Addis Ababa University
አዲስ አበባ ዩኒቨርሲቲ
SEEK WISDOM, ELEVATE YOUR INTELLECT AND SERVE HUMANITY !

## COLLEGE OF BUSINESS AND ECONOMICS

# A Review on the Effect of Integrated Financial Management Information System (IFMIS) in Public Offices in Lemi Kura Sub-City

A Thesis Submitted to the School of Graduate Studies of Addis Ababa University in Partial Fulfillment of the Requirements for the Degree of Master of Business Administration (MBA) in Management

By: Nebiyou H. Mariam
Advisor: Dr Demeke Chemdessa (Ph.D)

## DECLARATION

I, the undersigned declared that this thesis entitled " Assessing the Effect of Integrated Financial Management Information System (IFMIS) on the Financial Performance of Public Offices in Lemi Kura Sub-City" is my own original work. This thesis has not been presented for any other university and is not at the same time submitted in compliance of any other degree. All sources of materials used for this thesis have been properly acknowledged.

| | | |
|---|---|---|
| Nebiyou H. Mariam | | 22/06/2024 |
| Name of Author | Signature | Date |
| Advisor _Dr. Demeke Chimdessa___ _____ | | 24 June, 2024 |
| External Examiner | Signature | Date |
| Internal Examiner | Signature | Date |

## Abstract

This study aims to assess the effects of the Integrated Financial Management Information System (IFMIS) on the financial performance of public offices in Lemi Kura Sub-city. The research involved 140 employees working with IFMIS, selected through simple random sampling. Data collection and analysis were performed using descriptive statistics, including frequency count, percentage, mean, standard deviation, p-value, and t-test, alongside the determination of confidence intervals. The data were processed using the Statistical Package for the Social Sciences (SPSS) version 26 software. The findings indicate that IFMIS has significantly improved service delivery by auditors, with a notable enhancement in the audit process. Furthermore, the system has bolstered auditors' independence and facilitated easier access to financial data, both of which were strongly affirmed by the respondents. The system has also enhanced the reconciliation of financial transactions and the reliability of financial records, receiving high ratings from participants. IFMIS has clearly highlighted variances in financial statements, contributing to more transparent auditing processes. Based on these findings, the study recommends that the management of Lemi Kura Sub-city should increase the utilization frequency of IFMIS for cash management and allocate more resources toward the improvement of IFMIS systems. This enhancement is expected to establish greater efficiency in financial management, leading to improved financial performance. Additionally, it is crucial for Lemi Kura Sub-city to ensure the accuracy of records in accounting and financial reporting. This accuracy will ensure that stakeholders and the public have access to reliable financial information, promoting transparency in the use of public funds.

Keywords

Integrated Financial Management Information System (IFMIS), financial performance, financial process digitalization, financial records reliability, internal financial control, financial service quality, Lemi Kura Sub-city.

## ACKNOWLEDGEMENT

Primarily, I would like to be thankful to my Almighty God for his insightfulness in giving me healthiness, strength, concentration, and commitment to sustain and complete this study/work. Next, I would like to express my heartfelt thanks to my advisor Demeke Chemdessa (PhD) for his encouragement, inspiration, valuable comment and unreserved support to carry out this thesis work, specially, for his priceless commitment and professionalism along with leadership of the department that supported me into finalizing this thesis. Then, I would like to express my respect and special thanks for all respondents of the study participants for their willingness and interest to fill the questionnaires by sacrificing their precious, valuable and priceless time and for their cooperation, not only by providing the necessary data from their office but also by facilitating things for me, so that I can easily access data from their respective organization.

Nebiyou H.Mariam
June 2024
Addis Ababa, Ethiopia.

# Contents

Declaration ..... **Error! Bookmark not defined.**
Abstract ..... iii
ACKNOWLEDGEMENT ..... v
ABBREVIATIONS ..... viii
1. Introduction ..... 1
1.1. Background of the study ..... 1
1.2. Statement of the Problem ..... 2
1.3. Research questions ..... 3
1.4. Objective of the study ..... 3
1.4.1. General objective ..... 3
1.4.2. Specific objectives ..... 3
1.5. Significance of the study ..... 3
1.6. Scope of the study ..... 4
1.7. Limitations and delimitation ..... 5
1.8. Organization of the study ..... 5
2. Review of Related Literature ..... 7
2.1. Introduction ..... 7
2.2. Theoretical Review ..... 7
2.2.1. Integrated Financial Management Information System (IFMIS)..... 7
2.2.2. Connecting IFMIS and Organizational Performance ..... 8
2.3. Theoretical Frame work ..... 9
2.4. Review of Empirical Studies ..... 9
2.5. Analytical Framework ..... 10
3. Research Design and Methodology ..... 12
3.1. Research Design and Approach ..... 12
3.2. Sampling and Sampling Techniques ..... 13
3.2.1. Population and Sampling Frame ..... 13
3.2.2. Sampling Unit ..... 13
3.2.3. Sample Size Determination ..... 13
3.3. Data Collection Tools ..... 14
3.4. Data Collection Method ..... 14
3.5. Method of Data Analysis ..... 15
4. Data Presentation, Analysis and Interpretation ..... 16

4.1. Introduction ..... 16
4.2. Characteristics of Respondents ..... 16
4.3. IFMIS on Transparency in the management of public funds……..…18
4.4. Effectiveness of IFMIS in accounting & financial reporting……..…20
4.5. Effectiveness of IFMIS in the sub-city auditing……..……23
4.6. IFMIS for Control ……..…….25
5. Summary of Findings, Conclusions and Recommendations ..... 30
5.1. Summary ..... 30
5.2. Major Findings ..... 30
5.3. Conclusion ..... 32
5.4. Recommendation ..... 33
6. REFERENCE ..... 35

## ABBREVIATIONS

| | |
|---|---|
| CI | Confidence Interval |
| DOI | Diffusion of Innovation |
| EBIT | Earnings Before Interest and Taxes |
| EBITDA | Earnings Before Interest, Taxes, Depreciation, and Amortization |
| IFMIS | Integrated Financial Management Information System |
| PMS | Performance Measurement System |
| RAROC | Risk-Adjusted Return on Capital |
| RBV | Resource-Based View |
| ROA | Return on Assets |
| ROE | Return on Equity |
| ROI | Return on Investment |
| SD | Standard Devition |
| SPSS | Statistical Package for the Social Sciences |
| TAM | Technology Acceptance Model |
| UTAUT | Unified Theory of Acceptance and Use of Technology |

# CHAPTER ONE

## 1. Introduction

### 1.1. Background of the study

Across various public sectors, there is a growing emphasis on financial capacity and sustainability, leading to a transition from traditional public service models to market-driven approaches (Bunsis, 2010). Which means there is an increasing focus on value-based performance, which emphasizes financial efficiency and effectiveness in all public sector (de Azevedo Aguiar, 2017). Performance indicators in public sector generally fall into two main categories: operational performance and financial performance (Montanaro, 2013). This study focuses on financial performance, highlighting the importance of performance-based financial systems that implement proper system barrier solutions based on specific performance indicators.

The idea of public service in various public institutions, was eloquently articulated by Andrew in a 1907 commencement address. Andrew stated that public institutions will bring the advantages of scientific practicalities directly to the general public. This will lead to healthier homes and more attractive streets, more productive societies and, and happier and more prosperous communities by applying fundamental principles to all aspects of daily life (Patricia, 1983). This vision underscores the vital role that public institutions play in societal development and public welfare.

Other literatures also highlight that financial management is crucial for the effective operation of performance-based public funding systems (Nguyena, Viet, & Loan, 2021). Effective financial management practices enhance transparency, efficiency, accuracy, and accountability, enabling organizations to achieve their objectives (Abayneh, 2018). Granlund and Malmi (2002) noted that the use of computerized accounting and financial management systems in public institutions has accelerated over the past few decades (Hanover Research, 2014). These systems are often referred to as Integrated Financial Management Information Systems (IFMIS).

IFMIS is a system that is automated which integrates budgeting, planning, accounting, expenditure, reporting, and auditing functions (Ayoo, 2020). It entails the use of an integrated system to computerize all public financial management functions, including accounting and reporting as well as budget development and implementation (Emuigai, 2012). This study, therefore, aims to assess the effects of the Integrated Financial Management Information System

on performance in Lemi Kura Sub-city, encompassing a variety of public institutions to provide a comprehensive understanding of its impact.

Even though Lemi Kura sub city administration public relation office was not able to provide digital information on the overview of the scale of the sub city administration as well as the catchment area information, based on an interview I conducted to the head of the public relations office, I was provided with the relevant information required.

Accordingly, the sub city was established in 2020 from the Bole sub city catchment area with an intent to create a model sub city within the Addis Ababa city administration that can provide a model system to the remaining sub city administration offices. The sub city is working to become a smart sub city that can conduct administrative tasks and services to the people digitally with an integrated effort.

There are currently 10 weredas under the sub city office with an overall staff figure of 11,300 workforce. The sub city is providing services in social, political, economic, justice, & health areas to the residents within the sub city and working to integrate the system and services provided to create transparency as well as efficiency in the services provided.

## 1.2. **Statement of the Problem**

Currently, value-based performance is becoming a core focus in public institutions, which are shifting from a public service model to a market-driven one due to pressures to enhance financial capacity and sustainability (Bunsis, 2010). Consequently, implementers need to understand the concept of value-based performance, which is measured through financial performance metrics—how these metrics operate and how IFMIS contributes to the efficiency and effectiveness of internal financial resource allocation (de Azevedo Aguiar, 2017).

This shift necessitates going beyond contemporary definitions of IFMIS and public finance to secure the public interest in public administration through reforms guided by public choice theory (Martin, 1989). It is essential to reveal specific sector performance options exhibited in the IFMIS process.

Therefore, this study aims to review the effects of Integrated Financial Management Information System on performance in Lemi Kura Sub-City to understand the current state of matter with

regards to the IFMIS implementation/utilization and guide administrative reforms. As the newest sub city under the Addis Ababa City Administration that was established in 2020, the sub-city requires such studies to improve service delivery. And despite the significant role of IFMIS in different public institutions, literature over the past few decades has only sparsely covered its impact on public institutions around Addis Ababa city, therefore such literatures are necessary to cover those knowledge gaps.

## 1.3. **Research questions**

1. What is the effectiveness of IFMIS in supporting reliable institutional operation in Lemi Kura Sub-City?
2. Does IFMIS affect internal controls within the financial services in Lemi Kura Sub-City?
3. Does IFMIS support the financial compliance targets of Lemi Kura Sub-City?

## 1.4. **Objective of the study**

### 1.4.1. **General objective**

The main objective of the study is to explore the effect of the Integrated Financial Management Information System on performance in Lemi Kura Sub-City.

### 1.4.2. **Specific objectives**

1. To analyze how IFMIS enhances the transparency in the management of public funds in Lemi Kura Sub-City.
2. To evaluate how IFMIS affected internal controls to promote financing public services in Lemi Kura Sub-City.
3. To review how IFMIS enabled proper auditing and decision-making capacity of Lemi Kura Sub-City.

## 1.5. **Significance of the study**

This research paper aims to contribute to the existing body of knowledge and address the paucity of scholarly work on the nexus between IFMIS and financial performance in Lemi Kura Sub-City.

It provides valuable insights for the administration of Lemi Kura Sub-City to design effective strategies for harnessing the full potential of IFMIS. It also identifies key areas where further emphasis is needed. Additionally, this work will provide future scholars with an empirical source.

## 1.6. **Scope of the study**

This study focuses on reviewing areas of financial processes, through which Integrated Financial Management Information System (IFMIS) plays a role within Lemi Kura Sub-City. While IFMIS and public sector performance are broad concepts with numerous interactions, this study is limited to specific topical and spatial areas. The topical scope is limited to IFMIS, financing public services in Lemi Kura Sub-City, budgeting, and internal controls. The spatial scope is confined to Lemi Kura Sub-City.

## Theoretical Scope of the Research

In addition to the topical and spatial scope, the study's theoretical scope encompasses several key frameworks and concepts relevant to the implementation and impact of IFMIS in public sector management. The theoretical scope includes:

1. **Systems Theory:** Systems theory views an organization as a complex set of interrelated components working together to achieve a common goal. IFMIS, as an integrated system, supports this approach by connecting multiple financial management operations like budgeting, accounting, reporting, and auditing.
2. **Institutional Theory**: IFMIS, as an integrated system, aligns with this theory by linking various financial management processes such as budgeting, accounting, reporting, and auditing. The study investigates how these interconnections within the IFMIS framework contribute to overall performance improvements in public sector institutions.
3. **Performance Measurement Theory:** This theory focuses on the methods and metrics used to assess organizational performance. In the context of IFMIS, performance measurement theory helps evaluate the system's effectiveness in improving financial

management processes and outcomes. The study uses this theoretical lens to analyze financial performance indicators and the impact of IFMIS on these metrics.

4. **The Technology Acceptance Model** or TAM, looks into how people accept and use technology. TAM explores how users come to accept and use technology. This model is significant for the study as it helps understand the factors influencing the acceptance and effective utilization of IFMIS by public sector employees. Key constructs such as perceived usefulness and ease of use are examined to assess how they affect the adoption and success of IFMIS in Lemi Kura Sub-City.

By integrating these theoretical frameworks, the study provides a comprehensive understanding of the factors influencing the implementation and impact of IFMIS on public sector performance. This multi-theoretical approach allows for a deeper exploration of the complexities involved in financial management reforms and the practical implications for public administration in Lemi Kura Sub-City.The study focuses on reviewing the effect of the Integrated Financial Management Information System on performance in Lemi Kura Sub-City which through the analysis will try to improve the financial system and service delivery capacity of the organization. The topical scope is limited to IFMIS, financing public services in Lemi Kura Sub-City, budgeting, and internal controls. The spatial scope is confined to Lemi Kura Sub-City.

## 1.7. **Limitations and delimitation**

The study does have certain limitations. Firstly, due to time limitation, the study is only focused on specific sub-city and does not necessarily reflect on the city's current reflection with regards to IFMIS. As a new sub-city under a continuous reform, Lemi Kura sub-city employees have a continuous rotation and position shifts, which could create a limitation among the employees to have a feedback based on an extended time on role for the purpose of the research.

## 1.8. **Organization of the study**

This research work is organized into five chapters:

**Chapter One:** Contains the background of the study, statement of the problem, research questions, objectives of the study, significance of the study, and scope of the study.

**Chapter Two:** Reviews related literature, including previous studies, and presents the theoretical and conceptual frameworks adapted from earlier research.

**Chapter Three:** Describes the methods of the study, including the research design, participant analysis, data sources, data collection tools and procedures, and data analysis methods.

**Chapter Four:** Summarizes the study's findings and interprets them, then discusses them in relation to the literature review.

**Chapter Five:** Presents an overview of the findings, conclusions, and potential recommendations.

# CHAPTER TWO

# 2. Review of Related Literature

## 2.1. Introduction

The implementation of Integrated Financial Management Information Systems (IFMIS) in public sector organizations has gained substantial traction over recent years. This system aims to streamline and enhance the efficiency, transparency, and accountability of financial management processes. IFMIS is essentially a comprehensive, computer based accounting and budgeting system that integrates various financial management functions into a cohesive suite of applications. It supports government entities in planning budget requests, managing budgets, reporting on financial activities, and delivering public services more efficiently and effectively.

Given its pivotal role, understanding the impact of IFMIS on the financial performance of public offices is essential. This study seeks to investigate how IFMIS influences the financial performance of public offices in Lemi Kura Sub-City, Addis Ababa. By assessing various dimensions of financial performance, including service delivery, auditors' independence, data accessibility, and the reliability of financial records, the study aims to provide a comprehensive evaluation of IFMIS's effectiveness. The research draws on a theoretical framework that incorporates performance evaluation theory, resource-based theory, and technology acceptance models, among others, to contextualize the findings. Ultimately, this study contributes to the broader discourse on public sector financial management by offering empirical insights into the practical benefits and challenges associated with IFMIS implementation in a local government context.

## 2.2. Theoretical Review

### 2.2.1. Integrated Financial Management Information System (IFMIS)

Dorotinsky (2003) and Rozner (2008) defined IFMIS as an information system that tracks financial events and summarizes financial information. (Chado, 2015) explained that IFMIS consolidates all financial management functions into a single application suite. As an IT-based budgeting and accounting system, IFMIS assists government entities in planning budget requests, managing their

budgets, reporting financial activities, and delivering public services in a more efficient, effective, and economical manner.

Rodin-Brown (2008) summarized IFMIS involves the application of information and communications technology in financial operations to aid in management and budgetary decisions, uphold fiduciary responsibilities, and prepare financial reports and statements.

Marie (2009) explained that an IFMIS provides an integrated computerized financial system to improve the effectiveness and transparency of public resource management by automating the government's budget management and accounting processes. This system typically includes core subsystems such as accounting, budgeting, cash management, debt management, and other treasury-related functions. Additionally, some countries enhance their IFMIS with non-core subsystems like tax administration, procurement management, asset management, human resources and payroll, pension and social security systems, and other supportive modules.

### 2.2.2. **Connecting IFMIS and Organizational Performance**

This study explored several theories to elucidate the relationship between Integrated Financial Management Information Systems (IFMIS) and organizational performance. The theories examined include Performance Evaluation Theory: Sustainability, Market-Based Model, Accounting-Based Model, Resource-Based Theory, Diffusion of Innovation (DOI), Instrumental Theory, and Unified Theory of Acceptance and Use of Technology (UTAUT).

#### Organizational Performance

(Ayoo, 2020) described that organizational performance is a multifaceted and complex concept. Within the context of management control, performance encompasses more than the comparison between forecasts and outcomes. Achieving budgetary goals does not inherently signify good performance, nor does it measure the efficiency and effectiveness of internal resource allocation.

#### The Importance of a Performance Measurement System (PMS)

Gomes and Yasin (2013) state that an effectively designed performance measurement system is essential for guaranteeing that an organization can deliver cost-efficient, high-quality services that fulfill and surpass the changing needs and expectations of customers.

**Market-Based Model**

Developed by Merchant (2006), the Market-Based Model evaluates financial performance based on changes in the market value of the entity or returns to shareholders, including dividends. Even through Lemi Kura sub city is a public service entity, the service delivery systematic growth needs to go hand in hand in a market driven manner to attain the growing need of the people.

**Resource-Based Theory**

Barney (1991) developed the resource-based theory, positing that organizations achieve competitive advantage through their internal resources and capabilities rather than their products and services. This theory underscores the strategic importance of internal resources in attaining a sustained competitive advantage like that of IFMIS.

**Instrumental Theory**

Bailey (1968) developed the Instrumental Theory, which focuses on the public sector's ability to use budgeting systems effectively for resource allocation. This is a practical reality to how IFMIS should be utilized for productivity of limited financial resources within the Lemi Kura Sub city.

## 2.3. **Theoretical Framework**

The key concepts taken from the different theories opts towards creating a cost effective, high quality, sustainable strategy and system through which service is delivered is vital for the effective management of resources and driving an institution towards a sustainable goal.

In the case of Lemi Kura sub-city, the frame work indicates that the effective integration of IFMIS as a financial capacity building tool creates a thriving environment for transparency, financial control and compliant resource management system.

## 2.4. **Review of Empirical Studies**

Ayim (2014) explored the relationship between IFMIS and performance in government ministries, using systems theory, the technology acceptance model, and DeLone and McLean’s Model. The study employed a descriptive research design to capture the current state of affairs. The findings

indicated that system quality, information quality, and service quality significantly influenced government performance, with service quality and system quality having the highest impact.

Kasumba (2009) investigated the adoption and implementation of IFMIS in local governments in Uganda. The study found that socioeconomic factors, including power struggles, inappropriate designs of information technologies, insufficient IT skills, and negative user attitudes, influenced IFMIS implementation in Kampala district.

Chado (2015) analyzed the effectiveness of cash management and budgeting systems, financial reporting systems, internal control systems, and organizational accountability systems within IFMIS in Kenya's public sector. Using a descriptive research design and both quantitative and qualitative data analysis methods, the study found that these systems positively and significantly influenced financial management in the public sector.

Njonde and Kimanzi (2014) examined the effectiveness of IFMIS on public sector performance in Kenya. The study used a descriptive research design and analyzed data using both descriptive and inferential statistics. The results showed the effectiveness of IFMIS in financial reporting, internal controls, and budgeting, despite some challenges in internal controls. A positive relationship was found between the effectiveness of IFMIS and public financial management.

Lamba (2018) studied the effects of IFMIS adoption on public financial management performance. The research used a descriptive approach and gathered data through structured questionnaires. The study found that IFMIS facilitated risk management practices, financial tracking, and real-time reporting, enhancing overall financial management in public institutions.

## 2.5. **Analytical Framework**

The study has tried to understand the strategic utilization of the IFMIS system within the Lemi Kura sub city through proper utilization and analysis of organizational responsibilities and how these indicators are viewed by users/responders to bring and enhance value for better understanding of systematic barriers and enhance decision making capacity to leaders.

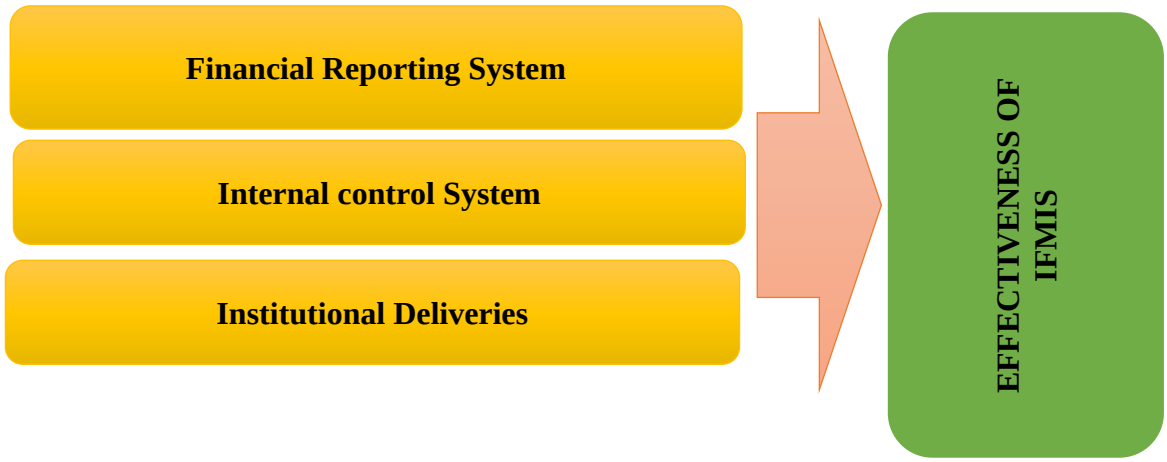
This comprehensive review of theoretical and empirical literature sets the foundation for analyzing the impact of IFMIS on organizational capacity to create a reliable and transparent financial system

in Lemi Kura Sub-City, providing a robust framework for understanding the dynamics and implications of IFMIS implementation.

Empirical literature has identified financial reporting system, internal control system, and institutional deliveries as independent variables. Conversely, the effectiveness of IFMIS, particularly regarding the sub-city's financial performance, is highlighted as the dependent variable. The analytical model for this thesis incorporates these independent and dependent variables as delineated by scholars such as Michael, Oyewale, and Oladosu (2017), and is graphically illustrated below.

As IFMIS's effectiveness, especially in the public sector set up where resource is scarce revolves around simplification, efficiency, transparency and accountability to enhance financial efficiency, compliance with budgeting and operational outcome. So, the recommended analytical model tries to address effectiveness of IFMIS as the required outcome through proper financial reporting system, enhanced internal control system and proper implementation of institutional deliveries.

**Figure 2.2: Analytical model**




*Source: Own Synthesis from Empirical Literature Review on as Michael , Oyewale 2018*

# CHAPTER THREE

## 3. Research Design and Methodology

### 3.1. Research Design and Approach

The study adopted a quantitative research design to comprehensively assess the effect of IFMIS on the financial performance of public offices in Lemi Kura Sub-City. This design integrates both quantitative and qualitative approaches, allowing for a more robust analysis of the research problem.

1. **Quantitative Approach**:

Structured questionnaires were administered to a sample of public office employees who used IFMIS. This provided quantitative data on their perceptions and experiences regarding the effectiveness of IFMIS in improving financial performance. Secondary data were collected from financial reports and records pre- and post-IFMIS implementation to measure changes in financial performance indicators such as budget accuracy, expenditure control, and financial reporting timeliness.

A stratified random sampling method was employed to guarantee that various departments within the public offices were adequately represented. The sample size was calculated using a formula that takes into account the population size to ensure statistical significance.

2. **Data Analysis**:

Descriptive statistics (mean, median and mode) and inferential statistics t-tests) will be used to analyze the survey data and secondary financial data. These analyses will help in understanding the impact of IFMIS on different financial performance metrics.

Thematic analysis will be employed to analyze interview and focus group data, identifying key themes and patterns related to the effectiveness and challenges of IFMIS.

## 3.2. Sampling and Sampling Techniques

### 3.2.1. Population and Sampling Frame

The target population for this study comprised employees and stakeholders of public offices in Lemi Kura Sub-City who were involved in or affected by the implementation and use of IFMIS. The sampling frame included official staff lists, departmental records, organizational charts and contact lists of external stakeholders.

### 3.2.2. Sampling Unit

The primary sampling units for this study included staff from various departments within the public offices of Lemi Kura Sub-City, specifically those involved with the IFMIS. These units comprised finance department staff such as accountants, budget officers, financial analysts, and internal auditors, responsible for financial transactions, budget preparation, and compliance. Additionally, IT Department staffs, including IFMIS system administrators and IT support personnel, were included due to their role in maintaining the system. Management and administrative staff, such as department heads, senior managers, and policy makers, were included in the sample to provide insights into strategic planning and performance evaluation. External stakeholders like auditors from oversight bodies, and consultants or advisors involved with IFMIS implementation were included to provide an external perspective.

Secondary sampling units consisted of various financial records and operational data. These included budget reports detailing allocations and expenditures, financial statements encompassing records of financial performance, and audit reports. Additionally, transaction logs documenting financial transactions processed through IFMIS and system usage reports tracking the system's performance will be analyzed to provide a thorough assessment of IFMIS's impact on financial performance.

### 3.2.3. Sample Size Determination

The sample size was determined based on precision rate and confidence level as cited in Kothari, (2004) for finite population. The formula applied is presented as follows.

$$N = \frac{z2.p.q.N}{e2\ (N--1) + z.2.p.q,}$$ where

N = size of population (homogeneous)

N = size of sample

e = acceptable error (the precision)

z = standard variant at a given confidence level.

where p is 0.5 and p + q = 1.

If the the level of precision is to be kept high, it is required relatively larger sample (Kothari 2004 p. 175) so, to increase sample size the margin of error was considered to be 6%. The normal reduced variable at 0.05 level of significance was

$$n = \frac{(1.96)^2 (0.5) (0.5) (300)}{(0.06)^2 (299) + (1.96)^2 (0.5) (0.5)} = 141$$

N = 300 where

n = the sample size z equals the confidence level,

e = the tolerance. For this study p = 0.5 to achieve a normal distribution.

n = 141 by setting confidence to be 95 % and error tolerance = 0.05. Therefore, the sample size is determined to be 141. Thus, the sample was considered to be adequate and representative of the target population.

## 3.3. **Data Collection Tools**

Both questionnaire and interview were the main data collection tools.

## 3.4. **Data Collection Method**

The data collection method for assessing the effect of the IFMIS on the financial performance of public offices in Lemi Kura Sub-City employed a quantitative method to provide a comprehensive understanding of IFMIS's impact. Quantitative data were gathered through structured questionnaires distributed to a representative sample. The questionnaires included closed-ended and Likert-scale questions to quantify perceptions of IFMIS's effectiveness. Additionally, secondary data were analyzed to measure objective financial performance indicators, while

operational data from transaction logs and system usage reports were examined to assess IFMIS's operational efficiency.

### 3.5. **Method of Data Analysis**

SPSS version 26 software was used to analyze the data in order to assess the impact of the IFMIS on the financial performance of public offices in Lemi Kura Sub-City. Quantitative data from structured questionnaires were analyzed with descriptive and inferential statistics, including regression analysis, to identify correlations and causal relationships. Secondary data, such as budget reports and financial statements, were statistically analyzed to compare pre- and post-implementation metrics.

# CHAPTER FOUR

## 4. Data Presentation, Analysis and Interpretation

### 4.1. Introduction

A total of 141 sample respondents participated in this study. The number of participants involved in the study, along with the sampling proportion, was statistically representative and sufficient to conduct the analysis and draw valid inferences.

### 4.2. Characteristics of Respondents

| Sex | | Age | | | Academic Qualification | | | Work Experience | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Male | Female | Age distribution | Frequency | Cum. Percent | Certificate | 15 | 10.6% | | Frequency | Cum. Percent |
| 57.9 | 42.1 | < 20 years | 2 | 1.4% | Diploma | 50 | 35.5% | Below 10 years | 71 | 50.7% |
| | | 21-30 years | 54 | 38.3% | Master's degree | 76 | 53.9% | 11-20 years | 53 | 37.9% |
| | | 31-40 years | 54 | 38.3% | Total | 141 | 100% | 21-30 years | 17 | 12.1% |
| | | > 41 years | 31 | 22.0% | | | | Total | 141 | 100% |
| | | Total | 141 | 100% | | | | | | |

**Table 4.1 Demographic result of the responders**

As shown in table 4.2.1, 81 (57.9%) of the respondents were males and 60 (42.1%) were females.

54 respondents (38.3%) were within the age range of 21-30, and another 54 respondents (38.3%) were aged 31-40. Additionally, 31 respondents (22.0%) were 41 years old and above. This indicates that the majority of the sample respondents are relatively energetic, mature, and capable of taking on responsibilities.

The table shows the qualifications of the respondents involved in the study. Out of a total of 141 participants, the majority hold a Master's degree, accounting for 76 individuals or 53.9% of the sample. This is followed by 50 respondents, or 35.5%, who possess a Diploma. The smallest group comprises those with a Certificate, totaling 15 individuals and representing 10.7% of the sample.

This distribution indicates that the sample is predominantly highly educated, with over half holding advanced degrees.

As also depicted in table, out of the total 140 participants, 71 individuals, representing 50.7% of the sample, have less than 10 years of work experience. This is followed by 53 respondents, or 37.9%, who have between 11 and 20 years of experience. The smallest group consists of 17 individuals, accounting for 12.1% of the sample, who have worked for 21 to 30 years. The cumulative percentages indicate that the majority of the respondents, 88.6%, have up to 20 years of work experience, while a smaller proportion, 12.1%, have more extensive experience of 21 to 30 years. This distribution suggests a relatively young workforce with a substantial number of respondents having less than a decade of work experience.

### 4.3. IFMIS on Transparency in the Management of Public Funds

**Table 4.2: Issues Related to IFMIS on Transparency in the Management of Public Funds**

| Items | One-Sample Statistics | | | Test Value = 3 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | T | DF | p-value | Mean Difference | 95% CI | |
| | N | Mean | SD | | | | | Lower | Upper |
| Clarity of Financial Reporting | 141 | 1.66 | 0.56 | 35.03 | 140 | <0.001 | 1.66 | 1.56 | 1.75 |
| Accessibility of Financial Information | 141 | 1.58 | 0.73 | 25.58 | 140 | <0.001 | 1.58 | 1.46 | 1.70 |
| Accuracy of Financial Data | 141 | 3.98 | 1.17 | 40.38 | 140 | <0.001 | 3.98 | 3.78 | 4.17 |
| Timeliness of Financial Reporting | 141 | 4.16 | 1.11 | 44.41 | 140 | <0.001 | 4.16 | 3.97 | 4.34 |
| Reduction of Financial Mismanagement | 141 | 3.96 | 0.80 | 58.68 | 140 | <0.001 | 3.96 | 3.83 | 4.10 |
| Audit Trail and Accountability | 141 | 3.28 | 1.42 | 27.33 | 140 | <0.001 | 3.28 | 3.04 | 3.52 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Stakeholder Confidence in Financial Management | 141 | 4.21 | 0.80 | 62.21 | 140 | <0.001 | 4.21 | 4.07 | 4.34 |
| User Training and Support | 141 | 2.50 | 1.32 | 22.37 | 140 | <0.001 | 2.50 | 2.28 | 2.72 |

**Note:** Mean and Standard Deviation

≤ 1.49 = Strongly Disagree;

1.5 – 2.49 = Disagree;

2.5 – 3.49 = Undecided;

3.5 – 4.49 = Agree;

≥ 4.5 = Strongly Agree

The above table presents the results of a one-sample t-test evaluating various aspects related to the impact of the IFMIS on the financial processes and controls in government services. The test value for each item was set at 3, with the interpretations of the means based on a scale where ≤ 1.49 indicates Strongly Disagree, 1.5 – 2.49 indicates Disagree, 2.5 – 3.49 indicates Undecided, 3.5 – 4.49 indicates Agree, and ≥ 4.5 indicates Strongly Agree.

For the clarity on financial reporting, the mean score was 1.66 (SD = 0.56), which is significantly below the test value of 3 ($t = 35.03$, $p < 0.001$), with a mean difference of 1.66 and a 95% confidence interval of 1.56 to 1.75. This result indicates that respondents generally disagreed that IFMIS has improved clarity on financial reporting. In terms of the access to financial information, the mean score was 1.58 (SD = 0.73), also significantly lower than the test value of 3 ($t = 25.58$, $p < 0.001$), with a mean difference of 1.58 and a 95% confidence interval of 1.46 to 1.70. This suggests disagreement among respondents regarding the improvement access to financial information due to IFMIS.

For accuracy of financial data, the mean score was 3.98 (SD = 1.17), which is significantly higher than the test value of 3 ($t = 40.38$, $p < 0.001$), with a mean difference of 3.98 and a 95% confidence interval of 3.78 to 4.17. This indicates that respondents agreed that IFMIS has improved accuracy of financial data. Regarding timeliness of financial reporting, the mean score was 4.16 (SD = 1.11),

significantly higher than the test value of 3 ($t = 44.41$, $p < 0.001$), with a mean difference of 4.16 and a 95% confidence interval of 3.97 to 4.34. This shows that respondents agreed that IFMIS has strengthened government financial controls.

For the reduction of financial mismanagement, the mean score was 3.96 (SD = 0.80), significantly above the test value of 3 ($t = 58.68$, $p < 0.001$), with a mean difference of 3.96 and a 95% confidence interval of 3.83 to 4.10. This suggests that respondents agreed that IFMIS helps reduce financial mismanagement.

The audit trail and accountability had a mean score of 3.28 (SD = 1.42), slightly above the test value of 3 ($t = 27.33$, $p < 0.001$), with a mean difference of 3.28 and a 95% confidence interval of 3.04 to 3.52. This indicates that respondents were generally undecided about the impact of IFMIS on the management of public funds. For stakeholder confidence in financial management, the mean score was 4.21 (SD = 0.80), significantly above the test value of 3 ($t = 62.21$, $p < 0.001$), with a mean difference of 4.21 and a 95% confidence interval of 4.07 to 4.34. This result indicates strong agreement that IFMIS enhances audit trail and accountability.

The user training and support had a mean score of 2.50 (SD = 1.32), significantly below the test value of 3 ($t = 22.37$, $p < 0.001$), with a mean difference of 2.50 and a 95% confidence interval of 2.28 to 2.72. This shows that respondents were undecided about the transparency of the financial system as influenced by IFMIS.

Overall, the results indicate agreement that IFMIS positively impacts access to financial information, government financial controls, reduction of financial mismanagement, and audit trail and accountability. However, respondents disagreed with the improvements in government services and efficiency of financial processes, and were undecided about the management of public funds and the transparency of the financial system.

This could be concluded as respondents believe on the impact of IFMIS on the internal level system strengthening and creating accountability within the sub city’s financial ecosystem but still believes on the need to do more service level delivery and process simplification to cascade the benefit to the end user.

### 4.4. Effectiveness of IFMIS in Accounting and Financial Reporting

**Table 4.3. Issues Related to Effectiveness of IFMIS in Accounting and Financial Reporting**

| Description | N | Mean | SD | T | Df | p-value | Mean Difference | 95% CI | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Lower | Upper |
| Improved accountability of receipts and payments | 141 | 3.76 | 1.32 | 33.71 | 140 | <0.001 | 3.76 | 3.54 | 3.98 |
| Led to timely financial reporting | 141 | 3.38 | 1.36 | 29.40 | 140 | <0.001 | 3.38 | 3.15 | 3.61 |
| Accurately discloses the true financial position | 141 | 3.55 | 0.95 | 44.01 | 140 | <0.001 | 3.55 | 3.39 | 3.71 |
| Improved compliance with financial reporting standards | 141 | 3.64 | 0.89 | 48.27 | 140 | <0.001 | 3.64 | 3.49 | 3.78 |
| Improved presentation of data for analysis | 141 | 3.57 | 1.31 | 32.14 | 140 | <0.001 | 3.57 | 3.35 | 3.79 |
| Improved quality of financial reports | 141 | 3.48 | 1.14 | 36.08 | 140 | <0.001 | 3.48 | 3.29 | 3.67 |
| Improved reconciliation of financial transactions | 141 | 3.86 | 0.92 | 49.54 | 140 | <0.001 | 3.86 | 3.71 | 4.02 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Improved reliability of financial records | 141 | 4.28 | 1.04 | 48.71 | 140 | <0.001 | 4.28 | 4.10 | 4.45 |

The sample respondents were requested to evaluate their level of agreement with different statements about the effectiveness of IFMIS in accounting and financial reporting. The one-sample t-test results show significant agreement for all statements, as indicated by p-values less than 0.05. The mean scores ranged from 3.38 to 4.28, all above the test value of 3, suggesting a general consensus that IFMIS has positively impacted various aspects of financial management and reporting.

Firstly, the analysis of whether IFMIS has improved the accountability of receipts and payments yielded a mean score of 3.76 with a standard deviation of 1.32. The high t-value of 33.71 and the significant p-value ($p < 0.05$) indicate strong agreement among respondents that IFMIS has substantially enhanced accountability in financial transactions. The 95% CI for the mean difference, ranging from 3.54 to 3.98, further supports this positive assessment, confirming that the observed mean significantly exceeds the test value of 3.

Regarding the timeliness of financial reporting, the mean score was 3.38 with a standard deviation of 1.36. The t-value of 29.40 and a significant p-value ($p < 0.05$) suggest moderate agreement among respondents that IFMIS has improved the promptness of financial reporting. While the mean is slightly above the test value, the CI of 3.15 to 3.61 indicates that this improvement is acknowledged, albeit to a lesser extent compared to other aspects.

For the accuracy of financial data disclosure, the mean score was 3.55 with a standard deviation of 0.95. The high t-value of 44.01 and a significant p-value ($p < 0.05$) demonstrate strong agreement that IFMIS accurately reflects the true financial position through financial statements. The CI of 3.39 to 3.71 reinforces the reliability of this finding, indicating that respondents have high confidence in the accuracy provided by IFMIS.

The statement concerning improved compliance with financial reporting standards received a mean score of 3.64 and a standard deviation of 0.89. The t-value of 48.27 and a significant p-value ($p < .000$) indicate robust agreement among respondents. The CI of 3.49 to 3.78 underscores this

substantial compliance improvement, suggesting that IFMIS has significantly contributed to adherence to financial reporting standards.

In terms of the of data presentation for easy analysis and interpretation, the mean score was 3.57 with a standard deviation of 1.31. The t-value of 32.14 and a significant p-value ($p < 0.05$) reflect a significant agreement that IFMIS has enhanced the presentation of financial data. The CI of 3.35 to 3.79 further corroborates this finding, highlighting that respondents believe in the system's effectiveness in facilitating data analysis and interpretation.

The quality of financial reports received a mean score of 3.48 with a standard deviation of 1.14. Although the t-value of 36.08 and the significant p-value ($p < .000$) indicate agreement, the lower mean suggests that respondents' agreement on this point is not as strong as for other aspects. The CI of 3.29 to 3.67 supports a moderate level of agreement, pointing to areas where further improvements might be necessary.

As

### 4.5. Effectiveness of IFMIS in the S.city Auditing

**Table 4.4. Issues Related to Effectiveness of IFMIS in the Auditing**

| Description | N | Mean | SD | T | Df | p-value | Mean Difference | 95% CI |
|---|---|---|---|---|---|---|---|---|
| Auditing via an IFMIS distinctly reveals discrepancies in the financial statements. | 141 | 4.36 | 1.03 | 49.94 | 140 | 0 | 4.36 | 4.18 - 4.53 |
| IFMIS has enhanced the detection of errors and fraud. | 141 | 3.9 | 1.31 | 35.22 | 140 | 0 | 3.90 | 3.68 - 4.12 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| IFMIS has enhanced the quality of service provided by auditors. | 141 | 3.76 | 1.21 | 36.72 | 140 | 0 | 3.76 | 3.55 - 3.96 |
| IFMIS has enhanced the audit process. | 141 | 3.81 | 1.07 | 42.28 | 140 | 0 | 3.81 | 3.63 - 3.99 |
| IFMIS has increased the independence of auditors. | 141 | 3.96 | 1.2 | 38.87 | 140 | 0 | 3.96 | 3.76 - 4.16 |
| IFMIS has facilitated easy access to financial data for auditors. | 141 | 3.59 | 1.11 | 38.46 | 140 | 0 | 3.59 | 3.41 - 3.78 |
| IFMIS has supported the audit function by increasing credibility to the financial statements. | 141 | 3.89 | 0.93 | 49.7 | 140 | 0 | 3.89 | 3.74 - 4.05 |
| Auditing through IFMIS has met public expectations regarding the financial statements. | 141 | 4.12 | 0.98 | 49.87 | 140 | 0 | 4.12 | 3.96 - 4.28 |

The table evaluates the effectiveness of the Integrated Financial Management Information System (IFMIS) in auditing based on respondents' ratings of various aspects. A one-sample t-test was used to assess the significance of the agreement levels, with a test value of 3 indicating a neutral point of view.

Firstly, respondents strongly agreed that audit through IFMIS visibly brings out changes in the financial statements, with a mean score of 4.36 and a standard deviation of 1.03. The high t-value

of 49.94 and the significant p-value ($p < .000$) demonstrate that this aspect is highly effective, supported by the confidence interval (CI) of 4.18 to 4.53.

Secondly, the improvement in the identification of errors and frauds was rated with a mean score of 3.90 and a standard deviation of 1.31. The t-value of 35.22 and a significant p-value ($p < .000$) indicate a strong agreement among respondents, with the CI ranging from 3.68 to 4.12. This suggests that IFMIS is effective in enhancing the accuracy and integrity of financial data.

Regarding the improvement of service delivery by auditors, the mean score was 3.76 with a standard deviation of 1.21. The t-value of 36.72 and a significant p-value ($p < .000$) reflect strong agreement, with a CI of 3.55 to 3.96. This indicates that IFMIS positively impacts auditors' efficiency and effectiveness in service delivery.

Respondents also agreed that IFMIS has improved the audit process, with a mean score of 3.81 and a standard deviation of 1.07. The t-value of 42.28 and a significant p-value ($p < .000$) support this finding, with the CI of 3.63 to 3.99. This demonstrates that IFMIS streamlines and enhances the audit process.

The improvement of auditors' independence due to IFMIS was rated with a mean score of 3.96 and a standard deviation of 1.20. The t-value of 38.87 and a significant p-value ($p < .000$) suggest strong agreement, with a CI of 3.76 to 4.16. This indicates that IFMIS contributes to more objective and unbiased auditing.

In terms of easy access to financial data by auditors, the mean score was 3.59 with a standard deviation of 1.11. The t-value of 38.46 and a significant p-value ($p < .000$) indicate agreement, although to a slightly lesser extent, with a CI of 3.41 to 3.78. This shows that IFMIS facilitates access to essential financial data for auditing purposes.

The enhancement of the audit function by increasing credibility to financial statements was rated with a mean score of 3.89 and a standard deviation of 0.93. The t-value of 49.70 and a significant p-value ($p < .000$) reflect strong agreement, supported by the CI of 3.74 to 4.05. This indicates that IFMIS enhances the credibility of financial statements.

Finally, respondents highly agreed that audit through IFMIS has met public expectations on financial statements, with a mean score of 4.12 and a standard deviation of 0.98. The t-value of 49.87 and a significant p-value ($p < .000$) demonstrate strong agreement, with the CI ranging from 3.96 to 4.28. This indicates that IFMIS aligns well with public expectations regarding financial transparency and reliability.

### 4.6. IFMIS for Control

**Table 4.5. Issues Related to IFMIS for Control**

| Description | N | Mean | SD | T | Df | p-value | Mean Difference | 95% CI |
|---|---|---|---|---|---|---|---|---|
| IFMIS can track every stage of a transaction process, thereby improving transparency and accountability. | 141 | 4.46 | 0.99 | 52.86 | 140 | <0.001 | 4.46 | 4.30 - 4.63 |
| IFMIS generates auditable financial statements issued by the S.city. | 141 | 4.15 | 0.98 | 50.04 | 140 | <0.001 | 4.15 | 3.99 - 4.31 |
| IFMIS has assigned distinct responsibilities to various individuals. | 141 | 3.94 | 1.18 | 39.38 | 140 | <0.001 | 3.94 | 3.74 - 4.13 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Employees receive more comprehensive information from IFMIS internal control processes compared to previous software. | 141 | 4.04 | 1.09 | 43.81 | 140 | <0.001 | 4.04 | 3.86 - 4.23 |
| Employees adhere to the payment of goods and services provided through IFMIS. | 141 | 3.86 | 1.21 | 37.89 | 140 | <0.001 | 3.86 | 3.66 - 4.07 |

The analysis focuses on evaluating the effectiveness of the Integrated Financial Management Information System (IFMIS) in enhancing control within Lemi-Kura Sub City. A sample of 140 respondents provided their ratings on five key statements related to IFMIS functionalities. The data was analyzed using one-sample t-tests against a test value of 3, with a significance level (alpha) set at 0.05. Each statement's mean (M), standard deviation (SD), t-value, degrees of freedom (df), p-value, mean difference, and 95% confidence interval (CI) were calculated to determine the level of agreement.

The first statement, "IFMIS can trace all stages of a transaction process, enhancing transparency and accountability," garnered significant agreement from respondents. With a mean of 4.46 (SD = 0.99), the high t-value of 52.86 and a p-value of less than .000 indicate strong statistical significance. The 95% CI for the mean difference, ranging from 4.30 to 4.63, further supports this conclusion. This result demonstrates a strong consensus among respondents that IFMIS effectively traces transaction stages, thereby enhancing the transparency and accountability of financial processes within the sub-city.

The second statement, "IFMIS provides auditable financial statements also received strong agreement, with a mean rating of 4.15 (SD = 0.98). The t-value of 50.04 and a p-value of less than .000 indicate a high level of statistical significance. The 95% CI for the mean difference, ranging

from 3.99 to 4.31, confirms this strong agreement. These results suggest that respondents have considerable confidence in the ability of IFMIS to produce auditable financial statements, which is crucial for maintaining financial integrity and accountability.

For the statement, "IFMIS has segregated duties to different individuals," respondents expressed significant agreement, as evidenced by a mean of 3.94 (SD = 1.18). The t-value of 39.38 and a p-value of less than .000 underscore the statistical significance of this finding. The 95% CI for the mean difference, from 3.74 to 4.13, indicates that respondents perceive IFMIS as effective in segregating duties among different individuals, which is an essential aspect of internal control and risk management.

The statement, "Employees get sufficient information from internal control processes in IFMIS compared to former software," was also rated highly, with a mean of 4.04 (SD = 1.09). The t-value of 43.81 and a p-value of less than .000 indicate a significant level of agreement. The 95% CI for the mean difference, ranging from 3.86 to 4.23, supports this conclusion. These results highlight that respondents believe IFMIS provides more sufficient and reliable information for internal control processes compared to previous software, enhancing the overall effectiveness of financial management.

Finally, the statement, "Employees follow payment of goods and services rendered in IFMIS," received a mean rating of 3.86 (SD = 1.21). With a t-value of 37.89 and a p-value of less than .000, the agreement is statistically significant. The 95% CI for the mean difference, from 3.66 to 4.07, indicates that respondents find IFMIS effective in tracking payments for goods and services. This functionality is crucial for ensuring accurate financial records and timely payments, thereby supporting operational efficiency.

### 4.7. IFMIS for Decision Making

**Table 4.6. Issues Related to Decision Making**

| Description | N | Mean | SD | T | Df | p-value | Mean Difference | 95% CI |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| The internal control processes in IFMIS enhance decision-making capabilities in Lemi Kura Sub-city. | 141 | 4.36 | 1.03 | 50 | 140 | <0.001 | 4.36 | 4.18 | 4.53 |
| IFMIS assists employees in making decisions in Lemi Kura Sub-city. | 141 | 3.90 | 1.31 | 35 | 140 | <0.001 | 3.90 | 3.68 | 4.12 |
| Financial reporting in IFMIS improves decision-making abilities. | 141 | 3.76 | 1.21 | 37 | 140 | <0.001 | 3.76 | 3.55 | 3.96 |
| The procurement process in IFMIS boosts decision-making effectiveness. | 141 | 3.81 | 1.07 | 42 | 140 | <0.001 | 3.81 | 3.63 | 3.99 |
| The budgeting process in IFMIS enhances my ability to make decisions. | 141 | 3.96 | 1.20 | 39 | 140 | <0.001 | 3.96 | 3.76 | 4.16 |

The above table presents the results of a study assessing the impact of IFMIS on decision-making capabilities in Lemi Kura Sub City. The first item, "Internal control process in IFMIS increases my decision-making capability in Lemi Kura Sub City," shows a high level of agreement with a mean score of 4.36 (SD = 1.03), and the 95% confidence interval (CI) ranging from 4.18 to 4.53. The t-value of 50 and p-value <0.001 indicate a statistically significant positive impact. Similarly, the second item, "Employees can easily access different information from the system; it helps in decision-making in Lemi Kura Sub-city," has a mean score of 3.90 (SD = 1.31), with a t-value of 35 and a CI between 3.68 and 4.12, also showing significant agreement.

For the statement "Financial report in IFMIS increases my decision-making capability," the mean score is 3.76 (SD = 1.21), with a t-value of 37 and a CI of 3.55 to 3.96, indicating significant agreement. The procurement process's impact on decision-making is similarly positive, with a mean of 3.81 (SD = 1.07), a t-value of 42, and a CI from 3.63 to 3.99. Lastly, the statement "Budgeting process in IFMIS increases my decision-making capability" shows a mean score of 3.96 (SD = 1.20), a t-value of 39, and a CI ranging from 3.76 to 4.16, all indicating significant

agreement. Overall, the data suggests that IFMIS significantly enhances decision-making capabilities across various aspects in Lemi Kura Sub City, with all items showing strong statistical support for positive impacts.

# CHAPTER FIVE

## 5. Summary of Findings, Conclusions and Recommendations

This chapter presents a summary of the study's key findings, the conclusions derived from these findings, and the recommendations made based on the conclusions.

### 5.1. Summary

This study aimed to assess the impact of the IFMIS on performance in Lemi Kura Sub-City. The objectives were:

1. To analyze how IFMIS enhances the transparency in the management of public funds in Lemi Kura Sub-City.
2. To evaluate how IFMIS affected internal controls to promote financing public services in Lemi Kura Sub-City.
3. To review how IFMIS enabled proper auditing and decision-making capacity of Lemi Kura Sub-City.

This study focused on understanding the effects of IFMIS from the respondents' perspectives. A quantitative research design was used. By employing structured questionnaires, effectiveness metrics like financial efficiency, compliance with budgeting, and operational outcomes influenced by IFMIS were measured qualitatively. Statistical techniques such as one sample statistics helped to identify correlations between IFMIS effectiveness and financial performance indicators like financial reporting system, internal control system and institutional deliveries.

### 5.2. Major Findings

The study included 141 respondents, predominantly male (57.9%) with a significant proportion aged between 21-40 years (76.6%). Most respondents held at least a Master’s degree (53.9%) and had less than 20 years of work experience (88.6%). This demographic profile suggests a well-educated and relatively young workforce.

Respondents generally agreed that IFMIS positively impacts transparency, accountability, and financial controls (e.g., accuracy of financial data, timeliness of reporting, reduction of mismanagement). These aspects received mean scores above 3.5, indicating agreement that IFMIS enhances these areas effectively**.**

IFMIS was perceived to significantly improve financial reporting standards, accuracy, and the ability to identify errors and frauds. Respondents showed strong agreement (mean scores between 3.38 and 4.28) regarding these improvements, indicating high confidence in IFMIS' effectiveness in financial management and reporting.

The system was deemed effective in enhancing various aspects of auditing, such as identifying variances, improving service delivery, and increasing the credibility of financial statements. Mean scores ranged from 3.59 to 4.36, suggesting a robust positive impact on auditing processes.

IFMIS was perceived to enhance internal control processes, facilitate access to critical financial data, and improve decision-making capabilities across different functional areas (e.g., procurement, budgeting). Mean scores for these aspects ranged from 3.76 to 4.46, indicating significant agreement on the system's utility in supporting decision-making.

Respondents were less decisive about IFMIS's impact on improving clarity on financial reporting and access to financial information as well as user training and support. These areas received mean scores below 2.5 or close to it, indicating disagreement or uncertainty among respondents.

In summary, while IFMIS was generally perceived positively in enhancing transparency, accountability, financial reporting, auditing, and decision-making processes within Lemi Kura Sub-City, there are areas which need improvement. The system showed clear strengths in improving specific financial and auditing functions but faced skepticism regarding clarity on financial reporting and accessibility regarding transparency. The findings suggest that while IFMIS has strong utility in enhancing certain aspects of financial management, further attention may be needed to address perceived limitations in broader administrative and transparency contexts.

The study attempted to answer the following research questions:

1. What is the effectiveness of IFMIS in supporting reliable institutional operation in Lemi Kura Sub-City?
2. Does IFMIS affect internal controls within the financial services in Lemi Kura Sub-City?
3. Does IFMIS support the financial compliance targets of Lemi Kura Sub-City?

To address the primary research questions, a standardized questionnaire was created, informed by a review of relevant literature. The data collected were analyzed using descriptive statistics, including frequency counts, percentages, means, standard deviations, T-values, and P-values. This analysis was conducted using the Statistical Package for the Social Sciences (SPSS) software, version 26.

## 5.3. **Conclusion**

The findings indicate that IFMIS has significantly contributed to improving financial management practices within the sub-city. It has enhanced transparency, accountability, and efficiency in financial operations, aligning with global trends towards digital transformation in public administration.

As explained on the analytical model, the independent variables which are the financial reporting, internal control and institutional deliveries have been analyzed using the different parameters to help understand the effective set up and utilization of IFMIS within Lemi Kura sub city, to help capacitate the internal financial foundation and create the base for further investigation to understand the end users satisfaction.

Respondents generally perceived IFMIS as instrumental in enhancing accountability through improved financial reporting, transaction transparency, and audit trail capabilities. This has fostered greater trust among stakeholders and improved compliance with financial regulations.

The study reveals that IFMIS has streamlined financial operations, reducing bureaucratic inefficiencies and enhancing the timeliness and accuracy of financial reporting. This efficiency is crucial for effective resource allocation and decision-making within governmental bodies.

Despite its benefits, the study also identifies challenges such as system complexity, training needs, and the need for continuous system updates and maintenance. Addressing these challenges is

essential for maximizing the long-term benefits of IFMIS implementation to benefit the end user and the community in a long run.

To further leverage the potential of IFMIS, policymakers and administrators should consider enhancing user training programs, strengthening cyber-security measures, and promoting broader stakeholder engagement. Additionally, integrating advanced analytics and reporting capabilities could provide deeper insights into financial data for informed decision-making.

The findings from this study have significant implications for policy development and practice in public financial management. They underscore the importance of investing in robust ICT infrastructure and capacity-building initiatives to support effective IFMIS implementation and sustainability.

In conclusion, while IFMIS has demonstrated substantial benefits in enhancing financial management practices within Lemi Kura Sub-City, ongoing efforts are needed to address challenges and optimize its functionality. Thus, stakeholders can ensure that IFMIS continues to serve as a cornerstone for transparent, accountable, and efficient public financial management systems in the future.

## 5.4. **Recommendations**

The implication might show areas of intervention to understand the effects of IFMIS on performance of public offices in Lemi Kura Sub-city. To have improved IFMIS on performance of public offices, the following recommendations are made based on the research findings and the conclusion.

1. The leadership team should allocate/invest resources to develop the capacity of the service providers to understand, stipulate and enhance the IFMIS system capacity within the sub city.
2. Lemi Kura Sub-city management should increase the frequency of utilizing IFMIS that practically address the client's everyday enquiry, and as a technology that is designed to evolve, the sub city must improve the technical & material needs of the service providers within the sub city to provide quality service.

3. Lemi Kura Sub-city management should intensify the use of IFMIS in financial reporting and allocate additional resources to enhance the financial reporting IFMIS systems. This step will lead to substantial enhancements in the county's financial performance.
4. Lemi Kura Sub-city should develop strategies to effectively plan, organize, direct, and control public funds, facilitating quick and efficient access to financial data and enhancing the delivery of government services.
5. Lastly, Lemi Kura Sub-city must ensure the accuracy of records in accounting and financial reporting to provide stakeholders with reliable financial information. Access to this information should be facilitated to ensure transparency in the utilization of public funds.

## 6. REFERENCE


Abayneh , K. (2018). Determinants of Effective Public Financial Management in Agricultural Department of North Shoa Zone Administration, Amhara National Regional State. 8-11.

Adams , O. L., Robichaux , R. R., & Guarino , A. J. (2010). More “Private” than Private Institutions: Public Institutions of Higher Education and Financial Management. *Journal of Educational Research & Policy Studies* , 1-5.

Addis , W. (2018). Factors Affecting Successful Implementation of Integrated Financial Management Information System (IFMIS) at Ministry of Finance and Economic Cooperation(MOFEC) . 5-16.

Akaranga , S. I., & Makau, B. K. (2016 ). Ethical Considerations and their Applications to Research: a Case of the University of Nairobi. *Journal of Educational Policy and Entrepreneurial Research* , 5-7.

Ayim, O. R. (2014). The Relationship Between Integrated Financial Management Information System and Performance of Government Ministries in Kenya. 2-38.

Ayoo , C. O. (2020). Contribution of Integrated Financial Management Systems (IFMIS) on Financial Accountability within Devoted Governments: in Nairobi City County, Kenya . 2-15.

Buddy, N. J. (1999). Analyzing the Financial Condition of Higher Education Institutions Using Financial Ratio Analysis. 1-5.

Bunsis, H. (2010). Analysis of the Financial Condition of the University of Illinois System. 8-15.

Chado, H. M. (2015). The Effect of Integrared Finanacial Mnagement Information System on the Financial Mangement of Public Sector in Kenya. 8-15.

de Azevedo Aguiar , C. (2017). Measuring Public Higher Education Institutions Financial Performance: An application of the EVA® approach . v .

Emuigai , V. K. (2012). The Effect of Integrated Financial Management Information Systems on the Financial Management of Public Sector in Kenya: A Case of the Kenyan Ministries. 12-18.

Fouka , G., & Mantzorou , M. (2011 ). What are the Major Ethical Issues in Conducting Research? Is there a Conflict between the Research Ethics and the Nature of Nursing? . 5-8.

Frølich , N. (2006). Funding Systems and Their Effects on Higher Education Systems . 2-5.

Hanover Research. (2014). Financial Reporting in Higher Education . 14-21.

Herbst, M. (2007). *Financing Public Universities.* Zurich: Springer .

IDB. (2015). Public Financial Mnagementin Latin America. In G. Uña , & C. Pimenta, *Integrated Financial Mnagement Information Systems in Latin America:Strategic Aspects and Challenges* (pp. 281-319). Washington, D.C.: IDB and IMF.

Kasradze, T. (2019). Challenges of Financial Management of The Higher Education Institutions in Georgia. 29-31.

Kasumba, S. (2009). Where New Technology Meets Socio-Economic Impasses: A Study of the Integrated Financial Management System as a Management Control in Local Governments in Uganda. 25-31.

Kothari. (2004). Research methodology, methods and techniques. 13-14.

Lamba, S. (2018). Effects of IFMIS Practices in Public Finance Management Performance: A Case Study of Kenya Power and Lighting Company. 48-56.

Marie , C. (2009). The Implementation of Integrated Financial Information Management Systems (IFMIS) . 2-7.

Martin, B. (1989). What is Public about Pubic Services? 2-5.

Michael , O. O., Oyewale , F. O., & Oladosu , B. J. (2017). Effects of Integrated Financial Management Information System on Performance of Public Sector in Nigeria . *International Journal of Engineering Technologies and Management Research*, 31-34.

Montanaro , M. K. (2013). The Influence of Financial Performance on Higher Education The Influence of Financial Performance on Higher Education Academic Quality Academic Quality . 8-11.

Ndzovu , S. M., & Ng'ang'a, P. (2019). Effects of Integrated Financial Management Information System on Financial Performance of Country Governmnt of Kwale. *The Journal of Management*, 11-14.

Nguyena, T. Q., Viet, H. T., & Loan, L. T. (2021). Factors affecting financial management: Case study of educational manager training and fostering public institutions . 1862-1864.

Njonde, J. N., & Kimanzi , K. (2014). Effect of Intgrated Financial Management Information System on Performance of Public Sector: A Case of Nairobi County Government . *International Journal of Social Sciences and Entrepreneurship*, 1-10.

OECD. (2017). Benchmarking higher education system performance: Conceptual framework and data, Enhancing Higher Education System Performance, OECD Paris. . 2-9.

Opiyo, N. A. (2017). Effects of Integrated Financial Mnagement Information System (IFMIS) on Cash Managment in Kenya: Case of Kisumu County Governmnt. 15-21.

Palgrave Macmillan . (2019). *Reforms, Organizational Change and Performance in Higher Education.* Copenhagen: Palgrave Macmillan .

Pathirane , L., & Blades, D. W. (n.d). Definign and Measuring the Public Sector: Some International Comparisons. 261-265.

Patricia , H. C. (1983). Public Service in Higher Education: Practices and Priorities. ASHE-ERIC Higher Education Research Report, 1983. 10-15.

Talla, S. A., FarajAllah, A. M., Abu-Naser, S. S., & Shobaki;, M. J. (2018). The Reality of University Performance According to the Models of Excellence in Palestinian Universities. *International Journal of Academic Multidisciplinary Research*, 21-29.

The World Bank . (1998). *Public Expenditure Management Handbook.* Washington, D.C.: The World Bank .

# Appendix A

## PARTI: General Questions

### Section A: GENERAL INFORMATION

Put tick mark in the box in front of the choice that suits you.

1. Sex: male ☐ Female ☐

2. Age: Below 20 ☐ 21-30 ☐ 31-40 ☐ 41 and above ☐

3. Qualification: Certificate ☐ Diploma ☐ Degree/Masters ☐

4. Years of experience in public organization

Less than 10 years ☐ 11-20 ☐ 21-30 ☐

## PART II: Questions Related to IFMIS Management System at Lemi Kura Sub City

### Section A: IFMIS on Transparency in the Management of Public Funds

Please indicate your level of agreement with the following statements so that your answers to these questions enable the researcher to assess the effectiveness of IFMIS in the management of public funds at Lemi Kura Sub City.

| | | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | IFMIS has increased the liability of receipts and payments of public Funds | | | | | |
| 2 | IFMIS has guided to well-timed financial reporting | | | | | |
| 3 | IFMIS enhances transparency within the financial system | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 4 | IFMIS has guided to development in compliance with financial reporting standards | | | | | |
| 5 | IFMIS has enhanced demonstration of data for smooth and easy analysis and interpretation | | | | | |
| 6 | IFMIS has enhanced the quality of financial reports | | | | | |
| 7 | IFMIS has enhanced reconciliation of financial transactions | | | | | |
| 8 | IFMIS has significantly enhanced the reliability of financial records. | | | | | |

**Section B: Effectiveness of IFMIS in the Sub-city Auditing**

Please indicate your level of agreement with the following statements so that your answers to these questions enable the researcher to assess the effectiveness of IFMIS in the auditing responsibilities at Lemi Kura Sub City.

| | | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | Inspection of accounts through IFMIS brings out variation in the financial statements | | | | | |
| 2 | IFMIS has led to the advancement of provision of service by auditors at adequate level | | | | | |
| 3 | IFMIS has enhanced the audit function of adding reliability to the financial statements | | | | | |
| 4 | IFMIS has led to the enhancement of the audit process | | | | | |
| 5 | IFMIS has led to the improvement of the auditor's independence | | | | | |
| 6 | IFMIS has availed easy access of financial data by the auditors | | | | | |
| 7 | Audit through the IFMIS has met the public expectations on the financial statements | | | | | |
| 8 | IFMIS can trace all the stages of a transaction process hence enhancing transparency and accountability of the process | | | | | |

**Section C: Effectiveness of IFMIS in Accounting and Financial Reporting**

Please indicate your level of agreement with the following statements so that your answers to these questions enable the researcher to assess the effectiveness of IFMIS in the accounting and financial reporting responsibilities at Lemi Kura Sub City.

| | | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | IFMIS has enhanced the liability of payments and receipts of public Funds at high level | | | | | |
| 2 | IFMIS has led to well-timed reporting of finances | | | | | |
| 3 | Via the financial statements presented, IFMIS precisely discloses the correct financial position | | | | | |
| 4 | IFMIS has led to improvement in compliance with financial reporting standards | | | | | |
| 5 | IFMIS has enhanced presentation of data for easy analysis and interpretation | | | | | |
| 6 | IFMIS has enhanced the quality of financial reports | | | | | |
| 7 | IFMIS has enhanced reconciliation of financial transactions | | | | | |
| 8 | IFMIS has enhanced the reliability of financial records | | | | | |

**Section D: Effectiveness of IFMIS for Control**

Please indicate your level of agreement with the following statements so that your answers to these questions enable the researcher to assess the effectiveness of IFMIS in the controlling system at Lemi Kura Sub City.

| | | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | IFMIS can trace all the stages of a transaction process hence enhancing transparency and accountability of the process | | | | | |
| 2 | IFMIS provides auditable financial statements from the AAU | | | | | |
| 3 | IFMIS has segregated duties to different individuals | | | | | |
| 4 | Employees receive ample information from the internal control processes in IFMIS | | | | | |
| 5 | Employees track the payment of goods and services rendered through IFMIS in Lemi Kura Sub-city. | | | | | |

**Section E: Effectiveness of IFMIS for Decision Making**

Please indicate your level of agreement with the following statements so that your answers to these questions enable the researcher to assess the effectiveness of IFMIS in the proper decision making capacity at Lemi Kura Sub City.

| | | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1 | IFMIS is significantly helping for decision making to undertake duties | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2 | Employees can readily access various information from the system, | | | | | |
| 3 | Financial reports generated by IFMIS enhance the ability to make decisions. | | | | | |
| 4 | The procurement process facilitated by IFMIS improves the decision-making capability. | | | | | |
| 5 | The budgeting process supported by IFMIS enhances the decision-making capability. | | | | | |

# Appendix B

**Statistics**

| | | VAR00001 | VAR00002 | VAR00003 | VAR00004 |
|---|---|---|---|---|---|
| N | Valid | 140 | 140 | 140 | 140 |
| | Missing | 0 | 0 | 0 | 0 |

**Sex**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 81 | 57.9 | 57.9 | 57.9 |
| | 2.00 | 59 | 42.1 | 42.1 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

**Age**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 1 | .7 | .7 | .7 |
| | 2.00 | 54 | 38.6 | 38.6 | 39.3 |
| | 3.00 | 54 | 38.6 | 38.6 | 77.9 |
| | 4.00 | 31 | 22.1 | 22.1 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

**Qualification**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 15 | 10.7 | 10.7 | 10.7 |
| | 2.00 | 50 | 35.7 | 35.7 | 46.4 |
| | 4.00 | 75 | 53.6 | 53.6 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

**Experience**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 70 | 50.0 | 50.0 | 50.0 |
| | 2.00 | 53 | 37.9 | 37.9 | 87.9 |
| | 3.00 | 17 | 12.1 | 12.1 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

**One-Sample Statistics**

| | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|
| VAR00005 | 140 | 1.6571 | .55969 | .04730 |
| VAR00006 | 140 | 1.5786 | .73031 | .06172 |
| VAR00007 | 140 | 3.9786 | 1.16587 | .09853 |
| VAR00008 | 140 | 4.1571 | 1.10767 | .09361 |
| VAR00009 | 140 | 3.9643 | .79938 | .06756 |
| VAR00010 | 140 | 3.2786 | 1.41964 | .11998 |
| VAR00011 | 140 | 4.2071 | .80015 | .06762 |
| VAR00012 | 140 | 2.5000 | 1.32220 | .11175 |

**One-Sample Test**

| | Test Value = 0 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| VAR00005 | 35.033 | 139 | .000 | 1.65714 | 1.5636 | 1.7507 |
| VAR00006 | 25.575 | 139 | .000 | 1.57857 | 1.4565 | 1.7006 |
| VAR00007 | 40.378 | 139 | .000 | 3.97857 | 3.7838 | 4.1734 |
| VAR00008 | 44.407 | 139 | .000 | 4.15714 | 3.9720 | 4.3422 |
| VAR00009 | 58.678 | 139 | .000 | 3.96429 | 3.8307 | 4.0979 |
| VAR00010 | 27.326 | 139 | .000 | 3.27857 | 3.0413 | 3.5158 |
| VAR00011 | 62.213 | 139 | .000 | 4.20714 | 4.0734 | 4.3408 |
| VAR00012 | 22.372 | 139 | .000 | 2.50000 | 2.2791 | 2.7209 |

**One-Sample Statistics**

| | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|
| VAR00013 | 140 | 3.7571 | 1.31877 | .11146 |
| VAR00014 | 140 | 3.3786 | 1.35958 | .11491 |
| VAR00015 | 140 | 3.5500 | .95454 | .08067 |
| VAR00016 | 140 | 3.6357 | .89129 | .07533 |
| VAR00017 | 140 | 3.5714 | 1.31479 | .11112 |
| VAR00018 | 140 | 3.4786 | 1.14092 | .09643 |
| VAR00019 | 140 | 3.8643 | .92301 | .07801 |
| VAR00020 | 140 | 4.2786 | 1.03928 | .08784 |

**One-Sample Test**

| | Test Value = 0 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| VAR00013 | 33.709 | 139 | .000 | 3.75714 | 3.5368 | 3.9775 |
| VAR00014 | 29.403 | 139 | .000 | 3.37857 | 3.1514 | 3.6058 |
| VAR00015 | 44.005 | 139 | .000 | 3.55000 | 3.3905 | 3.7095 |
| VAR00016 | 48.265 | 139 | .000 | 3.63571 | 3.4868 | 3.7847 |
| VAR00017 | 32.140 | 139 | .000 | 3.57143 | 3.3517 | 3.7911 |
| VAR00018 | 36.075 | 139 | .000 | 3.47857 | 3.2879 | 3.6692 |
| VAR00019 | 49.537 | 139 | .000 | 3.86429 | 3.7100 | 4.0185 |
| VAR00020 | 48.711 | 139 | .000 | 4.27857 | 4.1049 | 4.4522 |

**One-Sample Statistics**

| | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|
| VAR00021 | 140 | 4.3571 | 1.03236 | .08725 |
| VAR00022 | 140 | 3.9000 | 1.31017 | .11073 |
| VAR00023 | 140 | 3.7571 | 1.21069 | .10232 |
| VAR00024 | 140 | 3.8071 | 1.06546 | .09005 |
| VAR00025 | 140 | 3.9571 | 1.20474 | .10182 |
| VAR00026 | 140 | 3.5929 | 1.10523 | .09341 |
| VAR00027 | 140 | 3.8929 | .92679 | .07833 |
| VAR00028 | 140 | 4.1214 | .97794 | .08265 |

**One-Sample Test**

| | Test Value = 0 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| VAR00021 | 49.938 | 139 | .000 | 4.35714 | 4.1846 | 4.5297 |
| VAR00022 | 35.221 | 139 | .000 | 3.90000 | 3.6811 | 4.1189 |
| VAR00023 | 36.719 | 139 | .000 | 3.75714 | 3.5548 | 3.9595 |
| VAR00024 | 42.279 | 139 | .000 | 3.80714 | 3.6291 | 3.9852 |
| VAR00025 | 38.865 | 139 | .000 | 3.95714 | 3.7558 | 4.1585 |
| VAR00026 | 38.464 | 139 | .000 | 3.59286 | 3.4082 | 3.7775 |
| VAR00027 | 49.699 | 139 | .000 | 3.89286 | 3.7380 | 4.0477 |
| VAR00028 | 49.865 | 139 | .000 | 4.12143 | 3.9580 | 4.2848 |

**One-Sample Statistics**

| | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|
| VAR00029 | 140 | 4.4643 | .99936 | .08446 |
| VAR00030 | 140 | 4.1500 | .98130 | .08293 |
| VAR00031 | 140 | 3.9357 | 1.18267 | .09995 |
| VAR00032 | 140 | 4.0429 | 1.09197 | .09229 |
| VAR00033 | 140 | 3.8643 | 1.20676 | .10199 |

**One-Sample Test**

| | Test Value = 0 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| VAR00029 | 52.856 | 139 | .000 | 4.46429 | 4.2973 | 4.6313 |
| VAR00030 | 50.039 | 139 | .000 | 4.15000 | 3.9860 | 4.3140 |
| VAR00031 | 39.375 | 139 | .000 | 3.93571 | 3.7381 | 4.1333 |
| VAR00032 | 43.807 | 139 | .000 | 4.04286 | 3.8604 | 4.2253 |
| VAR00033 | 37.889 | 139 | .000 | 3.86429 | 3.6626 | 4.0659 |

**One-Sample Statistics**

| | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|
| VAR00034 | 140 | 4.3571 | 1.03236 | .08725 |
| VAR00035 | 140 | 3.9000 | 1.31017 | .11073 |
| VAR00036 | 140 | 3.7571 | 1.21069 | .10232 |
| VAR00037 | 140 | 3.8071 | 1.06546 | .09005 |
| VAR00038 | 140 | 3.9571 | 1.20474 | .10182 |

**One-Sample Test**

| | Test Value = 0 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| VAR00034 | 49.938 | 139 | .000 | 4.35714 | 4.1846 | 4.5297 |
| VAR00035 | 35.221 | 139 | .000 | 3.90000 | 3.6811 | 4.1189 |
| VAR00036 | 36.719 | 139 | .000 | 3.75714 | 3.5548 | 3.9595 |
| VAR00037 | 42.279 | 139 | .000 | 3.80714 | 3.6291 | 3.9852 |
| VAR00038 | 38.865 | 139 | .000 | 3.95714 | 3.7558 | 4.1585 |

**Statistics**

| | | VAR00001 | VAR00002 | VAR00003 | VAR00004 |
|---|---|---|---|---|---|
| N | Valid | 140 | 140 | 140 | 140 |
| | Missing | 0 | 0 | 0 | 0 |

**Sex**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 81 | 57.9 | 57.9 | 57.9 |
| | 2.00 | 59 | 42.1 | 42.1 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

**Age**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 1 | .7 | .7 | .7 |
| | 2.00 | 54 | 38.6 | 38.6 | 39.3 |
| | 3.00 | 54 | 38.6 | 38.6 | 77.9 |
| | 4.00 | 31 | 22.1 | 22.1 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

**Qualification**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 15 | 10.7 | 10.7 | 10.7 |
| | 2.00 | 50 | 35.7 | 35.7 | 46.4 |
| | 4.00 | 75 | 53.6 | 53.6 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

**Experience**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 1.00 | 70 | 50.0 | 50.0 | 50.0 |
| | 2.00 | 53 | 37.9 | 37.9 | 87.9 |
| | 3.00 | 17 | 12.1 | 12.1 | 100.0 |
| | Total | 140 | 100.0 | 100.0 | |

**One-Sample Statistics**

| | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|
| VAR00005 | 140 | 1.6571 | .55969 | .04730 |
| VAR00006 | 140 | 1.5786 | .73031 | .06172 |
| VAR00007 | 140 | 3.9786 | 1.16587 | .09853 |
| VAR00008 | 140 | 4.1571 | 1.10767 | .09361 |
| VAR00009 | 140 | 3.9643 | .79938 | .06756 |
| VAR00010 | 140 | 3.2786 | 1.41964 | .11998 |
| VAR00011 | 140 | 4.2071 | .80015 | .06762 |
| VAR00012 | 140 | 2.5000 | 1.32220 | .11175 |

**One-Sample Test**

| | Test Value = 0 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| VAR00005 | 35.033 | 139 | .000 | 1.65714 | 1.5636 | 1.7507 |
| VAR00006 | 25.575 | 139 | .000 | 1.57857 | 1.4565 | 1.7006 |
| VAR00007 | 40.378 | 139 | .000 | 3.97857 | 3.7838 | 4.1734 |
| VAR00008 | 44.407 | 139 | .000 | 4.15714 | 3.9720 | 4.3422 |
| VAR00009 | 58.678 | 139 | .000 | 3.96429 | 3.8307 | 4.0979 |

| | | | | | | |
|---|---|---|---|---|---|---|
| VAR00010 | 27.326 | 139 | .000 | 3.27857 | 3.0413 | 3.5158 |
| VAR00011 | 62.213 | 139 | .000 | 4.20714 | 4.0734 | 4.3408 |
| VAR00012 | 22.372 | 139 | .000 | 2.50000 | 2.2791 | 2.7209 |

**One-Sample Statistics**

| | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|
| VAR00013 | 140 | 3.7571 | 1.31877 | .11146 |
| VAR00014 | 140 | 3.3786 | 1.35958 | .11491 |
| VAR00015 | 140 | 3.5500 | .95454 | .08067 |
| VAR00016 | 140 | 3.6357 | .89129 | .07533 |
| VAR00017 | 140 | 3.5714 | 1.31479 | .11112 |
| VAR00018 | 140 | 3.4786 | 1.14092 | .09643 |
| VAR00019 | 140 | 3.8643 | .92301 | .07801 |
| VAR00020 | 140 | 4.2786 | 1.03928 | .08784 |

**One-Sample Test**

| | Test Value = 0 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| VAR00013 | 33.709 | 139 | .000 | 3.75714 | 3.5368 | 3.9775 |
| VAR00014 | 29.403 | 139 | .000 | 3.37857 | 3.1514 | 3.6058 |
| VAR00015 | 44.005 | 139 | .000 | 3.55000 | 3.3905 | 3.7095 |
| VAR00016 | 48.265 | 139 | .000 | 3.63571 | 3.4868 | 3.7847 |
| VAR00017 | 32.140 | 139 | .000 | 3.57143 | 3.3517 | 3.7911 |
| VAR00018 | 36.075 | 139 | .000 | 3.47857 | 3.2879 | 3.6692 |
| VAR00019 | 49.537 | 139 | .000 | 3.86429 | 3.7100 | 4.0185 |
| VAR00020 | 48.711 | 139 | .000 | 4.27857 | 4.1049 | 4.4522 |

**One-Sample Statistics**

| | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|
| VAR00021 | 140 | 4.3571 | 1.03236 | .08725 |
| VAR00022 | 140 | 3.9000 | 1.31017 | .11073 |
| VAR00023 | 140 | 3.7571 | 1.21069 | .10232 |
| VAR00024 | 140 | 3.8071 | 1.06546 | .09005 |
| VAR00025 | 140 | 3.9571 | 1.20474 | .10182 |
| VAR00026 | 140 | 3.5929 | 1.10523 | .09341 |
| VAR00027 | 140 | 3.8929 | .92679 | .07833 |

| | | | | |
|---|---|---|---|---|
| VAR00028 | 140 | 4.1214 | .97794 | .08265 |

**One-Sample Test**

| | Test Value = 0 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| VAR00021 | 49.938 | 139 | .000 | 4.35714 | 4.1846 | 4.5297 |
| VAR00022 | 35.221 | 139 | .000 | 3.90000 | 3.6811 | 4.1189 |
| VAR00023 | 36.719 | 139 | .000 | 3.75714 | 3.5548 | 3.9595 |
| VAR00024 | 42.279 | 139 | .000 | 3.80714 | 3.6291 | 3.9852 |
| VAR00025 | 38.865 | 139 | .000 | 3.95714 | 3.7558 | 4.1585 |
| VAR00026 | 38.464 | 139 | .000 | 3.59286 | 3.4082 | 3.7775 |
| VAR00027 | 49.699 | 139 | .000 | 3.89286 | 3.7380 | 4.0477 |
| VAR00028 | 49.865 | 139 | .000 | 4.12143 | 3.9580 | 4.2848 |

**One-Sample Statistics**

| | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|
| VAR00029 | 140 | 4.4643 | .99936 | .08446 |
| VAR00030 | 140 | 4.1500 | .98130 | .08293 |
| VAR00031 | 140 | 3.9357 | 1.18267 | .09995 |
| VAR00032 | 140 | 4.0429 | 1.09197 | .09229 |
| VAR00033 | 140 | 3.8643 | 1.20676 | .10199 |

**One-Sample Test**

| | Test Value = 0 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| VAR00029 | 52.856 | 139 | .000 | 4.46429 | 4.2973 | 4.6313 |
| VAR00030 | 50.039 | 139 | .000 | 4.15000 | 3.9860 | 4.3140 |
| VAR00031 | 39.375 | 139 | .000 | 3.93571 | 3.7381 | 4.1333 |
| VAR00032 | 43.807 | 139 | .000 | 4.04286 | 3.8604 | 4.2253 |
| VAR00033 | 37.889 | 139 | .000 | 3.86429 | 3.6626 | 4.0659 |

**One-Sample Statistics**

| | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|
| VAR00034 | 140 | 4.3571 | 1.03236 | .08725 |
| VAR00035 | 140 | 3.9000 | 1.31017 | .11073 |
| VAR00036 | 140 | 3.7571 | 1.21069 | .10232 |
| VAR00037 | 140 | 3.8071 | 1.06546 | .09005 |
| VAR00038 | 140 | 3.9571 | 1.20474 | .10182 |

**One-Sample Test**

| | Test Value = 0 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| VAR00034 | 49.938 | 139 | .000 | 4.35714 | 4.1846 | 4.5297 |
| VAR00035 | 35.221 | 139 | .000 | 3.90000 | 3.6811 | 4.1189 |
| VAR00036 | 36.719 | 139 | .000 | 3.75714 | 3.5548 | 3.9595 |
| VAR00037 | 42.279 | 139 | .000 | 3.80714 | 3.6291 | 3.9852 |
| VAR00038 | 38.865 | 139 | .000 | 3.95714 | 3.7558 | 4.1585 |