressing this challenge. It covers previous theories on use of ICT in SMEs, studies on use of ICT and SME performance.

## 2.1 Theoretical Review

### 2.1.1 Resource-Based View (RBV) Theory

This study is grounded in the Resource-Based View (RBV) theory, which suggests that firms can achieve and sustain a competitive advantage by acquiring and effectively managing resources that possess four key attributes: value, rarity, inimitability, and non-substitutability (VRIN) (Barney, 1991). This theoretical framework emphasizes the importance of a firm's internal capabilities and resources in achieving competitive advantage, rather than relying solely on external market conditions. By focusing on the VRIN resources, firms can develop a unique and sustainable competitive edge in their industry.

## 2.2 Empirical Review of Literature

This section provides an in-depth review of relevant literature, focusing on the study's research questions. The review systematically examines existing research, highlighting the findings of earlier scholars on the relationship between ICT adoption and the financial performance of SMEs. Through this exploration, the section identifies gaps in the current body of knowledge, setting the stage for further investigation to address these gaps and contribute to the existing literature.

### 2.2.1 Impact of ICT Adoption and Financial Performance of SMEs

ICT adoption significantly influences the financial performance of SMEs by enhancing operational efficiency and productivity. (Brynjolfsson & Hitt, 2020) demonstrated that firms investing in ICT experience substantial productivity gains, which directly translate into improved financial performance. Similarly, (Melville et al., 2014) argue that ICT contributes to value creation through cost reduction, improved customer service, and new revenue

generation opportunities. These benefits are supported by the Resource-Based View (RBV) theory, which suggests that ICT acts as a strategic resource that can create a competitive advantage (Barney, 1991).

ICT tools such as accounting software, inventory management systems, and Customer Relationship Management (CRM) systems have been shown to improve financial management and operational efficiency. Molla and Licker, (2021) emphasize that these tools automate routine tasks, minimize errors, and provide real-time financial insights, which are critical for effective decision-making. This automation not only saves time but also reduces operational costs, leading to better financial outcomes. For instance, SMEs using integrated financial systems can track expenses and revenues more accurately, facilitating better budgeting and forecasting (Tarutė & Gatautis, 2019).

ICT adoption also facilitates market expansion and enhances competitive positioning. (Zhu et al., 2022) found that SMEs leveraging the internet for marketing and sales can access global markets, thereby increasing their revenue streams. This is particularly advantageous for rural SMEs, which may have limited local market opportunities. (Schubert et al., 2020) supports this by arguing that ICT enables SMEs to innovate and differentiate their products, thus gaining a competitive edge. Additionally, ICT tools support e-commerce activities, allowing SMEs to reach broader customer bases and improve their market presence (Ibrahim et al., 2019).

Despite the advantages, rural SMEs face unique challenges in ICT adoption. Mozilla, (2017) identified barriers such as unreliable internet connectivity and high costs as significant impediments. These issues restrict the ability of rural SMEs to fully utilize ICT tools. (Matambalya et al., 2019) also noted that the lack of technical support and training exacerbates these challenges. For instance, in rural areas, SMEs often struggle with limited access to technical support services and training programs, which hinders their ability to effectively adopt and use ICT (Sife, Kiondo, & Fjermestad, 2020).

Although existing literature highlights the benefits of ICT adoption, there is a lack of focused research on the specific barriers and solutions for ICT adoption among SMEs in rural settings like Kibuku District. There was a need for in-depth studies to understand the unique challenges faced by these SMEs and to develop targeted interventions that can facilitate effective ICT adoption and improve financial performance.

## 2.2.2 Impact of ICT Infrastructure and Financial Performance of SMEs

IT infrastructure encompasses the physical and virtual resources that support the flow, storage, processing, and analysis of data within an organization. It includes hardware (servers, computers, networking equipment), software (operating systems, applications), and network resources (internet connectivity, intranet) (King, 2022).

IT infrastructure plays a crucial role in the effective use of ICT, and its impact on financial performance is well-documented. Brynjolfsson & Hitt, (2020) found that investments in IT infrastructure positively correlate with financial performance by enabling more efficient business operations. The importance of infrastructure is further supported by the Technology-Organization-Environment (TOE) framework, which highlights how technological resources impact organizational performance (Baker, 2018).

High-quality internet connectivity is a fundamental component of IT infrastructure that affects financial performance. Wieck & Vidal, (2019)found that broadband connectivity is linked to economic growth, which in turn improves business performance. Reliable internet access allows SMEs to participate in e-commerce, utilize online banking, and adopt cloud-based services, thus enhancing operational efficiency and financial management. Hardware investments, such as modern computers and servers, also support efficient business processes and data management (Zhu et al., 2022).

Effective IT infrastructure also includes investing in software and system integration. (Aisyah, 2020) found that SMEs adopting enterprise resource planning (ERP) systems experience significant improvements in financial performance due to enhanced operational efficiency and better decision-making. ERP systems integrate various business functions, providing a holistic view of operations and facilitating strategic planning (Davenport & Prusak, 2014). Moreover, the integration of software systems helps streamline processes and reduces operational redundancies (Leary, 2016).

Rural SMEs face specific challenges related to IT infrastructure. Gatautis, (2018) notes that limited access to high-speed internet and frequent power outages are common issues in rural areas. These infrastructural limitations hinder the ability of rural SMEs to fully exploit ICT tools. Efforts to improve IT infrastructure, such as establishing community internet centers and offering subsidies for ICT equipment, are essential for addressing these challenges (Chircu & Mahajan, 2019).

Although the general relationship between IT infrastructure and financial performance is established, there is insufficient research focusing on the specific infrastructural needs and deficiencies of SMEs in rural areas like Kibuku District. Detailed studies were needed to identify and address the unique infrastructural challenges faced by these SMEs and to develop practical solutions and policy interventions to improve IT infrastructure in rural settings.

### 2.2.3 Impact of ICT Technical Capacity and Financial Performance of SMEs

IT technical capacity refers to the skills, knowledge, and competencies of an organization's workforce to effectively utilize and manage IT resources. This includes technical skills (programming, networking, database management), problem-solving abilities, and familiarity with relevant software and tools (Mckinsey, 2021).

The technical capacity of SME employees significantly impacts the successful adoption and utilization of ICT. Bharadwaj, (2016) highlights that firms with higher IT technical capacity can better leverage ICT tools, leading to improved financial performance. This capacity includes skills in software usage, system maintenance, and cybersecurity, which are crucial for maximizing the benefits of ICT investments (Ofoezie, 2023).

Training programs are essential for developing IT technical capacity. Arvanitis, (2019) found that SMEs investing in employee training see improvements in ICT utilization, leading to enhanced financial performance. Training programs covering various aspects of IT, including software applications, system administration, and cybersecurity, can help employees effectively use ICT tools and address technical challenges (Compeau & Higgins, 2017). Additionally, regular training ensures that employees stay updated with the latest technological advancements (Hewitt, 2021).

Access to technical support and resources is critical for building IT technical capacity. Matambalya et al., (2019) found that SMEs with access to technical support services are more likely to adopt and effectively use ICT tools. Support networks, including government initiatives, NGOs, and industry associations, can provide valuable resources, training, and assistance to SMEs (Lefebvre, Lefebvre, & Mongeau, 2002). Additionally, partnerships with technology providers and local tech hubs can offer ongoing support and resources for rural SMEs (Kapurubandara & Lawson, 2020).

In rural areas, SMEs face challenges related to access to quality education and training programs. (Mozilla, 2017) highlighted that rural SMEs often struggle to find skilled personnel and training opportunities. This skill gap limits their ability to effectively use ICT tools and improve financial performance. Initiatives to provide targeted training and support programs for rural SMEs are essential for addressing these challenges. For example, local training centers, online courses, and workshops can help bridge the skills gap and enhance IT technical capacity (Pang et al., 2018).

While the importance of IT technical capacity is recognized, there was a lack of research focused on the specific training and support needs of SMEs in rural areas like Kibuku District. More detailed studies are needed to explore effective training methods and support mechanisms tailored to the unique contexts and constraints of these rural SMEs.

## 2.3 Summary of the Literature reviewed

This chapter looks at previous theories on use of ICT in SMEs, studies on use of ICT and SME performance. Based on the information provided, ICT adoption in SMEs is highlighted as a key driver for growth and expansion of SME's. ICT adoption improves financial performance by enhancing efficiency, productivity, and market access. Studies show that ICT investments lead to productivity gains and cost reductions, but rural SMEs face challenges like poor connectivity and high costs, limiting these benefits. Robust IT infrastructure is positively correlated with financial performance, enabling SMEs to leverage data analytics, streamline processes, and reduce operational costs. Effective alignment between IT and business strategies is crucial to maximizing these benefits. The technical capacity of employees is a critical factor in the successful implementation and utilization of ICT. SMEs with higher levels of IT technical capacity report better financial performance, highlighting the importance of continuous training and professional development. While ICT adoption presents significant opportunities for enhancing the financial performance of SMEs in Uganda, it requires strategic investments in IT infrastructure and technical capacity to realize its full potential.

# CHAPTER THREE

## RESEARCH METHODOLOGY

### 3.0 Introduction

This chapter describes the methods and procedures that were applied by the researcher in the course of this study in response to the research objectives. This chapter therefore provides an in-depth look into the research design, population and sample design, data collections methods, research procedures, and data analysis methods that were applied by the researcher. The chapter focuses on the methodologies used, population size, and tools for data collection among others.

### 3.1 Research Design

Research methodology, as defined by Creswell, (2014), is the general approach the researcher adopts in executing a research project. For this study, a quantitative research design was employed, specifically using a descriptive survey design. This design involved collecting and analysing numerical data to understand patterns, relationships, and trends among variables. The following details outlined the specific design and approach that was utilized. The descriptive survey design was appropriate for this study as it allowed for the systematic collection of data from a sample of SMEs in Kibuku District, Uganda. This design helped in describing the current state of ICT adoption, IT infrastructure, IT technical capacity, and their impact on financial performance.

### 3.2 Study Population

Kumar (2014) defines population or study population as an identified group, families living in a given location or people from which a sample is derived. Based on these definitions, the study identified a study group based on set variables and the information acquired was used to provide a general idea of impact of ICT use in enhancing financial performance in SME's.

This study's population consisted of select SMEs in Kibuku district, comprising various sectors which include, retail and wholesale trade, agriculture and agribusiness, service industry, education and training and healthcare. According to Kibuku District Local Government Production Department, there are approximately 110 registered SMEs in Kibuku district. The researcher engaged SME owners, managers, and administrative staff. This

decision was guided by the need to involve different actors in determining the levels of ICT adoption, which in turn affects financial performance. Kibuku district was the area of choice because of its accessibility to the researcher. This targeted population ensured a comprehensive understanding of the impact of ICT adoption across different roles within SMEs, providing a holistic view of its effects on organizational performance.

## 3.3 Sample Size

Omona, (2013) defines Sampling as the process of selecting a number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected. Following the recommendations of Krejcie & Morgan (1970), the researcher selected a sample from the research population. Of the 110 SMEs, 86 SMEs made up the study's sample size.

## 3.4 Sampling Method

The researcher employed purposive sampling to select 86 SMEs from the study population of 110 SMEs. The selection criteria were carefully defined to align with the objectives of the study. Specifically, the SMEs chosen had to be operational for a minimum of five years, ensuring organizational stability and experience and employ between 5 to 50 employees, classifying them as small to medium-sized enterprises according to standard definitions. By deliberately selecting SMEs with particular characteristics, the researcher aimed to gather detailed and relevant information that would best address the research questions, thereby ensuring the sample's relevance and depth (Creswell, 2014).

## 3.5 Type of Data

The researcher used both primary and secondary data sources. Primary data refers to information collected directly from original sources through methods such as surveys, interviews, and experiments, specifically for the purpose of addressing the research questions at hand (Saunders, Lewis, & Thornhill, 2016). In contrast, secondary data involves the use of pre-existing data collected for purposes other than the current research, such as financial records, reports, and previously conducted studies (Babbie, 2016). Primary data collected through questionnaires while secondary data was collected from already existing financial data.

## 3.6 Data Collection Methods

The data was collected using questionnaire. Oppenheim describes a questionnaire as a set of written questions used to collect information on a topic of interest from respondents. The questionnaire was a closed ended type where the expected response from respondent is presumed to be known and the respondent was just required to select from the set of answer from the provided alternatives. The closed questionnaire thought to address or answer the specific objectives as stated in Chapter 1. There were two primary sections (A and B) in the questionnaire. The respondent's information, including gender, age, and type of SME, were captured in Section A. The questions in Section B were designed to capture answers regarding the dependent variable, Financial Performance, and the independent variable, ICT. The Likert 5-point scale, which goes from Strongly Disagree (1) to Strongly Agree (5), was used to gauge the respondent's degree of agreement or disagreement.

## 3.7 Data Analysis Plan

Data analysis involves organizing and interpreting collected information to derive meaningful insights. In this study, the analysis process started with data editing, coding, and tabulation to prepare it for examination. Descriptive statistics, including frequency tables, percentages, means, and standard deviations, were employed to summarize the data. The Statistical Package for the Social Sciences (SPSS) was utilized for these analyses. Correlation analysis was conducted to assess the relationships among variables, while multiple regression analysis evaluated the impact of ICT adoption, ICT Infrastructure, and ICT Technical Capacity on Financial Performance.

## 3.8 Validity and Reliability

Validity refers to the extent to which a research instrument accurately measures what it is intended to measure, ensuring that the findings are relevant and accurate (Creswell, 2014). Reliability, on the other hand, is the degree to which the instrument produces consistent and stable results over time (Lada et al., 2009). To ensure both validity and reliability, the researcher conducted a pilot study using a small sample to identify and address any issues with the questionnaire. The Content Validity Index (C.V.I.) was used to assess the relevance of each item, with a score of 0.75 or higher indicating acceptable validity (Kimberlin & Winterstein, 2008). Feedback from the supervisor was incorporated to refine the instrument. Reliability was evaluated using Cronbach's Alpha, with a coefficient above 0.7 considered

acceptable (Nunnally, 1978), ensuring that the instrument consistently produced reliable results.

**Table 3. 1: Showing Reliability**

| Variables | Item | Cronbach's Alpha | CVI |
|---|---|---|---|
| ICT Adoption | 8 | .797 | .803 |
| ICT Infrastructure | 10 | .832 | .832 |
| ICT Technical Capacity | 8 | .761 | .764 |
| Financial Performance | 8 | .750 | .756 |

**Source: Primary Data (2024)**

**3.9 Ethical Considerations**

Ethical considerations were addressed by first obtaining authorization from the top management of small and medium enterprises (SMEs) in Kibuku District through an introductory letter from the University. The research ensured that all participants provide informed consent, understanding that their participation was voluntary and that they had the right to withdraw at any time without any repercussions. Questionnaires were designed to ensure anonymity by not requiring respondents to disclose their names or personal identifiers. Additionally, respondents were assured that their responses will be treated with strict confidentiality and used solely for the purposes of this research. These measures helped protect the participants' privacy and uphold ethical standards throughout the study.

**CHAPTER FOUR:**

**DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS**

**4.0 Introduction**

This chapter displays the analysis, data presentation, and interpretation of findings based on research objectives which were to; to evaluate the impact of ICT adoption on financial performance, to determine the effects of ICT infrastructure on financial performance and to establish the effects of ICT technical capacity on financial performance of SMEs.

**4.1 Response Rate**

The researcher distributed 86 questionnaires to respondents. However, 81 questionnaires were dully signed and returned. This constitutes 94.2% response rate. The response rate is considered adequate for the study as it meets the threshold of 50% according to Amin (2005).

**4.2 Demographic characteristics**

This information helped the researcher to describe the characteristics of respondents who participated in the study. The respondents' characteristics are said to have an influence on the nature of the findings according to Kothari (2004).

**4.2.1 Gender of respondents**

**Table 4. 1: Showing Gender of Respondents**

|        |        | Frequency | Percent |
|--------|--------|-----------|---------|
| Gender | Male   | 35        | 43.2    |
|        | Female | 46        | 56.8    |
|        | Total  | 81        | 100.0   |

**Source: primary data (2024)**

From the Table 4.1 above, it is clear that SMEs in Kibuku district are dominated by more females than males represented by 56.8% and 43.2% respectively. The results further show that there is uneven representation of males in the SMEs in Kibuku district.

**4.2.2 Age Characteristics**

**Table 4. 2: Showing Age Characteristics**

|     |                    | Frequency | Percent |
| --- | ------------------ | --------- | ------- |
| Age | Less than 20 years | 10        | 12.3    |
|     | 21-30 years        | 19        | 23.5    |
|     | 31-40 years        | 31        | 38.3    |
|     | 41 – 50 years      | 11        | 13.6    |
|     | Above 50 years     | 10        | 12.3    |
|     | Total              | 81        | 100.0   |

**Source: Primary Data, (2024)**

The results indicate that majority of the respondents (38.3%) were between 31 to 40 years of age, followed by 23.5% at the age bracket of 21 to 30 years, 13.6% between 41 to 50 years, 12.3% were less than 20 years and another 12.3% of the respondents were above 50 years of age. The implication of this is that SMEs in Kibuku district relatively have individuals who are more mature in their personal lives, hence contributing to a stable workforce with minor turnover rates in terms of replacement that in turn improves on their financial performance.

**4.2.3 Education level**

**Table 4. 3: Showing Education Level**

|           |             | Frequency | Percent |
| --------- | ----------- | --------- | ------- |
| Education | Certificate | 16        | 19.8    |
|           | Diploma     | 29        | 35.8    |
|           | Degree      | 20        | 24.7    |
|           | Masters     | 5         | 6.2     |
|           | Others      | 11        | 13.6    |
|           | Total       | 81        | 100.0   |

**Source: Primary Data (2024)**

From the results in the table 4.3 above, it shows that 35.8% of the respondents had acquired at least acquired diploma, 24.7% had acquired degree and 19.8% had acquired certificate, 13.6% had acquired other levels of education and 6.2% had acquired masters' level of education. This implies that most of the respondents had acquired a diploma level of

education hence they are less equipped with the ICT proficiency needed to boost on the financial performance of SMEs in Kibuku district.

### 4.2.4 Years served in business

**Table 4. 4: Showing Years served in business**

|       |              | Frequency | Percent |
|-------|--------------|-----------|---------|
| Valid | 0-5 years    | 23        | 28.4    |
|       | 6-10 years   | 30        | 37.0    |
|       | Over 10 years| 28        | 34.6    |
|       | Total        | 81        | 100.0   |

**Source: Primary Data (2024)**

The table 4.4 above shows that 28.4% of the respondents had been in SMEs for 0-5 years, 37.0% had worked between 6-10 years and 34.6% had been for over 10 years. The findings imply that, majority of the respondents have adequate experience that can be used to increase the financial performance of SMEs in Kibuku district.

### 4.2.5 Average annual Turnover

**Table 4. 5: Showing Average annual Turnover in Ugshs**

|       |                     | Frequency | Percent |
|-------|---------------------|-----------|---------|
| Valid | Less than 5 million | 24        | 29.6    |
|       | 5-20 million        | 28        | 34.6    |
|       | 21-50 million       | 20        | 24.7    |
|       | More than 50 million| 9         | 11.1    |
|       | Total               | 81        | 100.0   |

**Source: Primary Data (2024)**

The table 4.5 above shows that 29.6% of the SMEs had an average annual turnover of less than 5 million, 34.6% had an average annual turnover between 5-20 million, 24.7% were between 21-50 million and 11.1% had more than 50 million average annual turnover. This implies that on average most of the SMEs in Kibuku had the potential of encompassing ICT in their operations that can be used to improve their financial performance.

## 4.3 Pearson's Correlation Analysis

Correlation analysis measures the degree of relationship between the two variables and expresses the extent of this relationship by means of correlation. In this study, correlation coefficient represents the nature of the relationship between the variables whereby the coefficients are significant at the level of 0.01.

**Table 4. 6: Showing Correlation analysis**

| Variable | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| ICT Adoption (1) | 1 | | | |
| ICT Infrastructure (2) | .872 | 1 | | |
| ICT Technical Capacity (3) | .559 | .586 | 1 | |
| Financial Performance (4) | .830 | .823 | .520 | 1 |

**. Correlation is significant at the 0.01 level (2-tailed). N =81

**Source: Primary Data (2024)**

### 4.3.1 ICT Adoption and Financial Performance.

From the table 4.6 above, results show a positive and significant relationship exists between ICT adoption and financial performance (r=.830, $\rho$<0.01). This implies that improvement in ICT adoption is associated with a positive change in financial performance.

### 4.3.2 ICT Infrastructure and Financial Performance.

Results in table 4.6 above show that ICT Infrastructure positively affects financial performance (r =.823, p <0.01). This shows that enhancement of ICT Infrastructure is attached with variations in financial performance.

### 4.3.3 ICT Technical Capacity and Financial Performance.

From the table 4.6 above, results show a positive significant relationship exists between ICT Technical Capacity and financial performance. (r=.520, $\rho$<0.01). This implies that enhancement in ICT technical capacity is associated with a positive change in financial performance.

## 4.4 Regression Analysis

A regression analysis was conducted to determine the predictive power of the independent variables on the dependent variable. It entails determining the regression equation of the two variables. It involves using model summary table, ANOVA, among others to determine the T- Significance.

### 4.4.1 ICT Adoption and Financial Performance

The first objective of this study was to evaluate the impact of ICT adoption on financial performance of SMEs in Kibuku district, in order to do so, a regression analysis was conducted and the results are shown in table 4.7 below.

**Table 4. 7: ICT Adoption and Financial Performance**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .578 | .222 | | 2.602 | .011 |
| | ICT Adoption | .785 | .059 | .830 | 13.228 | .000 |
| | | R=.830 | $R^2$=.689 | Adj.$R^2$=.685 | F=174.968 | .000 |

a. Dependent Variable: Financial Performance

**Source: Primary Data (2024)**

The findings from table 4.7 above show that 68.5% variation in the financial performance is caused by ICT adoption (Adj.$R^2$=0.685; $\rho$<0.01). These results are further supported by a positive and significant relationship between the study variables of ICT adoption and financial performance (F=174.968; $\rho$<0.01). The table further shows a standardized beta coefficient of ($\beta$=0.830; $\rho$<0.01) that suggests that ICT adoption significantly predicts financial performance.

### 4.4.2 ICT Infrastructure and Financial Performance.

The second objective of this study was to determine the effect of ICT infrastructure on financial performance of SMEs in Kibuku District, Uganda, in order to do so, a regression analysis was conducted and the results are shown in table 4.8 below.

**Table 4. 8: Showing ICT Infrastructure and Financial Performance**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .679 | .221 | | 3.076 | .003 |
| | ICT Infrastructure | .778 | .060 | .823 | 12.871 | .000 |
| | | R=.823 | $R^2$=.677 | Adj.$R^2$=.673 | F=165.655 | .000 |

a. Dependent Variable: Financial Performance

**Source: Primary Data (2024)**

Results from table 4.8 above show that 67.3% variation in the financial performance is caused by ICT infrastructure (Adj.$R^2$=0.673; $\rho<0.01$). These results are further supported by a positive and significant effect between the study variables of ICT infrastructure and financial performance (F=165.655; $\rho<0.01$). The table further shows a standardized beta coefficient of ($\beta$=0.823; $\rho<0.01$) that suggests that ICT infrastructure significantly predicts financial performance.

### 4.4.3 ICT Technical Capacity and Financial Performance.

The third objective of this study was to establish the effects of ICT technical capacity on financial performance of SMEs in Kibuku District, Uganda, in order to do so, a regression analysis was conducted and the results are shown in table 4.9 below.

**Table 4. 9: Showing ICT Technical Capacity and Financial Performance.**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.801 | .313 | | 5.761 | .000 |
| | ICT Technical Capacity | .494 | .091 | .520 | 5.404 | .000 |
| | | R=.520 | $R^2$=.270 | Adj.$R^2$=.261 | F=29.209 | .000 |

b. Dependent Variable: Financial Performance

**Source: Primary data (2024)**

Results from table 4.9 above show that 26.1% variation in the financial performance is caused by ICT technical capacity (Adj.$R^2$=0.261; $\rho$<0.01). These results are further supported by a positive and significant relationship between the study variables of ICT technical capacity and financial performance (F=29.209; $\rho$<0.01). The table further shows a standardized beta coefficient of ($\beta$=0.520; $\rho$<0.01) that suggests that ICT technical capacity significantly predicts financial performance.

**CHAPTER FIVE:**

**DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

## 5.0 Introduction

This section presents discussion of the study findings, conclusion, recommendations, limitations of the study, and areas of further research

## 5.1 Discussion of Study Findings

Based on the findings from chapter four above of the study, this chapter provides interpretation of data of these findings on the study objectives.

### 5.1.1 ICT Adoption and Financial Performance

The study sought to evaluate the impact of ICT adoption on financial performance. The findings demonstrated that ICT adoption has a positive and significant effect on financial performance. These results are consistent with earlier studies of Brynjolfsson and Hitt, (2020) who affirmed that firms investing in ICT experience substantial productivity gains, which directly translate into improved financial performance. This means that when ICT tools are adopted in business, value is created through cost reduction, improved customer service, and new revenue generation opportunities. This is in line with the study by Melville et al., (2014) who urged that argue that ICT contributes to value creation which improves on the organization's financial performance. Similar results are in the study by Molla & Licker, (2021) who suggest that these tools automate routine tasks, minimize errors, and provide real-time financial insights, which are critical for effective decision-making. This automation not only saves time but also reduces operational costs, leading to better financial outcomes.

The findings seem to suggest that enhancement in financial performance requires ICT integration that can improve their operational efficiency and compete more effectively in the digital marketplace. This arises as a result of developing an ICT integration strategy and investing in appropriate ICT solutions that aids in better data management, real-time information access, and streamlined workflows and allows automation leading to improved productivity. This is further supported by Tarutė & Gatautis, (2019) who found that SMEs using integrated financial systems can track expenses and revenues more accurately, facilitating better budgeting and forecasting.

Lastly, the findings suggest that ICT tools can be a ruse to financial performance. This means that when ICT tools are well utilized, market expansion is easily facilitated and enhances competitive positioning. Similar results are in line with the study by Ibrahim et al., (2019) who affirmed that ICT tools support e-commerce activities, allowing SMEs to reach broader customer bases and improve their market presence. In light of this, the study finds that ICT tools serve as a shove for enlightening financial performance.

## 5.1.2 ICT Infrastructure and Financial Performance.

The study sought to determine the effects of ICT infrastructure on financial performance. The findings confirmed that ICT infrastructure has a positive significant effect on financial performance. These results are consistent with earlier studies of Brynjolfsson & Hitt, (2020), who found out that, investments in IT infrastructure positively correlate with financial performance by enabling more efficient business operations. Similarly, this was in congruence with a study by Baker, (2018) who mentioned that technological resources impact organizational performance.

The outcomes of the study suggest that for financial performance in SMEs to be effective, there should be good computer hardware used to simplify the operational activities of the business that in turn speed up and boost productivity. This can be done by allocating resources that can used to purchase the necessary hardware that the business operations require and establishing policies of implementation. In light of the above, the study contends that ICT hardware acts as an approach anchored towards enhancing financial performance.

Secondly, the findings seem to point out that, putting attention on software can bolster financial performance. This calls for SMEs to reinforce the use of software in the business operations. This reduces on delays and errors while increasing on the operational efficiency and effectiveness. This is in line with the study by Aisyah, (2020) who found that SMEs adopting enterprise resource planning systems experience significant improvements in financial performance due to enhanced operational efficiency and better decision-making.

Lastly, the findings suggest that networking also acts as a ruse to improving financial performance in SMEs. This can be done through having good networking system that can facilitate connections and interactions. This is in line with the study by Wieck & Vidal, (2019)who found that broadband connectivity is linked to economic growth, which in turn improves business performance. Reliable internet access allows SMEs to participate in e-

commerce, utilize online banking, and adopt cloud-based services, thus enhancing operational efficiency and financial management

### 5.1.3 ICT Technical Capacity and Financial Performance.

The study sought to establish the effects of ICT technical capacity on financial performance. The findings confirmed that ICT technical capacity have a positive and significant effect on financial performance. These results are in line with scholars like Bharadwaj, (2016) who highlights that firms with higher IT technical capacity can better leverage ICT tools, leading to improved financial performance. There should be training programs which are essential for developing IT technical capacity. Similarly, according to Arvanitis, (2019), SMEs investing in employee training see improvements in ICT utilization, leading to enhanced financial performance. This is also in line the findings by Compeau & Higgins, (2017) who confirmed that training programs covering various aspects of IT, including software applications, system administration, and cybersecurity, can help employees effectively use ICT tools and address technical challenges. This ensures that employees stay updated with the latest technological advancements.

The findings also point out that for financial performance to be enhanced in SMEs there must be strong training to build on human resource capacity of the employees. This requires routine technical training and workshops that are in line with financial performance which will help the organization increase on their technical capacity in utilizing the available technology in their operations. When this is put in place, SMEs will be able to utilize every window of opportunity, best use their resources and stand a head of their competitors. This is in line with the study by Pang et al., (2018) who found out that, local training centers, online courses, and workshops can help bridge the skills gap and enhance IT technical capacity.

### 5.2 Conclusion

Based on the results from the study, we present the following conclusion to improve on financial performance in SMEs.

The study sought to evaluate the impact of ICT adoption on financial performance. The study findings depict that ICT adoption positively affects the financial performance. The researcher therefore concludes that in order to improve financial performance, SMEs need to utilize ICT tools and ICT integrations in their operations.

Similarly, the study sought to determine the effects of ICT infrastructure on financial performance. The study findings portray that ICT infrastructure positively affect financial performance. The researcher therefore concludes that in order to improve on financial performance, SMEs need to increase the efficacy of business computer hardware, software and networking. These boost on their financial performance.

Lastly, the study sought to establish the effects of ICT technical capacity on financial performance. The study findings reveal that ICT technical capacity positively affects financial performance. The researcher therefore concludes that in order to increase financial performance, SMEs need to propagate training of employees on use of IT and human resource capacity as this will help them acquire knowledge that in turn improves on financial performance.

## 5.3 Recommendations of the Study

There is need for SMEs managers to sensitize, educate and train their employees on ICT most especially the ignorant ones who still thinking of manual operations and customers have to come and buy from them.

Secondly, there is need for SMEs owners to accept the reality of technology by investing funds in acquiring the computer hardware and software which are necessary for their businesses in order to boost production and help them reach their market at any time and place.

In order to improve on financial performance, SMEs should start employing the technical and professional people who have the capacity to run the IT tools used in their business.

## 5.4 Limitations of the Study

Lack of cooperation from some of the respondents during data collection process was the most challenging thing in this study. However, the limitation was managed by the researcher by providing clarity to the respondents on the aim of the study. A research permit was provided which helped the researcher to assure the respondents on the data provided.

The study obtained data using closed ended questionnaire which was gauged in a five-point Likert scale where the respondents only responded to specified and structured questions. Therefore, the qualitative views of the respondents were not obtained.

The study employed a cross-sectional research design, which provides a snapshot of the phenomenon at a specific point in time. This design may not capture the dynamic nature of the research context over time.

The study was limited by the geographical scope, research from only one District Local Government may not be sufficient.

## 5.5 Areas for Further Studies

The researcher recommends a qualitative study to be conducted in order to get deeper insight into the relationship between ICT and financial performance of SMEs.

A longitudinal research design should be adopted to examine the effect ICT on financial performance of SMEs since it allows researchers conduct several observations of the same subjects over a period of time.

A process variable (mediator or moderator) should be introduced in order to explain the how ICT influences financial performance of SMEs. Basic correlation studies might show a relationship between ICT and financial performance but fail to explain the underlying mechanisms driving this relationship. Introducing a process variable (mediator or moderator) would address this limitation by revealing how and why ICT influences financial outcomes, thereby providing a more comprehensive understanding of the relationship.

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# APPENDICES

## Appendix I: Letter of Introduction

**BUSITEMA UNIVERSITY**
*Pursuing Excellence*

P.O. Box 236, Tororo, Uganda
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### FACULTY OF MANAGEMENT SCIENCES

Date: 6th/8/2024

To: THE CAO KIBUKU DISTRICT LOCAL GOVERNMENT

Dear Sir/Madam,

RE: NYENDE COSMAS

On behalf of Busitema University, Faculty of Management Sciences, please allow me extend my appreciation to your organization for the continued support and commitment to providing services to our community. The Faculty looks forward to continuously partner with your organization in pursuance of excellence of our students by exposing them to practical learning experiences.

It's a University requirement that every student must carry out research and write a report in order to satisfy the requirement for the award of a Bachelor's Degree. The purpose of this letter is therefore to humbly request you to allow our fore mentioned student who is in THIRD year of study on a programme of Bachelors of Business Administration/Public Administration/Procurement and Supply chain management of Busitema University, to carry out research by way of collecting data in your esteemed organization.

We look forward to your supportive and positive response to our request above.

Yours faithfully,

Esuku Joseph
+256772181090/+256701181090; esuku01@gmail.com
**Ag. HOD (Economics & Management)**

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The Republic of Uganda

KIBUKU DISTRICT LOCAL GOVERNMENT,
OFFICE OF THE CHIEF ADMINISTRATIVE
OFFICER,
P.O. BOX 150,
**MBALE**

DATE: 12ᵀᴴ  AUGUST, 2024

In any correspondence on
this subject please quote: CR/156/1

The Head of Economics and Management Department,
Faculty of Management sciences,
P.O. BOX 236,
**TORORO-UGANDA**

**RESEARCH (DATA COLLECTION)**

Reference is made to your letter dated 6th, August, 2024 on granting your
student **Nyende Cosmas** permission to carry out his academic research on the
impact of ICT on Financial Performance on SMEs in Kibuku District.

I am pleased to inform you that your student has been granted permission to
undertake his Research.

By copy of this letter, the Chief Finance Officer has been asked to guide and
supervise the student during this period of Research.

Bankyaye Gelard
**For: Chief Administrative Officer**

For CHIEF ADMINISTRATIVE OFFICER
KIBUKU DISTRICT
LOCAL GOVERNMENT

Copy:   The Head of Finance
        Mr. Nyende Cosmas

**Appendix II: Questionnaire**

I am Nyende Cosmas a student at Busitema University carrying out research on the "Impact of Information Communication Technology (ICT) on Financial Performance of Small and Medium Enterprises in Kibuku District."

This study is being carried out as part of the requirements of obtaining a **Degree of Bachelors of Business Administration.** In order to carry out the research effectively, you have been selected to form part of the study, which is entirely for academic purposes only. I am therefore kindly requesting you to participate by responding to the questionnaire as truthfully and honestly as you can and the information you give will be treated with utmost privacy. You will not be required to fill in your name, unless you voluntarily want to, in which case the name will not appear in the final report that will be submitted to the university.

**Instructions:** You are not required to write your name on this questionnaire. In the following questions, put a tick in the box to indicate your answer.

**SECTION A: BACKGROUND INFORMATION**

1. Gender

Male ☐          Female ☐

2. Age

Less than 20 years ☐          21 – 30 years ☐

31 – 40 years ☐          41 – 50 years ☐

51 and above ☐

3. Professional qualification

Certificate ☐          Degree ☐          Other ☐

Diploma ☐          Master's degree ☐

4. What type of business are you doing?

Retail ☐

Manufacturing ☐

Service ☐

Agriculture ☐

Other (Please specify) ☐

5. How long have you been in business?

| | |
|---|---|
| 0 – 5 years | |
| 6 – 10 years | |
| Over 10 years | |

6. How many Employees are employed in the business?

| | |
|---|---|
| 0 - 5 | |
| 6-20 | |
| 20 - 50 | |
| Over 50 | |

7. What Position do you hold in the business?

| | |
|---|---|
| Owner | |
| Employee | |

8. What is your average annual turnover in UG Shs?

| | |
|---|---|
| Less than 5 million | |
| 5-20 million | |
| 21-50 million | |
| More than 50 million | |

## SECTION B: ICT AND FINANCIAL PERFORMANCE OF SMALL AND MEDIUM SCALE ENTERPRISES

| | Please respond to the statements below by ticking √ where applicable. SD=Strongly Disagree (1), DA=Disagree (2), NS=Not sure (3), A=Agree (4), SA=Strongly Agree (5) | SD | DA | NS | A | SA |
|---|---|---|---|---|---|---|
| | **ICT** | | | | | |
| **ICT Adoption** | | | | | | |
| IA01 | Our business uses ICT tools (computers, internet, software, etc.) regularly. | 1 | 2 | 3 | 4 | 5 |
| IA02 | ICT tools are essential for our daily operations. | 1 | 2 | 3 | 4 | 5 |
| IA03 | The use of ICT has increased our operational efficiency. | 1 | 2 | 3 | 4 | 5 |
| IA04 | ICT tools have improved our customer service. | 1 | 2 | 3 | 4 | 5 |
| IA05 | ICT tools have facilitated better communication within the organization. | 1 | 2 | 3 | 4 | 5 |
| IA06 | ICT adoption has enhanced our decision-making processes. | 1 | 2 | 3 | 4 | 5 |
| IA07 | The integration of ICT has streamlined our business operations. | 1 | 2 | 3 | 4 | 5 |
| IA08 | Our business is more competitive due to our use of ICT. | 1 | 2 | 3 | 4 | 5 |
| **ICT Infrastructure** | | | | | | |
| II01 | We have invested in computers. | 1 | 2 | 3 | 4 | 5 |
| II02 | We have invested in copiers, printers, and scanners. | 1 | 2 | 3 | 4 | 5 |
| II03 | We have invested in telephone and mobile phone services. | 1 | 2 | 3 | 4 | 5 |
| II04 | Our internet connectivity is reliable and sufficient for business needs. | 1 | 2 | 3 | 4 | 5 |
| II05 | The software applications we use are effective and meet our business needs. | 1 | 2 | 3 | 4 | 5 |
| II06 | Our data security measures are robust. | 1 | 2 | 3 | 4 | 5 |
| II07 | Our ICT infrastructure supports the growth and scalability of our business. | 1 | 2 | 3 | 4 | 5 |
| II08 | We regularly update our ICT infrastructure to keep up | 1 | 2 | 3 | 4 | 5 |

| | with technological advancements. | | | | | |
|---|---|---|---|---|---|---|
| II09 | The ICT tools we use are well-maintained and function properly. | 1 | 2 | 3 | 4 | 5 |
| II10 | We have sufficient technical support for our ICT needs. | 1 | 2 | 3 | 4 | 5 |
| **ICT Technical Capacity** | | | | | | |
| TC01 | Our employees have sufficient ICT skills to perform their jobs effectively. | 1 | 2 | 3 | 4 | 5 |
| TC02 | We regularly conduct ICT training for our employees. | 1 | 2 | 3 | 4 | 5 |
| TC03 | Our employees are proficient in using the software applications required for their roles. | 1 | 2 | 3 | 4 | 5 |
| TC04 | Our employees are aware of and follow cybersecurity best practices. | 1 | 2 | 3 | 4 | 5 |
| TC05 | We have a systematic approach to enhancing employees' ICT skills. | 1 | 2 | 3 | 4 | 5 |
| TC06 | Employees receive timely support for ICT-related issues. | 1 | 2 | 3 | 4 | 5 |
| TC07 | There is a clear process for addressing ICT-related challenges in the workplace. | 1 | 2 | 3 | 4 | 5 |
| TC08 | Our team is capable of troubleshooting common ICT problems independently. | 1 | 2 | 3 | 4 | 5 |
| **FINANCIAL PERFORMANCE** | | | | | | |
| FP01 | The volume of transactions has increased through the year | 1 | 2 | 3 | 4 | 5 |
| FP02 | Our business has experienced revenue growth over the past year. | 1 | 2 | 3 | 4 | 5 |
| FP03 | Our profit margins have improved | 1 | 2 | 3 | 4 | 5 |
| FP04 | Business operational costs have reduced | 1 | 2 | 3 | 4 | 5 |
| FP05 | Our market share has increased | 1 | 2 | 3 | 4 | 5 |
| FP06 | We have observed improved cost-efficiency | 1 | 2 | 3 | 4 | 5 |
| FP07 | Our ICT initiatives have contributed to sustained financial growth. | 1 | 2 | 3 | 4 | 5 |
| FP08 | Our financial efficiency has improved | 1 | 2 | 3 | 4 | 5 |

****THE END: THANK YOU****

**Appendix III: Work Plan**

| ACTIVITY | May, 2024 | June, 2024 | July, 2024 | Aug, 2024 |
|---|---|---|---|---|
| Identification of the problem | ▓ | | | |
| Formulation of problem statement | ▓ | ▓ | | |
| Proposal writing | | ▓ | ▓ | |
| Designing of data collection Instrument | | | ▓ | ▓ |
| Pre-testing questionnaire | | | | ▓ |
| Data collection | | | | ▓ |
| Data processing, tabulation and analysis | | | | ▓ |
| Data presentation and discussion of findings | | | | ▓ |
| Presentation of final report | | | | ▓ |

**Appendix IV: Research Budget**

| ITEM | AMOUNT(UGX) |
|---|---|
| Stationary | 50,000 |
| Travelling | 100,000 |
| Binding (spiral& hardcover) | 100,000 |
| Typing and printing of research work | 150,000 |
| Data (internet) | 50,000 |
| **GRAND TOTAL** | **450,000** |

**Appendix V:  Krejcie & Morgan Table of Sample Size Determination**

| N | S | N | S | N | S |
|---|---|---|---|---|---|
| 10 | 10 | 220 | 140 | 1200 | 291 |
| 15 | 14 | 230 | 144 | 1300 | 297 |
| 20 | 19 | 240 | 148 | 1400 | 302 |
| 25 | 24 | 250 | 152 | 1500 | 306 |
| 30 | 28 | 260 | 155 | 1600 | 310 |
| 35 | 32 | 270 | 159 | 1700 | 313 |
| 40 | 36 | 280 | 162 | 1800 | 317 |
| 45 | 40 | 290 | 165 | 1900 | 320 |
| 50 | 44 | 300 | 169 | 2000 | 322 |
| 55 | 48 | 320 | 175 | 2200 | 327 |
| 60 | 52 | 340 | 181 | 2400 | 331 |
| 65 | 56 | 360 | 186 | 2600 | 335 |
| 70 | 59 | 380 | 191 | 2800 | 338 |
| 75 | 63 | 400 | 196 | 3000 | 341 |
| 80 | 66 | 420 | 201 | 3500 | 346 |
| 85 | 70 | 440 | 205 | 4000 | 351 |
| 90 | 73 | 460 | 210 | 4500 | 354 |
| 95 | 76 | 480 | 214 | 5000 | 357 |
| 100 | 80 | 500 | 217 | 6000 | 361 |
| 110 | 86 | 550 | 226 | 7000 | 364 |
| 120 | 92 | 600 | 234 | 8000 | 367 |
| 130 | 97 | 650 | 242 | 9000 | 368 |
| 140 | 103 | 700 | 248 | 10000 | 370 |
| 150 | 108 | 750 | 254 | 15000 | 375 |
| 160 | 113 | 800 | 260 | 20000 | 377 |
| 170 | 118 | 850 | 265 | 30000 | 379 |
| 180 | 123 | 900 | 269 | 40000 | 380 |
| 190 | 127 | 950 | 274 | 50000 | 381 |
| 200 | 132 | 1000 | 278 | 75000 | 382 |
| 210 | 136 | 1100 | 285 | 1000000 | 384 |

Note.—*N* is population size.   *S* is sample size.

Source: Krejcie & Morgan, 1970