

**INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEM  
ADOPTION AND INTERNAL SERVICE DELIVERY IN  
KYAMBOGO UNIVERSITY**

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## DECLARATION

I, Birungi Mary, declare that this dissertation titled “*Integrated Financial Management Information System Adoption and Internal Internal Service Delivery in Kyambogo University*” has been done by me and is ready for submission to Kyambogo University.

Signed:..... Date:.....

## APPROVAL

We certify that Birungi Mary did her dissertation on “*Integrated Financial Management Information System Adoption and Internal Internal Service Delivery in Kyambogo University*” under our supervision. The dissertation is therefore submitted with our approval.

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Signed:..... Date: .....

Dr. Henry Mugisha

## **DEDICATION**

This dissertation is dedicated to my lovely children.

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## LIST OF ACRONYMS

AG	:	Accountant General
AIA	:	Appropriation in Aid
BMAU	:	Budgetary Monitoring and Accountability Unit
BOU	:	Bank of Uganda
GRN	:	Goods Received Note
IFMIS	:	Integrated Financial Management Information System
LPOs	:	Local Purchase Orders
MoFPED	:	Ministry of Finance Planning and Economic Development
MTEFs	:	Medium-Term Expenditure Frameworks
NDP	:	National Development Plan III
NTR	:	non-tax revenue
OAG	:	Office of the Auditor General
OBB	:	Output Based Budgeting
PBS	:	Programme Based System
SPSS	:	Statistical Package for Social Sciences
URA	:	Uganda Revenue Authority
URN	:	Uganda Radio Network

## **ABSTRACT**

The primary aim of this research was to examine the correlation between the adoption of an Integrated Financial Management Information System (IFMIS) and the internal service delivery perceived by users at Kyambogo University. The study was driven by specific objectives, namely, evaluating the impact of cash management, budgeting, and governance systems on internal service delivery. Employing a cross-sectional research design, a mixed-methods approach was utilized to gather, present, interpret, and analyze data. A sample of 191 IFMIS users from various departments including Human Resources, Finance, Procurement, Planning, University Administration, and Academic Departments participated in the study. Data was collected through structured questionnaires and analyzed using SPSS version 25. The findings revealed a significant positive correlation between cash management practices and internal service delivery. Moreover, the study demonstrated a positive association between governance systems and internal service delivery perceived by users. Additionally, the study identified budgeting and governance systems as predictors of internal service delivery, with governance systems emerging as the most influential predictor. In conclusion, the research asserts the indispensability of IFMIS in enhancing internal service delivery and emphasizes the significance of budgeting and governance practices in this regard. It recommends enhancing governance systems and restructuring budgeting processes. Furthermore, the study proposes future research directions, including investigating the relationship between IFMIS and internal service delivery from the perspectives of both users and students at Kyambogo University. Additionally, it suggests a study be conducted to extrapolate the impact of IFMIS adoption on the effectiveness of procurement systems within the university.

## **CHAPTER ONE: INTRODUCTION**

### **1.0 Introduction**

Chapter one offers a detailed overview of the research, including the background, problem statement, study purpose, objectives, research questions, scope, significance, and conceptual framework, providing a comprehensive understanding of the study's foundations and intentions.

### **1.1 Background to the Study**

#### **1.1.1 Historical Perspective**

Worldwide, internal service delivery is vital for accountability and transparency of governance systems. In this context, various scholars and writers such as: Alini, 2018; Caceres, et.al 2016. MoFPED, 2015; Munyambonera & Lwanga, 2015; Nazifi & Muhammad, 2014; OECD, 2018; Olaoye, 2019; Rhys & Walle, 2013; UNDP, 2015; assess the concept of internal service delivery has been arrested in terms of meeting clients' needs or providing value to customers (Ordanin et.al., 2011 & Hussain, 2014). Internal service delivery serves as a critical link between customer needs and an organization's strategic goals, incorporating both the institution's and customers' perspectives. Central to this process is the provision of high-quality services. Through a comparative review of literature and dictionary sources, internal service delivery is defined as the efficient provision of services, the level of service quality, and the degree of customer satisfaction (Lodorfos et al., 2015). Effective internal service delivery is demonstrated through the ability to meet expectations for standard goods and services, thereby fostering public trust and confidence.

The Integrated Financial Management Information System (IFMIS) is closely aligned with demonstrating an institution's ability to meet expectations for standard goods and services by offering a comprehensive financial management solution that integrates

various financial functions within an organization or government into a unified, automated system (Diamond & Khemani, 2006). Designed to enhance financial transparency, accountability, and efficiency, IFMIS supports internal service delivery by streamlining processes like budgeting, accounting, procurement, and reporting. According to Chêne (2019), IFMIS emerged in the late 1970s and early 1980s as a response to inefficiencies in manual, paper-based systems, helping governments and institutions combat financial mismanagement, corruption, and ineffective resource allocation. Thus, by improving financial management practices, IFMIS plays a vital role in strengthening internal service delivery, enhancing both operational effectiveness and public trust.

In the 1980s and 1990s as computing technology advanced, some governments began to explore and implement early versions of IFMIS (Heeks, 2001). These systems were largely developed to address the need for improved public expenditure management and to support the budgeting process. For example, Kenya and Uganda were among the early adopters of financial management systems with initial pilot projects focused on automating basic accounting functions (World Bank, 2010). However, these early systems were fragmented, often operating in silos with little integration between different financial functions such as accounting, procurement, and payroll management. During this time, the World Bank and other international financial institutions began to promote the adoption of IFMIS as part of broader public sector reforms aimed at improving governance, reducing corruption, and ensuring fiscal responsibility.

The early 2000s marked a significant period of growth for IFMIS as more governments began to embrace the system in response to increasing demands for transparency and accountability (World Bank, 2021). International financial organizations actively supported the implementation of IFMIS in developing countries by providing funding

and technical assistance. During this period, IFMIS evolved to include a broader range of financial functions including budgeting, procurement, cash management, and financial reporting. According to Davis and Scott (2021), countries like Tanzania, Zambia, and Ghana introduced IFMIS as part of public financial management reforms. These systems integrated various financial processes, allowing for better control of government resources and real-time financial information access across ministries and departments. Despite the widespread adoption of IFMIS, many countries faced significant challenges during implementation. For example, Malawi and Nigeria encountered setbacks in IFMIS implementation due to challenges with adopting the system to local conditions and resistance from key stakeholders (Barata & Cain, 2001). However, lessons learned from these experiences led to improvements in IFMIS design and implementation strategies. Governments began to emphasize the importance of stakeholder engagement, capacity-building, and phased implementation to mitigate these challenges.

In the 2010s, the adoption of IFMIS continued to expand globally, with many countries recognizing the benefits of the system for improving financial management (Davis & Scott, 2021). Technological advancements, such as the introduction of cloud-based systems and mobile applications, further enhanced the functionality and accessibility of IFMIS. For instance, Kenya's National Treasury implemented IFMIS to improve budget execution and accountability, while Uganda's IFMIS allowed for better management of public resources and real-time financial reporting (United Nations, 2020). The Integrated Financial Management Information System (IFMIS) has come a long way since its early development in the 1980s. Initially introduced to address inefficiencies in public financial management, the system has evolved into a sophisticated tool for promoting transparency, accountability, and fiscal responsibility in governments worldwide. While challenges remain, particularly in developing countries, the ongoing digital

transformation offers new opportunities for enhancing the effectiveness of IFMIS and improving public financial management across the globe.

According to Umble et al. (2003), the findings from their study underscore the vital significance of successfully implementing information systems projects for the viability and continued success of contemporary organizations. This is attributed to the fact that the efficient utilization of IFMIS typically results in noteworthy enhancements in organizational productivity (Mandal & Gunasekaran, 2003), thereby frequently granting organizations pivotal competitive edges (Poon and Wagner, 2001). As per Sarikas and Weerakkody (2007), the introduction of IFMIS has faced hurdles within implementing agencies. In the UK, shortcomings in IFMIS deployment are broadly attributed to technological, political, and organizational challenges. Similarly, IFMIS initiatives in Africa have encountered obstacles, with Ibrahim and Dauda (2014) pointing out corruption issues among others.

Hendriks (2012) acknowledges a range of these challenges, encompassing functional, corruption-related, implementation, and data migration difficulties. Moreover, Qwabe (2014) agrees with Hendriks (2012) that corruption significantly impedes the effective integration and utilization of IFMIS in Africa. Hendriks (2012) underscores the importance of having adequately skilled personnel for the successful implementation, operation, and maintenance of IFMIS. Nevertheless, a deficiency in capacity acts as a hindrance to the effectiveness of IFMIS implementation. According to Hendriks (2012), another significant factor causing delays in the adoption and implementation of IFMIS by African governments is the lack of capacity. Internal service delivery in sub-Saharan Africa in both Public and Private organizations enhances satisfaction of the expectations (Alini, 2018; Office, Editorial, 2019). To attain a competitive edge in internal service delivery, public entities must innovate by leveraging specialized competencies in the

form of knowledge and skills (Ordanini & Parasuraman, 2011). The scope and functionality of an IFMS vary across sub-Saharan countries, typically representing a complex and extensive strategic reform process (Chêne, 2017). In South Africa, the significant size and complexity of an IFMS present formidable challenges and risks to the implementation process, extending beyond mere technological risks to include functionality deficiencies (Hove & Wynne, 2018).

In East African nations like Kenya, the inception of the Integrated Financial Management and Information System dates back to 1998, with the rollout of the system to line ministries commencing in 2003 (GOK, 2013). The Government of Kenya's IFMIS operates on Oracle-based Enterprise Resource Planning (ERP) software. ERP applications, commonly referred to as ERPs, are comprehensive computer software and hardware systems designed to integrate an organization's data and processes into a unified system, centralized within a database accessed via a secure network (Diamond & Khemani, 2008). In Africa, 89% of organizations using the IFMIS project faced operational issues and experienced high failure rates. Recent studies predominantly examine specific aspects of IFMIS implementation, including performance, obstacles, consequences for governance, effects on supply chain management, and hurdles in central governments. Okello, Migiro, and Mutambara (2017) identified the absence of a study successfully combining underlying adoption factors and constructing an adoption framework for IFMIS implementation in the public sector.

Mostly in Uganda, effective internal service delivery cannot be achieved without the development of a culture that supports the building of capacity at all levels (Hendriks, 2012 & BMAU, 2015). Internal service delivery components typically consist not of tangible objects, but rather encompass a blend of procedures, interpersonal abilities, and resources that need to be effectively coordinated to achieve the intended or envisioned

service outcome (Lodorfos, et.al., 2015). Nevertheless, internal service delivery in the public sector is to be low. With this respect, lack of emphasis on the quality of public internal service delivery led to the institutionalisation of New Public sector Management (NPM) driven by Public Sector Reforms (PSRs) to deliver quality services that meet customer needs and expectations (Laffin, 2018). Additionally, the Government of Uganda (GoU) introduced Integrated Financial Management Information System (IFMIS) in 2003 as one of the reforms to improve internal service delivery through right competencies, knowledge and skills in cash management, budget management, appropriate governance systems, enforcing regulations, controls and processes. The implementation of new public sector reforms and management aid to attain Vision 2040 objectives documented in the National Development Plan III, realise efficient internal service delivery, improve quality of internal service delivery and attain customer satisfaction.

Likewise, the implementation of IFMIS in public universities aimed to enhance the quality of higher education (PEFA Assessment, 2017). Beginning in early 2013, IFMIS was introduced in public universities to boost budgeting, cash management, and financial reporting practices (Hendriks, 2018; Selfano et al., 2014; Semakula & Muwanga, 2012; Hove & Wynne, 2010). IFMIS possesses adoptability to changes in cash management, budgeting, and accounting practices, ensuring prompt and effective financial reporting to both internal and external stakeholders (McConville & Cordery, 2018). The primary goals of IFMIS include promoting transparency, curbing financial irregularities, and fostering accountability in the utilization of government resources (MoFPED, 2019).

The IT-based budgeting and accounting system, which oversees expenditure, does not provide universities with the capability to address emergencies (Uganda Radio Network, URN, 2017). A government survey conducted in 2015 regarding the utilization of IFMIS

identified downtime and insufficient expertise stemming from issues such as poor network connectivity, erratic power supply, and inadequate computer resources as significant impediments to internal service delivery (Budget Monitoring and Accountability Unit, 2015 & Ministry of Finance, Planning and Economic Development, 2015). Despite the implementation of IFMIS in various universities including Kyambogo University, Makerere University, Uganda Management Institute, Busitema University, Mbarara University of Science and Technology, Gulu University, Muni University, Soroti University, Kabale University, and Lira University, it is deemed unsuitable for public universities grappling with substantial domestic arrears, as they are unable to make procurements in the absence of available funds in the system (Ndyabahika, 2017). It is against this backdrop that the Vice Chancellors' Forum expresses a desire for the government to reconsider its decision regarding the adoption of the system.

### **1.1.2 Theoretical Perspective**

The research was informed by the New Public Management theory proposed by Lodorfos, Kostopoulos, and Kaminakis (2015), with additional support drawn from the innovation diffusion theory, which facilitates the assessment of technology adoption (Chêne, 2017). New Public Management (NPM) reveals that administrative reforms are enacted over the time in order to create a policy change in many public institutions characterised by bureaucratic tendencies, politics, failure to provide accountability, high levels of corruption, lack of will to respect the norms of social interaction and above all lack of transparency (Agboola & Lamidi, 2017). The New Public Management theory signifies a fundamental departure from the conventional model of public administration. It denotes a restructured transformation of the public sector that diverges from the authoritarian and conservative approach of traditional public administration, which relied on hierarchical structures influenced by Weber's bureaucratic principles (1946).

The NPM theory bases on two concepts, new managerialism and neo liberal institutional economics. Managerialism refers to professional management, explicit standards and measures of performance, managing of results, value for money management practices and closer to service consumers as a focus for better quality internal service delivery (Rhys & Van, 2013). Additionally, New public management is based on seven key principles, these are: Direct public sector costs should be cut and labour discipline raised so as to improve resource use; Private sector style management practices applied to increase flexibility in decision-making, competition in the public sector through term contracts and tendering increased, as rivalry is the key to lower costs and better standards (Agboola & Lamidi, 2017).

NPM's strength lies in the fact that managerial innovations not only enhanced short-term economy and efficiency but also introduced new challenges related to fragmentation and coordination. The reimagining of the government's role instilled a more entrepreneurial approach in the public sector but might have negative repercussions on equity and social cohesion (Van & Hammerschmid, 2011). Conversely, a weakness of NPM is its paradoxical centralization through decentralization. According to Faboolian (1998), granting public managers more authority may lead to decision-making concentration in their hands, potentially resulting in centralized decision-making contrary to NPM's decentralized claims. This centralization can impede creativity, communication, and flexibility within departments (Faboolian, 1998).

The relevance of the New Public Management theory to this study lies in its potential to leverage competition in public internal service delivery to achieve effectiveness, efficiency, transparency, and accountability in government operational expenditure (Osborne, Radnor & Nasi, 2013). By adopt ing the three principles of NPM reducing public sector costs, adopt ing private sector management practices, and shifting controls

from inputs to outputs -internal service delivery can be enhanced through IFMIS in Kyambogo University.

The Innovation Diffusion Theory (IDT) serves as a foundational framework for technology innovation diffusion research. It guides innovation adoption evaluations, such as assessing technology adoption (Chêne (2017)). Chêne (2017) identified four main elements of IDT: innovation, communication channels, time, and the social system. These elements, along with factors like complexity, compatibility, trial-ability, observability, and relative advantage, influence the adoption of innovations like IFMIS. Vaznonienė (2012) expanded on some factors, like perceived ease of use, which was explored in this study. Additionally, communication plays a crucial role in the innovation decision process, affecting various stages of adoption. The paper examines decision channels, change agents, skills training, and communication structures in the implementation and adoption of IFMIS in Kenya.

Chêne (2017) observed that innovation involves three temporal aspects: the innovation decision process, innovativeness of individuals, and the rate of adoption. IFMIS implementation aligns with these temporal aspects, as it takes time to adopt the system. Lastly, the social system, consisting of interrelated units working towards a common goal, can influence the implementation or adoption of a system positively or negatively. The paper investigates the social system surrounding IFMIS in Kenya to assess its impact on the system's adoption and implementation.

### **1.1.3 Conceptual Perspective**

Internal service delivery encompasses the interaction between service providers and clients, where providers offer services, be it information or tasks, and clients perceive either value enhancement or diminishment. From a governmental perspective, internal

service delivery entails the distribution of resources and essential services, such as water, electricity, sanitation infrastructure, land, and housing, upon which citizens rely (Kabunga, 2017). It serves as a mechanism for organizations to meet the needs and aspirations of the people they serve, aiming administratively to achieve the effectiveness of public entities (Amucu, 2018). The United Nations Development Programme (UNDP, 2013) defines internal service delivery as the interaction among policymakers, service providers, and consumers, encompassing both services and their underlying systems.

Nations must demonstrate the capability to deliver quality and standardized services to gain public confidence. The international principles of internal service delivery encompass various aspects, including availability, dependability, usability, usefulness, credibility, authenticity, responsiveness, flexibility, expandability, and sustainability (UNDP, 2013). Service quality, as defined by Yasin (2002), hinges on the disparity between customer expectations and perceptions of the service received, with indicators such as effectiveness and efficiency in timely internal service delivery. IFMS serves as an information system which monitors financial transactions and consolidates financial data (Hendriks, 2018; Rozner, 2008). It supports management reporting, policy decisions, fiduciary responsibilities, and the preparation of auditable financial statements (Casals, 2009).

Essentially, an IFMS automates financial operations, encompassing budget preparation, execution, accounting, and reporting for governments and other entities (Lianzuala & Khawlhing, 2008; Dener & Young, 2013). IFMS aims to enhance efficiency in budgetary processes, financial reporting, and execution, addressing fiduciary issues encountered prior to its implementation (Selfano et al., 2014). Its deployment has resulted in greater expenditure control, reduced processing times for payments, improved account reconciliation, and more accurate financial reporting.

#### **1.1.4 Contextual Background**

Kyambogo University, established in 2003 under the Universities and Other Tertiary Institutions Act 2001, resulted from the merger of Uganda Polytechnic Kyambogo (UPK), the Institute of Teacher Education, Kyambogo (ITEK), and the Uganda National Institute of Special Education (UNISE). In 2017, Kyambogo University adopted the use of IFMIS as part of the government's public sector reforms aimed at enhancing internal service delivery. Governments worldwide are heavily investing in transforming the public sector to streamline and improve internal service delivery through the implementation of new public sector reforms and management practices. The objective is to enhance accessibility, reliability, acceptability, efficiency, cost savings, transparency, accountability, and service quality. However, despite the intended goals of IFMIS to support fiscal discipline, strategic fund allocation, value for money, and accountability in public fund utilization, these objectives have not been fully realized.

Persistent inefficiencies result in the misallocation of resources and a decline in public confidence in government. Internal service delivery at Kyambogo University has remained subpar despite the adoption and implementation of IFMIS in 2017. Inadequate allocation and utilization of funds, weak accountability mechanisms, failure to achieve value for money, and a lack of probity have continued to adversely affect the quality of education. While staff utilize IFMIS for budget planning and execution, providing timely and accurate data for budget management and decision-making has remained challenging. To the best of the researchers' knowledge, there is limited information on whether the adoption of IFMIS has achieved its intended purposes at Kyambogo University, particularly in the education sector. This study aims to investigate the relationship between IFMIS and internal service delivery in higher education institutions.

## **1.2 Statement of the Problem**

Effective Integrated Financial Management Information System frameworks are widely regarded as critical for enhancing public internal service delivery, which encompasses efficient service delivery, quality of service, and customer satisfaction (Chêne, 2019). However, despite these recognized benefits, the IFMIS implementation at Kyambogo University has faced significant challenges in achieving these service delivery benchmarks. According to the Ministry of Finance, Planning, and Economic Development (MoFPED) (2022), users at the university did not consistently enter required accounting data into the system, leading to incomplete financial records and diminishing service efficiency. The Budget Monitoring and Accountability Unit (2019) further highlighted that 37.9% of the information entered by Kyambogo University users was inaccurate, and 45.7% of users reported delays in task completion due to oversight challenges, undermining the quality and timeliness of service delivery. Additionally, the Uganda Radio Network (URN) (2019) reported inadequate training for IFMIS users at the university, contributing to persistent errors and delays, which in turn affected customer satisfaction by disrupting financial tracking, budget execution, procurement processes, and payment timelines. Moreover, resistance among staff to fully adopt the IFMIS system exacerbated implementation difficulties, while connectivity issues and outdated hardware caused frequent downtimes that hindered efficient and quality service delivery (Budget Monitoring and Accountability Unit, 2019). The Office of the Auditor General (2020) noted that these disruptions, combined with incomplete and inaccurate data entries, posed risks to accountability and transparency, ultimately affecting user confidence and satisfaction. Additionally, MoFPED (2022) highlighted challenges with the sustainability of the system at Kyambogo University due to high maintenance costs and limited technical support, which further compromised the IFMIS's reliability and usability over time hence affecting its effectiveness. Therefore, this prompted the

researcher to examine the relationship between IFMIS adoption and internal service delivery in Kyambogo University.

### **1.3 Purpose of the study**

To examine the relationship between Integrated Financial Management Information System Adoption and internal service delivery in Kyambogo University.

### **1.4 Objectives of the study**

- i) To assess the relationship between cash management and internal service delivery of users in Kyambogo University
- ii) To examine the relationship between budgeting and internal service delivery of users in Kyambogo University
- iii) To investigate the relationship between governance system and internal service delivery of users in Kyambogo University

### **1.5 Research Questions**

- i) What is the relationship between cash management and internal service delivery in Kyambogo University?
- ii) Is there any relationship between budgeting and internal service delivery in Kyambogo University?
- iii) What relationship exists between governance system and internal service delivery of users in Kyambogo University?

### **1.6 Scope of the Study**

The scope was explained in two contexts, namely; Subject and Area scope.

### **1.6.1 Subject Scope**

The study focused on establishing the relationship between Integrated Financial Management System and internal service delivery in Kyambogo University. The study excluded other public Universities such as MUBS, Makerere University and Uganda Management Institute because it is within five years that Kyambogo University's adoption of IFMIS has experience audit queries that indicate no improvement in internal service delivery. The study limited itself to establishing the relationship between constructs of the three independent variable constructs that is cash management, budgeting and governance system on internal service delivery (BMAU, 2019).

### **1.6.2 Area Scope**

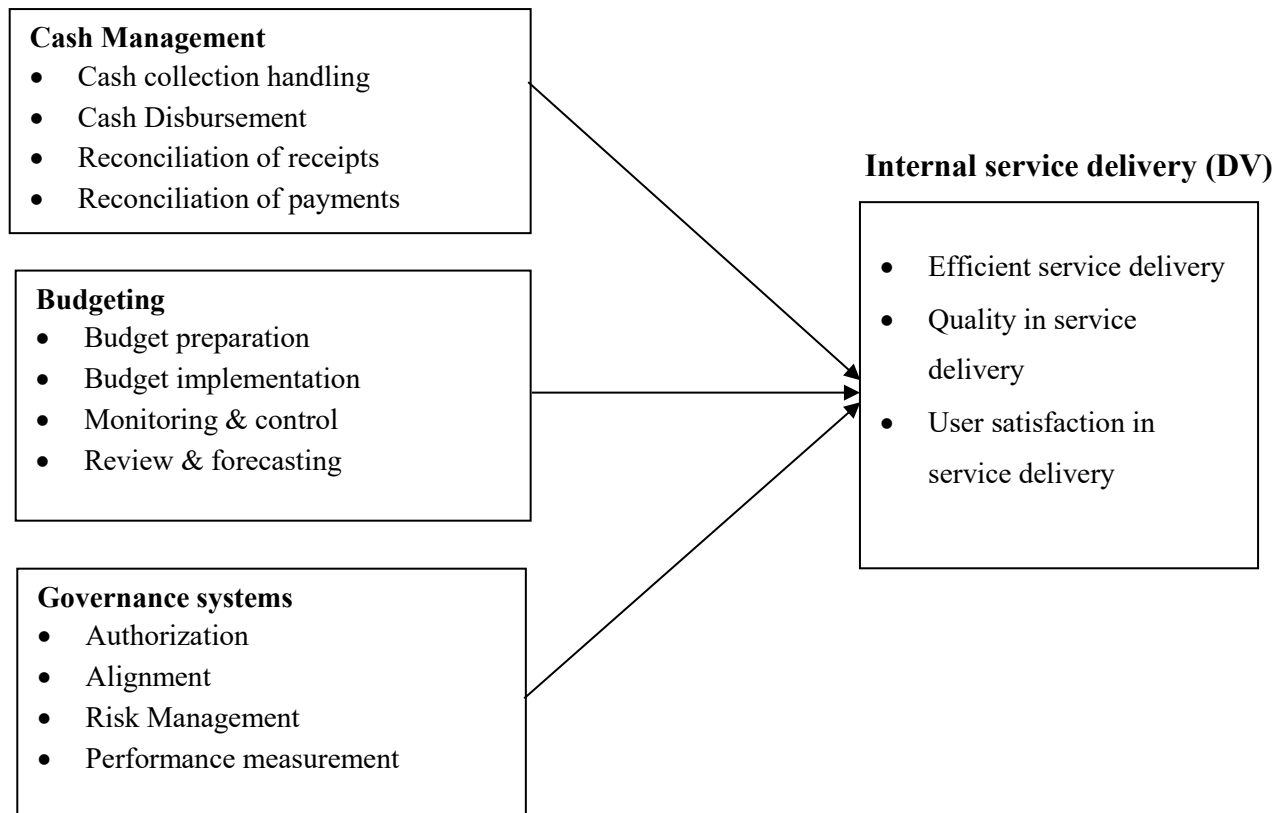
The study was carried out at Kyambogo University, which operates under the Universities and Other Tertiary Institutions Act (2001) and is overseen by the National Council for Higher Education (NCHE). Kyambogo University was chosen because it was one of the first public universities to implement IFMIS in its operations, yet its internal service delivery has consistently declined.

### **1.7 Significance of the Study**

The study aimed at determining the relationship between the Integrated Financial Management System (IFMIS) and internal service delivery at Kyambogo University. It will specifically examine how the three independent variables; cash management, budgeting, and governance system affect internal service delivery (BMAU, 2019).

## 1.8 Conceptual Framework

### IFMIS Adoption (IV)



**Figure 1.1: Relating Integrated Financial Management System (IFMIS) adoption and Internal Service Delivery**

**Source:** Adopted from BMAU (2015); Okello, Migiro & Mutambara (2017), Hendriks (2018), Njonde and Kimanzi (2018), Kahari et al., (2019), Naghshbandi & Ombati, (2014) and modified by the researcher.

The conceptual framework is derived from the works of Budget Monitoring and Accountability Unit (BMAU, 2015), Naghshbandi & Ombati, (2014), Okello, Migiro & Mutambara (2017), Hendriks (2012), Njonde & Kimanzi (2014) and Karanja (2018), with modification to suite IFMIS and internal service delivery context at KyU. The conceptual framework demonstrates that the level of internal service delivery is directly affected by IFMIS adoption. It is hypothesized that cash management being represented by cash collection, cash disbursement, receipt reconciliations and payment reconciliations under the IFMIS affects internal service delivery.

Further still, figure 1 above illustrates that budgeting under the IFMIS being characterized by appropriate budget preparation, budget implementation, monitoring & control and review & forecasting determines the level of internal service delivery measured in terms of efficiency, provision of quality service and realization of desired customer satisfaction (Kahari *et.al*, 2015). Similarly, the conceptual framework also indicates that the governance system as a component of IFMIS represented by authorisation, alignment risk management and performance measurement regulates internal service delivery as measured by efficient, quality of service and preferred customer satisfaction.

On the other hand, internal service delivery is the dependent variable whose dimension are formulated based on the ideas identified as; efficient internal service delivery, quality in internal service delivery, and customer satisfaction. Use of IFMIS, right competencies knowledge and skills in cash management as well as budget management, appropriate governance system to enforce regulations, controls and processes among others. The relationship between IFMIS adoption and internal service delivery was intervened by MFEDP policies, ICT policies, human resource policies, and International Financial Reporting Standards (IFRS).

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0 Introduction**

This chapter analysed the present body of knowledge pertinent to the topic under study so as to give a foundation of knowledge and identify gaps in existing studies. The researcher used an analytical approach in reviewing the literature by bringing out agreements and disagreements from the existing literature (Dawidowicz, 2017). The literature was analysed objective by objective. The section covered the review of the theory that supported the study and the relationships between the study variables.

### **2.1 Theoretical Review**

#### **2.1.1 New Public Management theory**

The study was guided by the New Public Management theory advanced by Lodorfos, Kostopoulos and Kaminakis (2015). New Public Management (NPM) reveals that administrative reforms are enacted over the time in order to create a policy change in many public institutions characterised by bureaucratic tendencies, politics, failure to provide accountability, high levels of corruption, lack of will to respect the norms of social interaction and above all lack of transparency (Agboola & Lamidi, 2017). The New Public Management theory signifies a significant shift from the traditional model of public administration. It represents a reformed public sector transformation that departs from the restrictive, autocratic, and conservative paradigm of public administration, which relied on top-down hierarchies and was based on Weber's bureaucracy (1946).

The NPM theory bases on two concepts, new managerialism and neo liberal institutional economics. Managerialism refers to professional management, explicit standards and measures of performance, managing of results, value for money management practices and closer to service consumers as a focus for better quality internal service delivery

(Rhys & Van, 2013). Additionally, NPM's strength is that managerial innovations did not only have a positive impact on short-term economy and efficiency, but also created new problems of fragmentation and coordination. The new thinking about the role of government did not only instil a more entrepreneurial spirit into the public sector, but may also have had negative effects on equity and social cohesion (Van & Hammerschmid, 2011). On the other hand, one of the weaknesses of NPM is that it involves a paradox of centralisation through decentralization. According to Faboolian 1998, giving public managers more authority to manage programmes may result in concentrating decisions making in them. This suggests that NPM may lead to centralised decision making by public managers, rather than encouraging decentralisation in public organisations it claims thus, centralisation is a disadvantage because it gives too much freedom to managers if damage is done, it may be difficult to undo it. Further, it can lead to less creativity within the department, limited communication between members of the organisation and inflexibility of the workers

The relevance of the New Public Management theory to this study is that taking advantage of competition in internal service delivery of public service is relevant to achieve effective, efficient, transparent and accountability in operational expenditure by government (Osborne, Radnor & Nasi, 2013). Additionally, adopting the three principles of new public management; namely: reducing public sector costs, adopting private sector style of management and shifting controls from inputs to output, internal service delivery could improve through adaptation of IFMIS in Kyambogo University.

### **2.1.2 Integrated Financial Management Information System (IFMIS)**

IFMIS is an Oracle-based Enterprise Resource Planning (ERP) Software, an IT-based budgeting and accounting system that assists entities in initiating, spending, and monitoring their budgets, initiating and processing payments, and managing and

reporting on their financial activities (MoFPED, 2012; MoFPED, 2015; MoFPED, 2018; Casals 2009 cited in Odoyo, Adero, & Chumba, 2014; Hendriks, 2012 & Wainaina, 2015; Faduma, Muturi, & Samantar, 2018). Odoyo, Adero, and Chumba (2014), as well as Macharia and Dominic (2019), mention that with IFMIS, all manner of reports can be generated; balance sheets, sources and uses of funds, cost reports, returns on investment, ageing of receivables and payables, requisition, tendering, contract award, cash flow projections, budget variances, auto-reconciliations, automatic file generation, and performance reports of all types; tailored to guiding external agencies and internal IFMIS can provide timely and efficient access to reliable financial data while also strengthening government financial controls, increasing budget transparency and accountability, expediting operations, and improving internal service delivery efficiency (MoFPED, 2018 & Odoyo et al., 2014).

A good Public Financial Management (PFM) system not only promotes better internal service delivery but also fosters economic growth and development. It guarantees that the government and its departments generate, manage, and spend public funds in an efficient and transparent manner (Munyambonera and Lwanga, 2015). Given the functions of IFMIS described above, it is critical that the system be able to supply the essential information on time and accurately, or it will not be used and will cease to fulfil its primary duty as a system (Wainaina, 2015).

### **2.1.3 Cash Management**

It is claimed that money is an institution's lifeblood. No aspect of running a business is independent of financial management. However, a variety of elements, such as good cash management techniques, have a major role in an entity's success (Attom, 2014 & Abioro, 2013 quoted in Muthama, 2016). Cash management is the practice of having the appropriate amount of money in the right place and at the right time to meet a company's

commitments in the most cost-effective manner. Cash management is the process of planning and controlling cash flows into and out of a business, cash flows inside the business, and cash balances held by a business at a given time (Odoyo et al., 2014; Nyabwanga, Ojera, Alphonse, & Otieno, 2012, as quoted in Oluoch, 2016). It is thus vital to evaluate the impact of Integrated Financial Management Systems on cash management.

To manage cash means to regulate an entity's ability to buy assets, pay debt, pay personnel, and run operations. Thus, good cash management is closely related to an institution's capacity to achieve its mission, goals, and objectives (Abioro, 2013). Furthermore, Pandey (2010), as cited in Oladejo, Akande, and Yinus (2017), supports this claim by stating that cash management in the modern corporation involves two simple rules: first, speed up cash collection (Cash Inflow) to minimise collection float, and second, slow down cash disbursement (Cash Outflow) to maximise disbursement float (Attom, 2014). Furthermore, sound cash management entails better expenditure decision timing, earlier income collection and banking, and more accurate cash flow forecasting (Mugambi, Njeru, & Ondabu, 2015). Ondiek (2013) asserts that lowering the time cash is tied up in the operational cycle enhances a company's profitability and market value, emphasising the importance of effective cash management procedures in boosting internal service delivery.

#### **2.1.4 Budgeting**

Ojua (2016) defined a budget as a numerical representation of management's proposed plan for a given timeframe. Vazonienė and Stončiuvienė (2012) define budgeting as an allocative mechanism of institutional resources to her various sections, activities and investments. A budget serves as an effective tool for management to plan, coordinate, control, and evaluate their activities at their fundamental levels. Oladejo et al. (2017)

outlined a clear, formal process for communicating an organization's time-bound expectations, goals, and objectives in financial terms to prevent confusion and aid in their attainment by all relevant parties. Lu and Willoughby (2015) contend that budgets' administrative and communication functions are essential for maintaining transparency and accountability in public fund management. The budgeting module of IFMIS automates public resource management from planning to execution, ensuring accountability. Managers can frequently evaluate organizational performance for budgetary allocation decisions with its assistance (Wainaina, 2014).

Budget planning is a comprehensive financial activity with explicit goals and objectives, that aligns organizational resources and performance efforts to achieve stated goals with less uncertainty. (Basheka & Nabwire, 2013). Budget planning involves creating a coordinated financial plan to achieve organizational goals. Malick & Grisay (2000) found that budget planning involves setting objectives but did not examine its relationship with service quality (as cited in Kasenene, 2013). In universities, service quality holds significant importance. Scott and Enu-Kwesi (2018) proposed planning, budgeting, and implementing initiatives for significantly enhancing public sector reach, accessibility, and quality. In the absence of adequate funds and proficient personnel, public institutions cannot provide adequate services, as stated by Tsheletsane and Fourie (2014).

The importance of budgeting was emphasized by Sandalgaard Sandalgaard's (2012) who argued that budgets, perspective highlights budgets' value as a control practice, have always played a key role in managing institutions by providing a roadmap mechanism, essential for managing institutions' future activities and to set a series of goals to be achieved and the means setting goals, as argued by which to achieve those goals (Cartiz, 2010). Additionally, Cartiz (2010). Similarly, Pintea et al., al. (2013) insist that rigorous

planning of any economic activity is an essential element for underscore the success importance of those meticulous planning as a crucial success factor for economic activities. Regarding public education institutions, Government funding for public educational institutions is one of the sources that are suggested to be taken into consideration during budget planning, (Basheka & Nabwire (2013). Others include sources of income generated internally, tuition, assistance from donors, and loan financing. Budget planning, according to Amucu (2018) and Nabunya, Nabunya (2012), is all about committing, prioritizing, and allocating financial resources to the various programs to be implemented in programs for a specific time frame. These resources can come from internal sources, tuition, donor funding, and loan finance. Despite being explicit about what budget planning entails, Atwebembeire, Namubiru, Ssentamu, and Musaazi's (2018) study contains similar insights that echoes the same emotions.

This ensures practically that the Effective implementation of internal service delivery programmes are effectively implemented, leading to guarantees the realization of desired quality of the educational services quality (Atwebembeire, et al., 2018). Effective control of a budget should ensure that proposed results in the realization of desired educational programmes are achieved services without deviating from exceeding the planned budget (Saka, 2015). Clearly, when such control is effectively exercised, the result is realization of the desired quality of educational services (Incheul, 2015, Incheul, 2010 and Bwire, Katusiime & Sendyona, 2020). Generally, thus, a university that falls short of achieving the planned failing to effectively manage its budget management effectiveness brings into question raises concerns about the quality of its educational services. offerings. Kyambogo University has had to witness a scenario in which its Ineffective budget management has been ineffective (Basheka an issue at Kyambogo University, according to Basheka & Adda, 2013). Adda (2013).

In line with the above, the Improved budget planning and execution using the available resources is also improved are achieved through timely and accurate data in budgeting processes and controls. The formulation of budget becomes realistic in the government due Due to data integration at various levels which guarantees levels, the budget formulation process in government becomes more realistic and effective, resulting in better budget execution (Tanase, (Paraphrased from Tanase, 2014).

The IFMIS budget module also provides adequate link to links all budgetary team teams for continuous review and actions (Wienhold, 2015). Budgeting The budgeting module ensures the distribution, monitoring and control at the level of manages planned data, revenues, expenses/expenditures expenses, and liabilities (commitments). (commitments) through distribution, monitoring, and control. Budget module provides for the procedures of The budget data maintenance, accounting and control through integration of module integrates medium term expenditure framework (MTEF). procedures for budget data maintenance, accounting, and control. The budget appropriations items, organized by units, can be registered in the system as a structured budget plan in the form of structured budget plan, presented as listing of budget items by organizational units. a listing. The structured budget plan has a hierarchical budget structure, which provides a confined to the financial year, forms the basis for inputting budget data input into the system and is formed within the limits of a financial year. system. The application of such mechanism mechanism's implementation brings about the described effects.

According to Speer (2012), despite substantial financial investments in the management of decentralized governments, financial management practices remain inadequate. The connection between budgeting and internal service delivery in public sector organizations is an area of research that is still developing, yet its potential advantages

are well-known. Scott & Enu-Kwesi (2018) observed that scholars and policy makers continue to grapple with the challenge of optimizing public sector internal service delivery, in accordance with New Public Management (NPM) principles and efficiency objectives (Lapsley & Ríos, 2015). According to Hendricks (2012), an IFMIS strengthens public financial management by boosting confidence and credibility in the budget via comprehensive and transparent reporting, while supplying expenditure data extending from budget approvals to real disbursement at lower levels, thereby enhancing the budgeting process and planning. Kimanzi and Njonde (2014) reported that improvements in financial processes related to budgets have occurred due to the provision of financial reporting, budget execution, internal controls, monitoring, and review by IFMIS. Transparency of the budgetary information ensures both confidentiality and credibility.

According to Muita and Karanja (2018), IFMS has failed to fully adopt to the Output Oriented Budgeting (OOB) reforms. The OBT is updated every four months with spending information from the IFMIS for use in financial reporting. The IFMS configuration facilitates the execution of internal controls in accordance with public financial laws, expedites permit production and finance issuance to the administration, enables revenue reception, purchase order approval and issuance, recording commitments, approval and processing of expenditures, and generates administrative information for management levels and combined levels. (Semakula & Muwanga, 2012).

### **2.1.5 Governance System**

The governance system encompasses the collection, management, monitoring, and control of both financial and non-financial information (Otieno, Migiro, & Mutambara, 2017). Institutions manage financial transactions, performance, data control, IFRS and GAAP compliance, policies, regulatory frameworks, operations, and disclosures. The

risks associated with a poorly governed system include fraud, misappropriation, material errors, regulatory penalties, flawed decision making, and diminished stakeholder confidence. In IFMIS, financial governance encompasses internal controls, financial policies, internal and external audits, workflow, financial controls, data tracking and validation, and data security (Hendriks, 2018). An efficient governance system guarantees accurate financial data. Human resources can appropriately utilize financial data when entities impose controls on it. A unified system comprises of software for data structuring and formatting, a real-time and historical information data hub, data validation, an audit trail and log, ensuring all financial processes from close-to-disclosure. (CIPFA and IFAC, 2013)

In 2010, the approach to public financial management advocated an all-encompassing view of the financial operations of government. Fewer bottlenecks and missed deadlines are experienced in the human resources process. Effective governance systems are essential for managers to ensure congruence in objectives. The primary functions of governance systems encompass Strategic Alignment, Risk Management, Resource Management, Value Delivery, and Performance Measurement (Whole System Approach to Public Financial Management, 2010). An effective IFMIS enhances governance through real-time financial data utilization by human resources for efficient internal service delivery. Effective IFMIS governance minimizes political discretion, significantly improving transparency, accountability, and deterring corruption and fraud (Public Expenditure and Financial Accountability, 2011).

An IFMIS governance system enables international financial regulation and reporting standard compliance and decentralized operations through centralized web-based solutions, serving a large number of authorized budget users at all levels (Minani, 2016). The IFMIS governance system is seamlessly incorporated into the government's internal

control, internal audit, and risk management processes. This establishes a structure for recognizing and addressing risks, errors, and fraudulent activities. To optimize the design and management of IFMIS projects for improved financial management and governance outcomes (Othieno et al., 2017).

In Total Quality Management, performance measures hold significant importance. Performance measures are linked to specific goals. Performance measures have tracked costs, quality, quantity, cycle time, efficiency, productivity, and more for products, services, and processes since their inception. Organizations gain substantial benefits from implementing performance measurement programs (Njagi, 2019; Dener, Watkins & Dorotinsky, 2017). Employees gain an immediate understanding of processes, leading to realized benefits. Individuals gain a more comprehensive view of the organization's operations beyond their own area of responsibility. (Nakhumicha, 2018)

Acknowledging values like transparency and accountability, good governance ensures effective functioning. IFMIS enhances public finance management's transparency and accountability. IFMIS's efficiency and effectiveness at a high-level lead to greater accountability, responsiveness, equitability, and communication ability, driving better governance, as shown by Uwiragiye (2018), while the transparency of public funds is also crucial for fostering governance, according to Selfano, Peninah, and Sarah (2014). The stability of institutions' funds management relies on the stability of their governance. According to Hendriks (2012), institutional governance of IFMIS necessitates staff with the appropriate knowledge and abilities. This scholar identifies lack of capacity as a significant contributor to delays in the implementation process. Brar (2010) identified capacity constraints as a major hindrance to an IFMIS' effectiveness. This study aimed to explore the connection between IFMIS and internal service delivery at Kyambogo University.

### **2.1.6 Internal service delivery**

Internal service delivery refers to the provision of services to individuals or communities, emphasizing efficiency, effectiveness, and accessibility (Basheka et al., 2013). Internal service delivery encompasses both the reliability, responsiveness, assurance, and adequate capacity of a service provider to meet consumer expectations. (Tam Wai-Ming, 2008, Basheka et al., 2013) Effective services are achieved through the implementation of practical programmes, leading to exceptional educational quality (Kasenene, 2011, citing Musaaazi, 2005; Ching-Yaw, et al., 2007; Ngware & Ndirangu, 2005). Internal service delivery occurs through the interaction between providers and clients, with the client deriving value or experiencing a loss based on the provider's offering of a service. The internal service delivery process is defined as the discrepancies in size between each gap in internal service delivery or the variance between student expectations and perceptions. Important patterns of satisfaction with services can be identified by perceptions of individuals or groups (Chen, Dean, Frant & Kumar 2014). At Kyambogo University, this study proposes a model for efficient, effective, and quality internal service delivery that enhances customer satisfaction.

Recognizing good service quality leads to customer satisfaction and loyalty. Measuring service quality in an organization leads to improved customer loyalty and satisfaction (Orel & Kara, 2014; Chou et al., 2014; Hussain et al., 2015; Kasiri et al., 2017). Service quality is a strategic weapon used by many organizations to improve institutional performance and operational efficiency. According to Lupo and Bailey (2014) and Štimac and Šimić (2012), the significance of measuring service quality in the education sector is highlighted due to its service-oriented nature. The internal service delivery should inspire clients with exceptional quality education, making them enthusiastic contributors in public and private sectors. (Tsinidou, et al., 2010) Universities must

consider both societal expectations and students' perceptions when evaluating the value of their graduates' skills (Katamei & Kiprop, 2015). According to Chen et al., (2014), delivery of services in Africa's universities is problematic due to productivity and growth constraints, while developed countries contend with these issues minimally due to robust IFMIS infrastructure. The implementation of public university-specific IFMIS by East African governments has continuously failed to meet desired levels of efficiency, effectiveness, and quality, resulting in customer dissatisfaction. Students' satisfaction serves as a measurement standard for assessing world-class quality. The concept of internal service delivery has been largely overlooked. In the context of the current debate, this research aims to explore the university's internal service delivery.

#### **2.1.7 Efficiency**

Moeti, Khalo and Mafunisa (2007) posited the relationship between efficiency and inputs-outputs. To deliver optimal efficiency, IFMIS enables maximizing output while keeping inputs constant, thereby enhancing budgeting, cash flow management, and financial reporting, ultimately leading to superior internal service delivery (Khemani & Diamond, 2005). Efficient internal service delivery under IFMIS significantly improves public finance management processes and institutional arrangements (Hendricks, 2012). According to Simson et al. (2011), IFMIS automation improves internal service delivery efficiency but brings challenges due to the need for process reform and the acquisition of new human resource skills. According to Rangira and Mulyungi (2016), supporters of automation reforms argue that IFMIS improves efficiency, cuts costs, and lowers the risk of corruption shifting from users to overseers, by streamlining procedures and reducing misappropriations/misallocations.

Effective internal service delivery is ensured through the control of unauthorized, fruitless, wasteful, and irregular expenditures using IFMIS (Moeti et al., 2007).

Unauthorized expenditures occur when funds are spent outside the approved purpose or budget. (Bragg, 2013) Unnecessary expenditure, which is not sanctioned by law, is categorized as either fruitless and wasteful or irregular depending on the circumstances. (Moeti et al., 2007). Isidore (2012) demonstrated that financial managers utilize IFMIS tools for financial planning and capital budgeting, resulting in more effective financial decision making and enhanced internal service delivery.

### **2.1.8 Effectiveness**

Moeti et al. (2007) assert that meeting institutional objectives determines effectiveness. An entity's productivity, efficiency, and economy count for nothing if it fails to achieve its own objectives or if it achieves the wrong ones. Regardless of efficiency, universities must evaluate success through meeting their objectives. Simson et al. (2011) highlight that the structure of public finance management processes revolves around the budget cycle. This annual cycle is designed to effectively plan, execute, and account for public expenditure on education. With legislative oversight, the government initiates the budget cycle by planning the upcoming year's resource allocation in line with policy priorities. Upon approval of the budget and commencement of the new fiscal year, both spending agencies and the Ministry of Finance undertake its implementation. They allocate their resources towards salaries for public servants, office expenses like rent and electricity, and goods and services for stakeholders.

Effectively allocating public funds according to stated policy objectives while maximizing value for money can be as difficult as planning how to spend it. (Khemani & Diamond, 2005) To prevent corruption and overspending, institutions must execute the budget in accordance with the approved appropriations and rules. The budget execution process consists of four key stages: authorization and allocation, commitment of funds, verification of deliveries, and payment. An IFMIS is crucial for budget reform

and effective resource management, often considered a precondition for improved internal service delivery. An Integrated Financial Management Information System (IFMIS) enables efficient financial management, enhancing transparency and accountability to improve internal service delivery (Cherotich & Bichanga, 2018).

### **2.1.9 Customer Satisfaction**

An individual's satisfaction with a service is determined by the comparison of the actual and expected internal service delivery. In today's standard, meeting customer satisfaction is both the minimum requirement and an indicator of excellence for public entities, according to Hendriks (2012). Studies indicate that customer satisfaction correlates with improved financial outcomes. (Eklof, Olga, Podkorytova, & Malova, 2020) In recent years, customer satisfaction and service quality have seen extensive research due to their significant importance. (Biwott, 2015). The implementation of IFMIS had a minimal impact on customer satisfaction as evidenced by statistically insignificant findings across all factors. Minani (2012) found that inadequate internal service delivery mechanisms in organizations lead to poor service quality and increased customer dissatisfaction. (Bwalya et al., 2014 confirmed this finding)

Chêne (2017) states that IFMIS manages electronic bank reconciliations and cash limits for governments' expenditure planning. The IFMIS facilitates governments in receiving revenues, approving and issuing purchase orders, tracking commitments, and processing payments (including generating invoices and checks for suppliers). The IFMs enable generation and reporting of management information at both county and consolidated levels. According to Chado (2015), IFMIS can enhance public cash management by increasing comprehensiveness and transparency of information to boost confidence and credibility. The company aims to enhance cash management through supplying up-to-date and precise data for informed decision making. Scholars have focused on cash

management in the context of other countries, excluding Uganda and its Public Universities. This study aims to explore the connection between cash management and service provision at Kyambogo University.

## **2.2 Budgeting and Internal Service Delivery**

Proper budgeting utilizing an Integrated Financial Management Information System (IFMIS) significantly enhances public planning and budgeting efficiency, aligning prioritized citizen needs with policy objectives and accurate allocations (Paraphrased from Allen, 2015; GoK, 2015). The poor services rendered by organizations resulted from the skills inadequacy among their budgeting staff, according to Imuezerua and Chinomona (2015). Budgeting practices, including policies, procedures, public officials' involvement, and public participation, shape the types of services provided (Lee, 2012). The availability, quality, and cost of public services define what they offer to citizens (He, 2011).

According to MoFPED (2020), IFMIS provides timely, accurate and consistent data for budgetary processes in the public sector, enabling managers and decision makers to enhance internal service delivery (Rodian-Brown, 2008). Improved financial reporting, budget execution, and internal controls by IFMs have led to enhanced internal service delivery (Kimanzi & Njonde, 2014). Samanta et al. (2014) observed that several developing countries allocate significant budgets for establishing public utilities and delivering various public services. These services often underperform in terms of access, productivity, and equity. Resources can be misallocated towards less critical uses or lost, leading to inefficiencies. The failure of public internal service delivery could be due to the absence of need-based planning and resource monitoring. Tshandua and Kariuki (2010) and Fozzard (2008) both found that effective budget planning involves committing, prioritizing, and allocating resources for the implementation of programs

intended to improve people's standard of living. Charalambos and Ananiadis (2004) and Mott (2007) reported similar observations. Universities, as service providers, do not outline service quality as a primary goal nor discuss the consequences when funding targets are unmet (Njonde & Kimanzi, 2018).

In the context of Education, participatory budgeting should extend to costing, expenditure, and revenue planning in addition to prioritization and project conceptualization as participants aim to enhance learning resources, such as the need for new schools, better technology, and stronger curricula, among others (Rachman, 2014). The education sector grants failed to sufficiently finance the construction of a new physical structure. The community can now consider alternative education approaches, such as expanding an existing school, enhancing teacher development, and transporting students to less crowded schools. While Akena (2015) cites Babcock, et al., (2008) revealing the significant difference in volume between conditional and unconditional grants, Samanta, et al. (2014) discovered a direct relationship between participation in budgeting and public internal service delivery. Scholars have focused on budgeting in varying geographical contexts other than Uganda and Public universities. This study aimed to explore the connection between budgeting and internal service delivery within Kyambogo University.

### **2.3 Governance System and Internal service delivery**

Kahari et al. (2015) concluded that there is strong, negative and statistically significant relationship of -0.461 and 0.749 between IFMIS implementation and (staff resistance, capacity skills respectively). A lack of strategic planning, change management procedures, and capacity building prevents effective system implementation, operation, and maintenance by governments. Determining staff competence is essential for ensuring they possess the necessary knowledge and skills to manage IFMIS. The degree of

financial and ICT expertise among staff, along with the extent of their IFMIS training. An IFMIS strengthens public financial management by boosting the comprehensiveness and transparency of budget information, thereby bolstering confidence and credibility. Kimwele (2011) examined the influences on successful implementation of IFMIS in government. The study investigated both the effectiveness of IFMIS implementation and the influencing factors of its success. Ineffective usage of the IFMIS system by government employees was due to insufficient top management support.

## **2.4 Literature Summary**

scholarly literature emphasizes the numerous advantages of IFMIS for public finance management. Despite limited research and ambiguous findings, some studies have reported successful outcomes. The automated features of IFMIS largely replace manual budget execution and accountability processes without exploration of potential improvements. An efficiently operating Integrated Financial Management Information System (IFMIS) generates data for budgeting, analysis and reporting. The scholars established that IFMIS enables the generation of financial statements and leaves an unbroken audit trail for auditing purposes. The relationship between IFMIS and financial reporting, budgeting, internal control, and government is acknowledged in literature. This study aimed to determine the effect of IFMIS on internal service delivery at Kyambogo University. The following chapter outlines the research design employed in this study.

## **CHAPTER THREE: METHODOLOGY**

### **3.0 Introduction**

The study's research methods and instruments were detailed in this chapter. The study outlines its research design, participant demographics, sample size and selection, data gathering methods, measurement tools and validity checks, ethical considerations and potential limitations.

### **3.1 Research Design**

The study was a cross-sectional analysis. This design involves collecting all data at a single time interval. This design is preferred for collecting data from multiple individuals concurrently (Kothari, 2014). The study employed a combination of qualitative and quantitative techniques for a more comprehensive and integrated understanding than could be achieved through a single method. (Creswell, 2014). Numerical data was processed using a quantitative methodology. Bringing the status of IFMIS adoption and its link to internal service delivery at Kyambogo University to the forefront was accomplished through this action. According to Creswell and Clark (2011), this method is commonly used in the post-positivist research approach for designing data collection tools, measuring variables, and interpreting statistical results related to internal service delivery.

### **3.2 Study Population**

The study selected employees from specific Kyambogo University departments using IFMIS for data sampling. The total population was the target population for the study. Those providing public service using IFMIS were the focus of the respondents. The Directorate of Human Resource Management at the Ministry of Public Services (MoPS) has the approved staff structure for KyU, detailing the number of staff for each category. The target population for the study consisted of only the 174 employed staff who were

actively on the payroll. 174 respondents targeted, all utilizing IFMIS to impact internal service delivery (Human Resource Manuals: KyU-2014). Umair (2018) focused on Kyambogo University and its selected respondents as the units of analysis and inquiry.

### **3.3 Sample Size and Sampling Technique**

#### **3.3.1 Sample size Determination**

The unit of analysis was KyU as a representative sample of all Kyambogo University.

The university was one of the first universities to roll out IFMIS application. On the other hand, the unit of inquiry constituted staff working in the different departments/directorates that include: Directorate of Human Resources, Finance department, PDU, Directorate of Planning, Office of the University Secretary, Office of the DVC finance and administration, Deans and heads of Department and User department staff (academic, Administrative & support). These were chosen because they were the only offices using IFMIS. As illustrated in table 3.1, the ultimate sample size of 151 respondents from a target population of 174 is derived using the Sample Size Table (Appendix III) by Krejcie and Morgan (1970).

**Table 3. 1: Population and Sampling distribution**

Category of respondents	Population	Sample size	Sampling Technique
Directorate of Human Resources(Director human resources)	03	03	Purposive Sampling
Finance department( Bursar, Manager, Senior Assistant Bursar, Senior Accounts Assistant & Accountants)	30	28	Stratified sampling
PDU (Senior Procurement & Officer, Procurement officer)	06	06	Purposive sampling
Directorate of Planning (director planning and senior planning officers)	06	06	Purposive sampling
Office of the University Secretary (university secretary and deputy US)	06	06	Purposive sampling
Office of the DVC finance and administration (DVC F & A)	03	03	Purposive sampling
Deans	20	19	Purposive sampling
User department staff (academic, Administrative & support)	100	80	Simple random sampling
<b>Total</b>	<b>174</b>	<b>151</b>	

**Source:** Staffing Structure for Public Universities (2020)

### 3.3.2 Sampling Techniques

Taherdoost (2016) states that the researcher employs sampling to select representative individuals from the target population. The study employed a combination of stratified, simple random, and purposive sampling methods to choose respondents.

#### 3.3.2.1 Purposive Sampling Technique

The Directorate of Human Resources staff were chosen using purposive sampling. This technique employed was used to obtain extract confidential data linked related to the employment of IPPS within usage in IFMIS for payroll generation. The members, were equipped with their richer and more in-depth information, are responsible for ensuring accurate expenditure on comprehensive data, oversee precise staff emoluments compensation spending.

### **3.3.2.2 Stratified Random Sampling Technique**

Using IFMIS, departments were randomly selected in a stratified manner for data collection. Stratified sampling allows for greater precision with a potentially smaller sample, saving costs.

### **3.3.2.3 Simple random sampling technique**

The study participants were randomly selected department heads for the study to ensure equal representation of all university staff.

## **3.4 Sources of Data**

### **3.4.1 Primary Data**

Field data was gathered from staff at Kyambogo University who use IFMIS to predict internal service delivery. Quantitative data sources included; specific measurements and outcomes gathered from surveys, IFMIS data, reports, and other statistical reports from secondary data. Key informants at Kyambogo University provided the qualitative data through interviews which helped to explain the quantitative data from questionnaires.

### **3.4.2 Secondary Data**

The research utilized secondary data from numerous sources including literature, journals, articles, reports, Public Universities' annual and quarterly performance reports, newsletters, and other relevant records. The researcher analyzed, interpreted, and evaluated the data in accordance with the study variables before presenting it in the report. The justification for using secondary data in this study is that it formed the core of the research because existing literature built my study findings, which led to better results, and saving time and money. Secondly, the relevancy of secondary data to this study was that it provided leverage in an attempt to answer a new research question. Literature review as secondary data reconciled with primary data in chapter five.

### **3.5 Data Collection Methods**

Data collection methods entail processes for acquiring and quantifying information on research variables. According to Amin (2005), research methods can be qualitative, quantitative or mixed. The study collected both primary and secondary data from field and literature sources. Data collection methods included; questionnaire for qualitative data while interview guide and documentary review (Barifaijo et al., 2010).

#### **3.5.1 Questionnaire survey**

A questionnaire survey entails participants answering questions on a form designed by the researcher (Amin, 2005). The respondents filled in both types of questionnaires in English independently. Kothari (2004) claims that interviewees' insights are directly reflected in questionnaire responses.

#### **3.6.2 Interview Method**

Interviewing refers to the collection of data through a face-to-face conversation, during which follow-up questions are asked for clarification (Amin, 2005). Interviews provided qualitative insights into the role of IFMIS adoption in improving internal service delivery at KyU, complementing data from questionnaires. The researcher interviewed KyU's key informants using this method. Qualitative studies enable a deeper understanding of IFMIS adoption and internal service delivery at KyU through methods such as interviews (Amin, 2005).

### **3.6 Data Collection Instruments**

#### **3.6.1 Questionnaires**

Essential information was collected using a questionnaire. Due to the literacy and writing abilities of the respondents, the short data-gathering time frame and large sample size rendered the questionnaire appropriate (Moore & Llompart, 2017). The survey contained

only multiple-choice questions rated on a 5-point Likert scale. Respondents were asked to provide their opinions using the scales: Not sure, Disagree, and Strongly Disagree.

### **3.6.2 Interview Guide**

In the study, the researcher employed structured interviews to collect qualitative data. Saunders et al. (2012) provided that all interviews be conducted face-to-face. The data was gathered via face-to-face interviews, employing an interview guide derived from the Directorate of Human Resources, the University Secretary's office, and the DVC finance and administration office (Mugenda & Mugenda, 1999). The researcher captured both written and spoken responses from the respondents at the same time. The questionnaire data were deepened by the interview insights. The researcher gathered data directly.

### **3.7 Measurement of Variables**

The measures that were applied for each variable were indicated in this section. Table 3.2 presents the measures of the variables.

**Table 3.2: Measures of Variables**

<b>Variable Name</b>	<b>Operationalization</b>	<b>Measurement/indicator</b>	<b>Measurement scale</b>
Cash flow management	Cash management entails optimally planning and regulating the firm's cash inflows and outflows.	-Automated Management -quick and easy tracking of transactions	Cash Likert scale
Budgeting Practices	Budgeting is defined as an organization's financial resources that are distributed among its units, activities, and investments through the budgeting process.	-reduce wasteful/irregular expenditures - Adequate resources allocation	Likert scale
Governance	Governance system refers to the process where institutions collect, manages, monitors and controls both financial and non-financial information	-transparency in financial management - Reporting systems indicates streamlined flow of activities	Likert scale
Internal service delivery	Internal service delivery encompasses not just satisfying consumer expectations through reliability, responsiveness and assurance, but also providing sufficient provider capacity.	-lecturers committedly teach students. -Learning students are provided with basic research knowledge and skills	Likert scale

**Source:** Adopted from Sahney, et.al. (2010) and re-designed by the Researcher (2023)

### 3.8 Reliability and Validity Tests

#### 3.8.1 Validity of the Instrument

Research instruments' validity denotes their ability to accurately assess the intended construct (Saunders et al., 2012). According to Shekharan and Bougie (2010), the content validity test ensures the measures cover an adequate and comprehensive range of the concept. The authors' information was harmonized to fit the study's context. The draft questionnaire were assessed for appropriateness in capturing the study variables by the supervisors during the questionnaire development stage. The Content Validity Index (CVI) was used to assess validity.

$$CVI = \frac{\text{Number of items rated relevant}}{\text{Total number of items}} \times 100\%$$

The CVI value should be at least 0.7, as suggested by Saunders et al. (2009). The values for Cronbach Alpha are shown in Table 3.3.

**Table 3.3: Validity and Reliability**

<b>Variable</b>	<b>Content validity index</b>	<b>Cronbach's Alpha</b>	<b>N of Items</b>
Cash management	0.82	0.84	11
Budgeting	0.73	0.81	11
Governance systems	0.82	0.73	11
Internal service delivery	0.83	0.77	6

*Source: Primary Data*

Table 3.3 indicates CVI obtained for the subcomponents of integrated financial management systems including cash management, budgeting and governance systems, along with the variable of internal service delivery were above the 0.7 cut-off. This implied that the questionnaire which was used to collect data for the purpose of this research contained valid items. On the other hand, the results obtained that Cronbach Alpha coefficient with respect to cash management, budgeting and governance systems, along with the variable of internal service delivery were above the threshold of 0.7. In this case, the results meant that results obtained were consistent, hence fit to be relied upon for making conclusions and recommendations

### **3.8.2 Reliability of the Instrument**

Reliability assesses the extent to which the items in a questionnaire generate consistent responses over several trials with different populations in the same setting or circumstances (Bajpai, & Bajpai, 2014). Reliability test indicates the extent to which the questionnaire was without bias or error free, and hence ensures consistent measurement across time and across the various factors in the questionnaire. In this study, Cronbach's alpha coefficient was employed to determine the internal consistency of the questionnaire

as recommended by Campos, da Oliveira, Feitoza & Cattuzzo (2017). According to Cronbach and Meehl (1955), a certain number of items that were found to affect the reliability of the questionnaire were replaced to improve the reliability. The rule of thumb, requires that a reliability of 0.70 or higher should be obtained if the instrument is to be considered reliable.

### **3.9 Data Processing and Analysis**

The field data was tallied, arranged, revised, categorized, and recorded onto a coding sheet. Using the category system, the cleaned data was compiled and transformed into frequencies and percentages. The data was analyzed using the Statistical Package for Social Scientists (SPSS). For the purposes of the descriptive analysis, the primary variables' means and standard deviations as well as the associated indicator items were calculated. Charts and tables were used to illustrate the data, and recommendations and conclusions were drawn in accordance with the goals of the study. For ease of comprehension, the data was displayed as frequency distribution tables. Descriptive statistics were used in the analysis of the study data. According to Creswell (2015). In order to measure the statistical link between the two, Pearson's correlation coefficient, or  $r$ , was used.

### **3.10 Ethical Considerations**

Adhering to ethical rules is essential for professional practice (Webster, 1986). Before commencing the questionnaire, the researcher explained the research objectives, obtained informed consent, and ensured privacy and anonymity. The researcher acquired an introduction letter from the University together with the identity card presented to the organizations under study as well as the respondents. Assurance was made to management and staff that the information needed was for academic purposes and would be handled with confidentiality.

To ensure objectivity and impartiality in the study, specific measures were implemented. The researcher employed validated data collection tools to minimize bias in responses and data interpretation. Participants and respondents were assured of anonymity and confidentiality, reducing the risk of biased responses due to workplace relationships. Likewise, the analysis was conducted using standard statistical methods without personal influence. On the other hand, the research findings were reviewed by external experts to ensure objectivity in conclusions. These measures helped mitigate potential bias arising from the researcher's role as an employee of the university.

### **3.11 Limitations of the Study**

The respondents were uncooperative and hostile, with some suspecting the researcher was spying on them. The researcher ensured both cooperation and respect from respondents, persuading them with the academic nature of her study. The discussion with the researcher is expected to enhance respondents' level of awareness.

Delay by the respondents in answering these questionnaires since most of them might be busy doing their daily activities. The researcher might opt to electronic means of collecting data to some respondents. The researcher asked the respondent's contacts such that she could often reach out to them to remind them about answering the questionnaire.

Resource constraint in terms of finances and technical aspects, the researcher tried to minimize the financial costs by doing some of the activities that involved finances herself. The study's results on IFMIS and internal service delivery in a single institution are not applicable to other projects. The researcher suggested relying on certain projects for future endeavors.

## CHAPTER FOUR: PRESENTATION AND INTERPRETATION OF RESULTS

### 4.0 Introduction

The presentation, analysis and interpretation of the research findings are detailed in chapter four. This chapter also provides results related to the demographic characteristics and explains the response rate at which was attained.

### 4.1 Response Rate

A number of 151 staff members using IFMIS were the focus of this study. Out of which 130 staff provided valid responses, resulting in an 86.1% response rate (as shown in table 4.1). The response rate exceeds the standard 70% threshold. According to Mugenda & Mugenda (2014), a response rate of 70% or higher is necessary for dependable and accurate results.

**Table 4. 1: Illustrating the Response Rate**

	<b>Tool</b>	<b>Targeted</b>	<b>Responded</b>	<b>Valid</b>
1	Questionnaire	24	16	16
2	Interview	127	116	114
	<b>Total</b>	<b>151</b>	<b>132</b>	<b>130</b>

**Source:** Primary data (2024)

### 4.2 Demographic Characteristics

The study used a frequency table to present demographic characteristics obtained herein. These characteristics include; gender, age, qualification, duration in institution, and duration of IFMIS usability. The results are presented in table 4.2.

**Table 4. 2: Demographic Characteristics**

<b>Demographic Characteristic</b>	<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>		
Male	73	56.2
Female	57	43.8
<b>Age</b>		
18-30 years	9	6.9
31-40 years	31	23.8
41-50 years	43	33.1
Over 50 years	47	36.2
<b>Qualification</b>		
Certificate and below	6	4.6
Diploma	34	26.2
Degree	62	47.7
Post graduate degree	28	21.5
<b>Duration in institution</b>		
7 -9 years	36	27.7
10 years and over	94	72.3
<b>Duration of IFMIS usability</b>		
7 -9 years	36	27.7
10 years and over	94	72.3

Source: Primary Data (2024)

The findings in table 4.2 show that majority of the study participants were male who consisted 56.2% as opposed to 43.8% females. These results meant that the dominant gender in Kyambogo University are males. It could be likely that male personnel are more efficient, effective and economical when executing institutional tasks and responsibilities compared to females. In relation to age of respondents, the results obtained that majority were over 50 yrs. A significant number of respondents were also aged between 41-50 years. In this case, it meant most of employees in Kyambogo University are old people. These results imply that older people are more committed and dedicated to ensuring internal service delivery. This is so because old people tend to appreciate what they have and highly concerned about the career they have built over time. Hence, they are at a level where they are not ready to exploit, but rather perfect in what they do.

Results further obtained that the largest number of respondents had a degree, with 47.7% possessing an undergraduate degree whereas 21.5% post graduate degree. The results

meant that most personnel in Kyambogo University were highly learned. Education advances skills, knowledge, and abilities crucial for effective and efficient internal service delivery. Results further revealed that most respondents had been in their current institution for 10 years and over. This implied that Kyambogo University had experienced personnel. This further implies that personnel of higher learning institutions had a thorough understanding of the institution and what it takes to offer the necessary services. Furthermore, results obtained that most of the respondents had used the IFMIS for at least 10 years. This meant the personnel who were using IFMIS in Kyambogo University fully understood the system. Hence, it is quite unlikely that such personnel could easily make mistakes which could compromise their ability to offer internal service delivery.

#### **4.3 Descriptive Statistics**

The study aimed to determine the correlation between cash management and internal service delivery at KyU. Under section 4.3, the researcher obtained data using specified research tools. The table below shows the mean and standard deviation obtained from the descriptive statistics. The likert scale used for data collection ranged from strongly disagree (1) to strongly agree (5). 1-1.5 responses indicated strong disagreement. 1.5-2.5 responses indicated disagreement with the statement, while 2.5-3.5 responses were neutral. Participants expressing agreement with the statement ranged from 3.5 to 4.5 while those with strong agreement exceeded 4.5. The standard deviation summed up the dispersion of different response distributions.

### 4.3.1 Descriptive Statistics on cash management and internal service delivery

**Table 4. 3: Descriptive Statistics for cash management and internal service delivery  
n=130**

Cash management and internal service delivery	Min	Max	Mean	Std. Deviation
Automated Cash Management has improved revenue collection and disbursements	1	5	2.41	1.386
Automated Cash Management has enhanced timely accuracy of account transactions	1	5	2.21	1.340
IFMIS has improved budgetary processes as well as managerial decision-making in all departments at KyU for better internal service delivery	1	5	2.48	1.559
IFMIS has led to quick and easy tracking of transactions to significantly reduce wasteful expenses and irregular expenditure.	1	5	2.60	1.561
Using IFMIS, cash limits is made available in a reliable and timely manner.	1	5	2.24	1.340
IFMIS makes bank reconciliation automatic thus allowing a closer monitoring of debtors (cash inflows) and bank account balances.	1	5	2.06	1.076
IFMIS allowing a closer monitoring of creditors (cash outflows) and cash in bank account	1	5	2.42	1.536
Prompt payment of funds ensures efficient education internal service delivery.	1	5	2.56	1.461
IFMIS has made use of cash projections relatively easy.	1	5	2.29	1.390
<b>Overall average</b>			<b>2.36</b>	<b>1.405</b>

Source: Primary Data (2021)

As evidenced in table 4.3 above, overall response was that majority of the respondents disagreed that cash-flow management using IFMIS positively influenced internal service delivery in KyU (mean =2.36 & SD =1.405). The findings of the study revealed that automated Cash Management has improved revenue collection and disbursements (mean=2.41 & SD =1.386). Most respondents disagreed that IFMIS had ameliorated revenue collection and disbursements in KyU. The finding is contrary to interview results from one of the participants who said;

*“IFMIS has fiscal powers to mobilize, allocate, spend and account for institutional resources disbursed from the treasury”. Similarly, another participant added; “IFMIS encompasses the mobilization of revenue; the allocation of these funds to various university activities and programmes; expenditure; and accounting for spent funds”.*

In tandem with the above, participant (n=8) revealed that;

*“For budgeting, examining results, managing cash, tracking debts and receivables, monitoring fixed assets, and assessing departmental performance, managers can utilize cash flow information”*. Supplementing to the above, another participant added: Participants (n=4) also revealed that these *Financial records serve as the foundation for generating all reports and financial statements*.

On the second statement respondents disregarded the view that automated cash management has enhanced timely accuracy of accounts transactions (mean=2.21 & SD =1.340). This means that use of IFMIS in public KyU did not enhance timely accuracy of accounts transactions.

This is particularly well illustrated by one of the participants who affirmed *“warranty submission, cash limits, as well as approval of disbursements take longer than expected and suppliers often take about a month to receive payments for supplies made which would have been easily done within one week”*

*The quantitative data also is in conformity with qualitative data where an interviewee revealed that, there is a bureaucratic tendency where approval of requisitions on IFMIS, goods received notes and payments take more than two weeks instead of a day hence this delays implementation of university activities.*

Other participant (n=2) said *“implementing IFMIS for automated cash handling in public universities ensures accountability and adequately maintained financial systems to the public”*.

The respondents further added that,

*“Cash outflow control aims at achieving transparency, both in terms of clear lines of responsibility and standards. Public cash outflow control is a preventive mechanism aimed at ensuring that adequate systems are in place to prevent the occurrence of corruption and fraud”*.

Item 3 of how IFMIS has improved budgetary processes as well as managerial decision making in all departments at KyU for better internal service delivery, it was clearly depicted with a higher mean of 2.48 and a standard deviation of 1.599. This implies that using IFMIS did not improve budgetary efficiency as well as managerial decision making.

The quantitative data is supported by interview responses in which, one participant said that,

*“Government budgets allocate funds as revenue or grants-in-aid. Budget cuts reduce the allocated amount, resulting in insufficient funds for KyU.”*

Table 4.3 illustrates that IFMIS has led quick and easy tracking of transactions to significantly reduce wasteful expenses and irregular expenditure (mean=2.60 & SD =1.561). This implies that, IFMIS did not compel quick and easy tracking of transactions to significantly reduce wasteful expenses and irregular expenditure.

Some participants (n=4) stated that, *“mischarge on IFMIS makes financial tracking difficult and thus distorts appropriation of funds”*. Further still voucher entrants divert funds from one vote to another contrary to the Public Financial Management Act (2015)

Additionally, from the qualitative data received participant (n=10) said that, *“On financial tracking system, the study found out that IFMIS has made financial monitoring practices easier than before it was adopted in public institutions. This is based on the foundation that there are huge financial transactions and activities that usually take place in public universities which also calls for the need of sophisticated systems in order to improve accuracy in tracking every transaction”*.

On the contrary, another participant (n=15) had this to say: *IFMIS has several charts of accounts tracked by the system. Each account in the chart is assigned a unique identifier, or an account number, involving a series of information tags that denote certain things about the data being entered into the system. For example, these tags may denote the cost center, the department or unit responsible for the transaction, the program or purpose for which the transaction is being made, the nature of the transaction, and so on*

Respondents refuted the view that, using IFMIS, cash limits is made available in a reliable and timely manner (mean=2.24 & SD =1.340). This means that cash limits were delayed which affected internal service delivery. The finding is supported by a participant who stated:

*Commitment control – ensures that before a purchase is committed to, there is sufficient cash allocated for the expense and the allocation matches the appropriated budget.*

*Accounts payable – Processes and generates payments, with built-in checks to ensure invoices match approved commitments. Accounts receivable – produces bills and processes and records receipts, including all types of inflows received by all public universities, including nontax revenues and fees.*

*During interviews one of the respondents revealed that delay in releasing cash limits affected government students who had to receive their meals allowances in time to cater for their daily feeding needs.*

Further still, table 4.3 indicates that respondents supported the view that, IFMIS makes bank reconciliation automatic thus allowing a closer monitoring of debtors (cash inflows) and bank account balances (mean=2.06 & SD =1.076). The implication is that although bank reconciliation were automated, it was still difficult to closely monitor debtors (cash

inflows) and bank account balances. During interviews with one of the participants had this to say

*IFMIS also seek to strengthen the efficiency of financial controls by making comprehensive, reliable and timely financial information available to the Auditor General, parliament, investigative and prosecutorial agencies, etc., as they improve accounting, recording and reporting practices through the provision of timely and accurate financial data, a standardised integrated financial management reporting system and an upgraded computerised accounting system. When they work well, they make bank reconciliation automatic and allow a closer monitoring of outstanding bills and cash in bank accounts.*

The study results in table 4.3 above show that IFMIS allows closer monitoring of creditors (cash outflows) and cash in bank account (mean=2.42 & SD =1.536). The implication of this finding is that it was challenging to closely monitor creditors (cash outflows) and cash in bank account to influence internal service delivery in IFMIS as acknowledged by majority of the respondents.

The quantitative data is backed up with the qualitative data from one of the participants who had this to say: *“Close monitoring of cash outflows helps KyU to meet cash obligations and at the same time curb bankruptcy”*.

Likewise, another participant supplemented by saying that: *IFMIS in public universities work well by automating reconciliation and allowing closer monitoring of outstanding bills and cash in bank accounts ready for analysis.*

The participants (n=10) revealed that; *To optimize cash holds and enhance revenue collection efficiency, KyU adopted IFMIS for cash flow planning and monitoring.*

The participants (n=9) added that; *“KyU cannot operationally function well when they experience cash shortages or cash surplus. This improves efficiency cash management practices and internal service delivery as well.*

It was argued that the timely release of funds significantly influences the provision of education services (mean=2.56 & SD =1.461). Respondents did not believe there was a delayed release of funds impacting education internal service delivery.

Additionally, another participant indicated that: *“With IFMIS funds can be encumbered till the procurement process or cycle is complete. This reduces available funds for other expenditure or emergencies. There is also no spending at source or transfer of funds from one vote to another for the disbursed from MoFPED to the spending programmes/departments. This slows down implementation of activities in more active section colleges, schools, faculties and departments”*.

In line with the above quantitative data, Participant (n=8) also reported that, *Kyambogo University using IFMIS is generally affected by untimely as well as inadequate quarterly releases from the MOFPED. These delay implementation of planned activities such as meeting instructional materials expenses leading to high domestic arrears.*

Respondents also revealed that IFMIS has made use of cash projections relatively easy (mean=2.29 & SD =1.390). This implies that cash projections were still difficult to make using IFMIS which affected internal service delivery in Ugandan higher institutions of learning.

Another one said: *Kyambogo University, experience delayed/inadequate release of funds, delayed procurement processes which affected implementation of a number of planned outputs such as, research, outreach and capital development.*

Another participant added that: *Oracle General Ledger module enables the creation of forecast versions as functional budget counterparts. The system generates detailed and summarized comparative and historical reports on planned and actual data, as well as budget execution outcomes, for specified periods. The Oracle Cash Management module provides forecasting capabilities for payments and receipts based on General Ledger data, outstanding debtors and creditors bills/invoices, unexecuted contracts, and procurement requests, which can be used for financial flows forecasting.*

#### **4.3.2 Descriptive Statistics for budgeting and internal service delivery at KyU**

The second objective of the study was to establish the relationship between budgeting and internal service delivery at KyU. Respondents indicated the extent to which they

strongly disagree (1), disagree (2), not sure (3), agree (4), strongly agree (5). The results are presented, interpreted and analyzed as in table 4.12;

**Table 4.4: Descriptive Statistics for budgeting and internal service delivery, n=130**

	Min	Max	Mean	Std. Dev
IFMIS has ensured that KyU budget is prepared timely in accordance with rules and policies.	1	5	2.52	1.423
I use IFMIS to execute the budget to reduce wasteful/irregular expenditures at the University	1	5	2.20	1.374
Using IFMIS has assisted me allocate adequate resources on its projects without biased opinions.	1	5	2.62	1.446
IFMIS has streamlined all the University financial processes on allocations without budget unauthorized in various units/departments.	1	5	2.72	1.473
IFMIS modules have improved on the financial allocations and public expenditure management in KyU.	1	5	2.85	1.508
KyU use of IFMIS has reduced misappropriation of public funds through un-approved expenditures.	1	5	2.46	1.429
IFMIS has reduced the number of audit queries on un-planned expenditure at KyU.	1	5	2.85	1.597
Budget implementation allows efficient and effective communication at KyU.	1	5	2.16	1.416
IFMIS has enhanced confidence and credibility of the KyU budget.	1	5	2.38	1.407
<b>Valid N (listwise)</b>				
Overall Average			<b>2.28</b>	<b>1.307</b>

**Source:** Primary Data (2021)

The table 4.4 above illustrates that the overall mean was 2.28 with standard deviation of 1.307 implying that majority of the respondents refuted the view that budgeting using IFMIS positively influenced internal service delivery at KyU. This is supported by the following verbatim;

*“Timely data on budget commitments, accruals, and actual treasury transactions is not consistently produced by IFMIS.”*

The participants (n=10) revealed that: *although IFMIS automatically distributes budget allocations to spending ministries, it has no inbuilt system to monitor*

*budget implementation. IFMIS reports produced do not normally provide expenditures incurred by budget appropriation line items in the chart of accounts.*

Similarly, another participant (n=18) stated that:

*“IFMIS streamlines the payroll process without incorporating budgetary controls. IFMIS budget checks are skipped during transactions, resulting in frequent budget overruns despite KyU's functional payroll system. Domestic arrears payment, too, adheres to this principle. This lack of controls increases processing efficiency”.*

Another interviewee, participant (n=12) revealed that:

*IFMIS does not adequately address larger relevant budget management deficiencies and therefore less effective in solving budget management problems. The effectiveness of a system is undermined if funds committed are not adequately exercised or if budget releases are delayed. This practice of incurring budgetary commitments outside the system at Kyambogo University has led to continued accumulation of arrears.*

In support to the above, additional qualitative data from one of the participants (n=10) indicated that: *funds commitments management and budgetary allocations in IFMIS is essential for effective budgetary control. Delayed budget releases causes spending units to by-pass the system thereby dodging budgetary controls.*

Interviews with participant (n=7) revealed that,

*IFMIS features a built-in budget flow chart of accounts, including the budget program classifier that designates the ledger accounts involved in budget transactions as assets/liabilities. Ensuring compliance with budget appropriations, commitments and cash allocations, expenditures are regulated accordingly.*

Furthermore, table 4.4 illustrates that the highest mean was 2.85 with a standard deviation of 1.508, which indicates that respondents disagreed with the view that IFMIS ensures that KyU budget is prepared timely in accordance with rules and policies.

This was confirmed by yet another participant who said; *Budget estimates are properly scrutinized to ensure accuracy, effectiveness and efficiency of KyU' revenue and expenditure. IFMIS has improved budgetary planning and execution*

*by providing timely and accurate data for budget management and decision making. IFMIS allow a more standardized and realistic budget formulation in KyU while promoting better control over budget execution through the full integration of budget execution data. IFMIS enhance financial discipline and control operating costs by reducing administrative tasks and civil servants' work load.*

This was supplemented by one of the interviewees (n=11) who stated that; *Procedures for budget release and warrants are inadequate to avail allocations to KyU kick off their programs activities such as purchase order, commitment and invoice transactions from the first day of the new financial year. Evidence has shown that without timely budget release procedures, managers develop informal arrangements to bypass the IFMIS' commitment and budget control procedures. The laxity in budget release creates resistance in KyU for including some funds in the treasury single account (TSA).*

Similarly, another participant (n=16) observed that; *Once a budget release occurs, a warrant is issued but if the treasury does not have enough funds to cover budget releases it lead to delays in payment of invoices and attributes accumulation of arrears which affects suppliers who rely on borrowing to finance Universities' supplies, goods and works. These end up paying higher interest as the cost of delayed payments.*

The lowest mean 2.15 and standard deviation of 1.416 shows that the respondents strongly disagreed with the view that budget implementation allows efficient and effective communication in KyU. This means that the effectiveness of an IFMIS as a budget management tool depends not only on its technical robustness but also the policy and institutional environment under which it operates.

The finding above is supported by interviewee, participant (n=6) who revealed that, *"a well working IFMIS platform has the ability to improve efficiency in administrative activities by ensuring that KyU' resources are not only put into proper use but cautiously utilized. Such tracking mechanisms include having in*

*place an up-to-date ICT infrastructure, reliable communication strategies and tools, automation of all organizational processes, and strength of internal control systems (ICS)”.*

On real time reporting, another participant (n=15) mentioned that: *Reports are also tailored towards meeting the international reporting standard which is a manifestation of transparency in holding KyU accountable to for spending public revenue on government’s behalf*

### **4.3.3 Descriptive Statistics for governance system and internal service delivery at KyU**

In bid to elicit data about the third objective of the study which was to establish the relationship between governance systems and internal service delivery at KyU, participants indicated the extent to which they strongly disagree (1), disagree (2), not sure (3), agree (4), strongly agree (5). The finding is descriptively presented in table 4.15 below;

**Table 4. 5: Descriptive Statistics for governance system and internal service delivery at KyU, n=130**

	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev</b>
Good Governance prevails at KyU due to proper Accountability.	1	5	2.47	1.473
IFMIS budgetary monitoring and review has compelled transparency in financial management at KyU.	1	5	2.77	1.582
The quality of social services provided by KyU signifies good governance.	1	5	2.74	1.508
Efficient and effective communication to stakeholders is an indicator of proper governance system at KyU.	1	5	2.62	1.544
Delegation and segregation of duties permit team work at KyU.	1	5	1.98	1.476
Reporting systems indicates streamlined flow of activities.	1	5	2.54	1.365
Organisation structure permits proper flow of information and responsibilities.	1	5	2.22	1.413
Administrative procedures and policies portray a good image of KyU governance.	1	5	2.61	1.507
Overall mean			2.49	1.484

Source: Primary data (2021)

Table 4.5 shows that good governance prevails at KyU due to proper accountability with (mean = 2.47 &  $\delta$  = 1.473). This means that Ugandan KyU have not used IFMIS to become more responsive to their clients' needs. The finding agrees with interview results in which one of the participants pointed out that:

*Kyu is responsible for ensuring provision of quality education by proper administration. The main governance aspects are related to the rights of students as a social responsibility and accountability to society”*

Table 4.5 above shows that IFMIS budgetary monitoring and review has compelled transparency in financial management at KyU with mean 2.77 & SD = 1.582). This means that governance systems do not aid alignment of institutional goals within the budget due lack of transparency in financial management in higher institutions of learning. The finding concurs with qualitative findings from participant (n=6) who indicated that;

*Budgetary constraints characterized by an increasing population of students increase pressure on fulfilling university activities such as research, and recruitment of staff to full capacity among others bridging a gap in governance as a means of building public trust. Additionally, this has retarded KyU' committed to prioritizing quality teaching and learning.*

Findings in Table 4.5 above further reveal that the quality of social services provided by KyU signifies good governance (mean=2.74, SD = 1.508). This implies that governance aspects related with the Ugandan public learning process did not fulfill the educational mission of the institutions.

Respectively, one of the participants said that,

*Quality of educational services is still substandard in that KyU are not able to accommodate the diverse needs of the students, in terms of skills, knowledge, research, innovations, technology. However, its practical implementation is hampered both by the insufficient level of funding, limited financial resources and low cash limits in IFMIS.*

Participant (n = 6) advocated for *Providing highly skilled labour to the market is a social service KyU in Uganda need to upscale to fulfill the demanding needs of economic transformation. This can be done by providing good governance systems that permit attainment of; technical, behavioural and thinking skills.*

From the results in Table 4.5, it was revealed that efficient and effective communication to stakeholders is an indicator of proper governance systems at KyU with mean = 2.62 & SD = 1.544. This means that there was lack of proper communication channels at KyU which propelled bad governance systems among managers, administrators, boards and council.

One of the participants said; *KyU's staff are deficient in both customer care and administrative competencies. An unsatisfactory staff performance is indicative of deficiencies in the communication process.*

This is supported by the following verbatim from the participants; *Ineffective communication hinders teamwork by causing misunderstandings. Such an environment, characterized by minimal engagement, low team spirit, and dwindling staff interest, negatively impacts students' well-being. Hash language, gestures, maintaining eye contact, facial expressions, and incorrect vocabulary use are the most critical communication barriers among KyU staff.*

*Most lecturers use lecture method instead of student-centered teaching methodologies as a major approach for improved teaching and learning.*

Findings in Table 4.5 also revealed that delegation and segregation of duties permit teamwork at KyU (mean=1.98 &  $\delta$  = 1.476). This signifies that there was low delegation and segregation of duties, powers and authority, which reduced team spirit in KyU. Delegation makes better use of resources and enables individuals to be efficient.

The respondents further revealed that reporting systems indicates streamlined flow of activities mean= 2.54;  $\delta$  = 1.356). This meant that KyU is grappling with deficiencies in governance and management issues.

One of the participants said:

*The University Council holds the ultimate authority in setting the goals and objectives for KyU. The Appointments Board is effectively and competently supported by the supreme organs in carrying out its role and mandate. While the Principal Law recognizes only the Appointments Board among University Council committees, other committees such as Remuneration, Audit & Risk, Finance & Investment, and Governance/Nomination have significant roles in governance.*

*A respondent disclosed that IMFIS enhances governance by enabling real-time financial data access for efficient program management, budgeting, and resource allocation. This improves transparency, accountability, and prevents corruption and fraud.*

The findings further indicated that organisation structure permits proper flow of information and responsibilities (mean = 2.22  $\delta$  = 1.413). The organisation culture of KyU embedded with their organisational structure could not permit formal communication hence promoting bad governance systems. Finally the study revealed that administrative procedures and policies portray a good image of KyU governance (mean = 2.61 SD = 1.507). This signifies that a wide variety of administrative procedures are bureaucratic and such establishment disfavor's service provision of unique services to clients.

#### **4.3.4 Descriptive statistics for Internal service delivery**

The measures of the dependent variable which perceived internal service delivery at KyU were examined in regard to table 4.6;

**Table 4. 6: Descriptive Statistics for perceived internal service delivery, n=130**

Measures of Perceived Internal Service Delivery	Min	Max	Mean	SD
KyU lecturers committedly teach students.	2	4	2.50	.643
KyU students are provided with feeding allowances in time to get meals in time.	3	5	4.20	.783
Leaving out allowances at Ky U are paid in IFMIS directly to meet desired accommodation services.	1	5	2.00	1.301
The library services and facilities essential for students to learn effectively are given priority.	1	5	2.51	1.474
KyU budgets for laboratory equipment/materials needed by students for effective teaching and learning.	1	5	2.81	1.522
Ky U staff demonstrate professionalism when teaching students.	1	5	2.25	1.242
Ky U Staff perform services dependably.	1	5	2.60	1.646
KyU offers the necessary recreational facilities for honing their gaming and sports abilities to students.	1	4	1.95	1.038
KyU provide students with all necessary resources for researching, gaining information, and expanding knowledge.	1	5	2.06	1.214
KyU have adequate capacity to deliver.	1	5	2.62	1.495
There is guarantee of educational services at KyU.	1	5	2.62	1.490
Reliability of educational services is observed at Public Institutions of Higher Learning.	1	5	2.25	1.216
KyU ensures that students needs are met.	1	4	2.00	.992
KyU renders services to meet students' educational needs.	1	5	2.54	1.532
University employees deliver in accordance to students need timely.	1	5	2.34	1.622
Management handles students' complaints timely.	1	5	1.95	1.106
KyU provides dependable services to students.	1	5	2.11	1.351
The information provided to students by KyU staff is accurate.	1	5	1.57	1.145
Overall average mean			2.38	1.267

Source: Primary data (2021)

KyU lecturers committedly teach students (mean= 2.5 & SD = .643). This means that lecturers in public universities provided few lecture hours to learners without properly guiding them. KyU students are provided with feeding allowances in time to get meals in time (mean= 4.2 & SD =.783). This signifies that although IFMIS aids real-time

transactions, students did not get their e-cash on time. Leaving out allowances at KyU are paid in IFMIS directly to meet desired accommodation services (mean=2.0 & SD = 1.301). KyU prioritizes students' library services (mean=2.51 & SD=1.474). This means that using IFMIS to pay off internet service provider for the library website hosts affect utilization of library services at KyU.

KyU budgets for laboratory equipment/materials needed by students for effective teaching and learning (mean= 2.81& SD =1.522). This implies that service providers were not paid in time for supplies of laboratory equipment/materials, which affected delivery time. KyU staff demonstrate professionalism when teaching students (mean=2.25 & SD =1.242). This means that the mode of delivery was poor to influence effective teaching and learning in universities. KyU Staff perform services dependably (mean=2.60 & SD =1.646). This implies that staff did not render services to clients to meet their expectations. KyU provide recreational facilities needed by students to develop their games and sports talents (mean=1.95 & SD =1.038). This implies that recreational facilities were not well developed to limited funding for capital development.

Students are provided with information needs regarding research to enrich their knowledge (mean=2.06 & SD =1.214). This implies that data, WIFI and internet facilities were not adequate to enable students enrich knowledge in assignments and research. KyU have adequate internal service delivery capacity (mean=2.62 & SD =1.490). This signifies that IFMIS budget provided for underfunding of staff recruitment compelling under-staffing and low internal service delivery. There is assurance of educational services at KyU (mean=2.62 & SD =1.492).This implies that the quality of education in public universities is wanting. Reliability of educational services is observed at KyU (mean=2.25 & SD = 1.216). This signifies that

dependability on university education as a measure of skilled man power/human capital for speeding up industrialization is defective. KyU provide responsiveness to students' educational needs (mean= 2.0& SD =0.992). This means that KyU lag behind in being responsive to clients' needs.

KyU renders educational services to meet their needs (mean=2.54 & SD =1.532). This means that do not provide the educational services that satisfy students' needs. KyU serves her clients timely (mean=2.34 & SD =1.622). This indicates that staff are slow in providing students with timely services required. Top management handles students' complains in a timely manner (mean=1.95 & SD =1.106). This means that students are not handled with due care and diligence, University employees deliver in accordance to students need timely (mean=2.11 & SD =1.351). This means that university employees are not reliable in guiding learners meet their needs. The information provided to students by university staff is accurate (mean=1.57 & SD =1.145). This meant that employees and students perceived that university employee delver unrealistic information to their clients.

#### **4.4 Correlation analysis**

Correlation analysis was used to examine the causal relationship between variables. In particular, the study used Pearson Correlation Analysis (r) model because it gives the most accurate statistic. These results are presented in table 4.7 on the next page.

**Table 4. 7: Pearson Correlation Analysis**

<b>Variable/Construct</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>
Cash Management (1)	1												
Cash collection (2)	0.146	1											
Cash disbursement (3)	.631**	0.146	1										
Cash reconciliation (4)	.341**	.219*	.341**	1									
Budgeting (5)	.402**	.376**	.402**	.700**	1								
Budget preparation (6)	.235**	.408**	.235**	.576**	.646**	1							
Budget implementation (7)	.314**	.257**	.314**	.682**	.838**	.371**	1						
Monitoring and control (8)	.195*	.256**	.195*	.208*	.640**	0.118	.375**	1					
Governance Systems (9)	.250**	.675**	.250**	.340**	.536**	.547**	.345**	.362**	1				
Authorisation (10)	0.011	.739**	0.011	0.045	.258**	.407**	0.111	.182*	.702**	1			
Alignment (11)	.361**	.559**	.361**	.498**	.615**	.541**	.551**	.228**	.633**	.442**	1		
Performance measurement (12)	.350**	0.014	.350**	.341**	.362**	.210*	.293**	.262**	.518**	-.202*	.284**	1	
Internal service delivery (13)	.298**	.299**	.298**	.300**	.441**	.286**	.271**	.398**	.447**	.191*	.343**	.405**	1

**Note:**  $n=130$ ; \*.  $p<0.05$  level (2-tailed). \*\*.  $p<0.01$  level (2-tailed).

Source: Primary data (2021)

#### **4.4.1 Relationship between cash management and internal service delivery of users**

Table 4.7 revealed a weak significant and positive relationship between cash management and internal service delivery of users ( $r=.298$ ,  $p<.01$ ). These findings meant that enhancing cash management is likely to enhance the propensity of internal service delivery of users in Kyambogo University. In addition, the results indicated that cash collection is a weak significantly and positively associated with internal service delivery of users ( $r=.299$ ,  $p<.01$ ). This meant that boosting cash collection is bound to translate in internal service delivery of users. Furthermore, the results revealed a weak significant and positive relationship between cash disbursement and internal service delivery of users ( $r=.298$ ,  $p<.01$ ). These results meant that boosting cash disbursement is likely to boost internal service delivery of users. Results further revealed a weak significant and positive relationship between cash reconciliation and internal service delivery of users ( $r=.300$ ,  $p<.01$ ). This meant that enhancing cash reconciliation is likely to stimulate internal service delivery of users.

#### **4.4.2 Relationship between budgeting and internal service delivery of users**

Correlation results in table 4.7 revealed a weak significant and positive relationship between budgeting and internal service delivery of users ( $r=.441$ ,  $p<.01$ ). In other words, the results meant that enhancing budgeting would stimulate internal service delivery of users. The results further obtained that there exists a weak significant and positive relationship between budget preparation and internal service delivery of users ( $r=.286$ ,  $p<.01$ ). The results meant that enhancing budget preparation during budgeting would stimulate internal service delivery of users. Likewise, results obtained that budget implementation is significantly weak and positively associated with internal service delivery of users ( $r=.271$ ,  $p<.01$ ). In this case, the results meant that enhancing budget implementation is likely to translate in internal service delivery of users. Results further revealed a weak significant and positive relationship between budget monitoring and control and internal service delivery of users

( $r=.398$ ,  $p<.01$ ). This meant that stimulating budget monitoring and control is likely to enhance internal service delivery.

#### **4.4.3 Relationship between governance system and internal service delivery of users**

Results in table 4.7 revealed a weak significant and positive relationship between governance systems and internal service delivery of users ( $r=.447$ ,  $p<.01$ ). The results meant that enhancing governance systems is likely to boost internal service delivery of users. Further results revealed that authorisation is significantly and positively weakly associated with internal service delivery of users ( $r=.191$ ,  $p<.05$ ). These results meant that improvement authorisation would improve internal service delivery of users. Also, the results obtained a weak significant and positive relationship between alignment and internal service delivery of users ( $r=.343$ ,  $p<.01$ ). These results meant that enhancing alignment is likely to stimulate internal service delivery of users. In addition, results obtained a weak significant and positive relationship between performance measurement and internal service delivery of users ( $r=.405$ ,  $p<.01$ ). These results meant that enhancing performance measurement is likely to enhance internal service delivery of users.

#### **4.5 Multi- Regression Analysis**

The researcher used a combined regression model to predict perceived internal service delivery by the constructs of integrated financial management system. The results in the table 4.13 below provide the degree to which the elements of IFMIS namely; cashflow management, budgeting, governance predict changes in perceived internal service delivery at KyU.

**Table 4. 8: Multi- Regression Analysis**

Model	Coefficients <sup>a</sup>			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
1 (Constant)	2.299	.563		4.084	.000
CASH_MGT	.080	.270	.069	.296	.768
BUDEGTING	.030	.257	.028	.117	.907
GOVERNANCE	-.076	.117	-.061	-.646	.519
R	.125 <sup>a</sup>				
R Square	.016				
Adjusted R Square	-.009				
Std. Error of the Estimate	1.660				
F	.643				
Sig.	.589 <sup>b</sup>				

a. Dependent Variable: PERCEIVED\_SERVICED\_DELIVERY  
a. Predictors: (Constant), GOVERNANCE, CASH\_MGT, BUDEGTING SERVICE

Source: Primary data (2021)

The results of the study established that for a unit change in IFMIS constructs predict .125 of the change in perceived internal service delivery in public institutions of higher learning ( $R^2 = 0.16$  and Adjusted R Square = .016). The remaining .84 is explained by other factors not incorporated in the model. The model was statistically significant This indicates that the model is statistically significance at  $p=.589>0.01$  and predicts the outcome variable (i.e., it is a good fit for the data).

## **CHAPTER FIVE: DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter provides a discussion of findings, conclusions and recommendations in relation to study objectives. These objectives were to; assess the relationship between cash management budgeting, and governance system and examine the influence of Integrated Financial Management Information System on the internal service delivery of users. The chapter also highlights some of the methodological limitations and subsequently suggests areas for further research.

### **5.2 Discussion of the major Findings**

#### **5.2.1 Relationship between cash management and internal service delivery of users**

Findings in this study obtained revealed that cash management is positively associated with internal service delivery of users, more so in Kyambogo University. In essence, the findings meant that improving cash management is bound to rise the propensity of internal service delivery of users. Cash managed in IFMIS covers government subvention and non-tax revenue (NTR) also Known as appropriation in aid (AIA). Cash management is done in way that public institutions are funded based on their potential to collect/generated the revenue at source. All collections are made to the treasury through Uganda Revenue Authority (URA) and guided by the Public Financial Management Act (2015), which prohibits spending at source. The findings are consistent with previous works such as Chowdhury and Shil (2019) and Rana et al. (2019) who noted that cash management is important in addressing tendencies of financial mismanagement because it ensures that all expenditures are approved before resources are disbursed to the responsible parties, and also make sure that all receipts as collected are reflected in the system.

With the introduction of integrated financial management system, Kyambogo University can be able to enhance cash management given the fact that all cash transactions are meant to be electronic, shifting from the manual framework. This would promote real-time monitoring and control making it simple for Kyambogo University to track any suspicious entries which would result in wastage. In the same manner, Odoyo et al., (2014) expressed that cash management is inevitable for stimulating accountability and transparency because it promotes monitoring and control. Similarly, Liyanapathirana and Ranjani (2017) demonstrate that capability of any public entity to fulfill services is very much inclined to the way internal personnel support the use of cash management model within the public financial management framework. The consistency in the findings herein suggest that the essence of cash management cuts across a range of institutions of learning, Kyambogo University inclusive.

The study also established that cash collections determine the level of internal service delivery. This means that stimulating cash collection could enhance internal service delivery in Kyambogo University. Managing cash collections means the way all cash is recorded as it is received, something which helps KyU to establish their actual financial capacity. This information is paramount in guiding the institutions in making decisions regarding selecting which services they can provide effectively given the available resources. The government requires Universities to submit a cash warranty through the accountant general, which determines actual quarterly and half-year cash release to institutions of higher learning. This is uploaded on IFMIS and provides a basis of cash limits within which the institution expenses are made. Whenever requisitions are made, upon approval by the accounting officers, the Local Purchase Orders (LPOs) are generated in IFMIS to encumber funds which reduces the amount of cash release on the system. Encumbrances are paid out upon satisfactory confirmation that goods, services and works have been accomplished. The cash

management control system bases on the Goods Received Note (GRN) being approved in the system upon matching it with delivery note and LPO specifications. Moreover, it promotes accountability and transparency in cash matters within the institution, which minimizes mismanagement.

In the same context, Attom (2014) and Muthama (2016) emphasized that one of the core issues in cash management is cash collection. Indeed, scholars are of the view that cash collection determines the overall capacity of the institution to execute tasks and responsibilities so as to offer the desired services to various stakeholders (Mugambi et al., 2015; Oluoch, 2016). The findings also concur with the New Public Management Theory (Hood, 1991). This theory suggests that institutions must adopt and build systems which promote transparency and minimize wastage. Herein, it can be summarized that stimulating cash collection aspects are intended to satisfy this theory because when every cash collection is recorded, and verified, transparency is promoted.

Furthermore, the study revealed that there is a positive relationship between cash disbursement and internal service delivery of users at Kyambogo University. This finding meant that enhancing cash disbursement would stimulate internal service delivery. Effective management of cash disbursement facilitates the institution's ability to execute some of the activities and tasks because there is no activity that can be executed unless it is allocated the necessary resources to do so. In this case, it can be reasoned that when cash disbursement is effectively carried out, activities and tasks will equally be effectively fulfilled. This relates with Rosli (2020) who expressed that cash management within an Integrated Financial Management Information System depends is largely defined by how cash allocation is carried out. This research contributes to knowledge by providing empirical evidence to indicate how cash disbursement, as a subcomponent under cash management can contribute

towards internal service delivery. Most importantly, it provides evidence in the context of Kyambogo University to contribute to the already existing.

Findings further revealed that cash reconciliation is positively associated with internal service delivery of users. These findings suggested that boosting the way cash reconciliation is carried out within the Integrated Financial Management Information System is likely to stimulate internal service delivery. Within the same context, the researcher echoes that cash reconciliation activities serve as an oversight process, which seeks to accurate accountability. During reconciliation in IFMIS, a statement from Bank of Uganda (BOU) is validated against IFMIS transactions were unaccounted for invoices (invoices rejected) contained in the hold report by MoFPED as well as bounced payments are balanced to match /rally with the cash release of the institutional vote on daily basis. This investigate process is important because it promotes accountability and transparency in cash resources, and minimizes mismanagement of cash. Henceforth, this research demonstrates that it is always crucial to make sure all expenditures are cross-checked as a mechanism for boosting accountability, which could culminate in internal service delivery. This is in agreement with previous scholars such as Chado (2015); and Mutema (2019) who revealed that cash management provides clarity by highlighting that one of the cash management components which are necessary is cash disbursement. In the same way, Davis et al. (2019) indicates it is important to carryout am verification exercise where cash information contained in the system is compared with the source documents. This would increase cash safety and transparency in cash matters within the institution to stimulate internal service delivery.

### **5.2.2 Relationship between budgeting and internal service delivery of users**

The research findings indicated that budgeting and internal service delivery are positively associated. This suggested that improving budgeting is likely to enhance strategic

educational knowledge and skills. Budgeting is important because it serves as the roadmap and guides on how cash can effectively be spent within a given period (Quarterly, Monthly or during a financial year). Budgets are prepared or compiled using Output Based Budgeting (OBB), which has to be preceded by Programme Based System (PBS), recommended, monitored and supervised by Ministry of Finance Planning and Economic Development. The approved budget by parliament is then uploaded into IFMIS for execution against the cash release in accordance to each item in the vote. Virement is prohibited by law in accordance to both the budget Act (2001) and Public financial management Act (2015). This cash management system helps to curb misalignments as mischarge.

The PFM Act further stipulates that only virements or reallocations of funds to a tune of 10% are allowed and any other allocations above 10%, require permission to be obtained from the Minister of finance through the Accountant General (AG) as well as auditor general (OAG) with minutes of the Council and approval of parliament. For some services such as student re-imbursments involve the use of E-cash payments (Tel) because they have no supplier numbers. Moreover, budgeting provides a projection, forecast and estimation of the potential cash resources. Complying with the budget can protect KyU from unplanned expenditures, whose execution can easily cause financial distress and compromise ability to provide appropriate services contrary to PFMA (2015). This is in line with adoption of Integrated Financial Management Information System in budgeting stimulates accuracy and efficiency in the public planning and budgeting process (Muhamud & Nalwoga, 2019; Njeru & Malenya, 2019). Although these scholars do not indicate the possible outcomes following accuracy and efficiency which comes along, the current research closes this missing link, by clearly explaining how internal service delivery is bound to manifest. The research teaches us that the module should be effective in budget preparation, implementation, and should have the capacity to monitor and control the whole exercise of budgeting. The research also

contributes to new public management theory by demonstrating that budgeting is one of the channels for promoting accountability and transparency, which are strongly emphasized by this theory (Djelic & Sahlin-Andersson 2006; Lodorfos et al., 2015).

Notably, this research finds that budget preparation can determine internal service delivery of users at KyU. Budget preparation sets pace for budgeting within the organization. This means that its effectiveness does not only determine the effectiveness of all other processes in budgeting, but also ensures that budgeting is actually carried out within the institution. Because of this, it can then be argued that when budget preparation is carried out within the designated timeframe, it facilitates all other processes to be efficient and so is the execution of tasks. Nonetheless, Imuezerua and Chinomona (2015) indicate that whereas budgeting is a key component within integrated financial management system, it is unlikely that it directly influences internal service delivery. Whereas, Hussein (2019) and Victor (2018) indicate budgeting is crucial in determining internal service delivery.

Further still, this study established that budget implementation is one of the budgeting components which can enhance internal service delivery, particularly in Kyambogo University. In line with budgeting in IFMIS, approved work plans and procurement, plans support budget implementation. No spending outside the budget is allowed. All expenditures are tailored towards realisation of national objectives spelt out in the National Development Plan (NDP) III. In order to attain prudent planning, activities choices in the work plan need to be realistic. All plans in the budget were done to match the available resource envelop. Procurement plans to are drafted within the agreed period to enhance budget execution. Off budget, expenditures do not form part of the medium-term expenditure frameworks (MTEFs). MTEFs provide a medium-term perspective for achieving government

fiscal objectives, bypassing the limitations of the annual budget cycle. They generally span a period of at least three years beyond the current budget.

In the same way, the research argues that the way the budget is implemented can strongly determine internal service delivery. For instance, consistently executing budget activities would enable Kyambogo University to minimize unplanned expenditure, which would reflect inefficiency and ineffectiveness of users. This research therefore unearths the fact that the implementation module should not allow users to exceed planned amount for spending unless approved as this would be crucial in promoting transparency and minimize cash mismanagement, which could translate in internal service delivery. In congruence, Basheka and Nabwire (2013) suggested that consistency in budget execution is a key determinant of internal service delivery. Even then, this research provides recent evidence along the same line further confirming that the functionality of budget execution or implementation in Uganda still stands.

The study results further established that budget monitoring and control is positively associated with internal service delivery. This meant that boosting budgetary monitoring and control in the Integrated Financial Management Information System could increase the propensity of internal service delivery of users. This is explained by the fact that budget monitoring and control is directed towards seeking explanation for every expenditure or income as expressed. When the budget is closely monitored and controlled, users find difficulty to alter already approved activities which can translate in fraudulent dealings and misuse of resources. The findings were consistent with Vazonienė and Stončiuvienė (2012) who demonstrated that budgeting is a key tool for increasing internal managerial control over the expenditure and receipts.

### **5.2.3 Relationship between governance system and internal service delivery of users**

The study findings revealed that governance systems are positively associated with internal service delivery. The findings postulated that enhancing governance systems within the Integrated Financial Management Information System could lead to low internal service delivery especially among Kyambogo University. Indeed, governance systems are important because they determine the magnitude of controls within the system. These controls determine the extent to which users can be restricted from accessing the system and making it difficult to engage in any self-interest act. The finding is supported by earlier findings by Hendriks (2018) who revealed that whereas users of integrated financial management systems vary, each has got a different mandate which must be fully reflected in the system to avoid tendencies of overlapping which result in fraudulent transactions and wastage of resources. Additionally, the findings by Othieno et al. (2017) unleash that it is prudent for policy makers and managers to integrate governance systems within IFMIS to enhance the chances of internal service delivery. Likewise, Minani, (2016) acknowledges that it is widely acknowledged that governance systems vary, although whichever aspect is instituted boosts monitoring and control of actions of users.

The study findings unveil that authorization is necessary in stimulating internal service delivery. It is argued that ensuring that the system strictly accepts verified expenditure is necessary because this cannot incorporate any transactions to inflate expenditure. The study also established that making sure that approvals of any activity goes through a process would ensure a systematic way of doing things in a manner which is highly transparent, to build a system where users are focused towards rendering services with efficiency and effectiveness. Moreover, this research demonstrates that having an Integrated Financial Management Information System which blocks access upon specific number of login attempts could increase the propensity of internal service delivery of users because it would minimize

unauthorized access to the system which could increase tendencies of errors. The findings concur with Lodorfos et al. (2015) who revealed that mechanisms are available to promote authorization which makes different internal stakeholders fully responsible for their actions and activities. From the empirical context, Amuche (2019), and Ndagire and Baguma (2018) demonstrate that governance systems are crucial in stimulating record keeping as well as encouraging accountability, which translates in efficient utilization of public resources to boost internal service delivery.

Likewise, the findings obtained indicated that there is a positive significant weak relationship between alignment and internal service delivery. Alignment of the system institutes a framework where individual actions and behaviour of users within the system can easily be tracked. This not only promotes accountability but also encourages users of the system to exercise efficiency and effectiveness because they are aware that the system assesses them. Aligning ensures a clear segregation of duties would create a system where different users have to participate in a particular transaction before it can be approved. Additionally, findings denote that having a system which is aligned in such a way that each and every user operates with a different system interface is paramount in internal service delivery. Precisely, this would mean that users would also access different information which is only relevant for them which would increase their efficiency and effectiveness. The finding is supported by Pasape and Godson (2022) who expressed that governance systems in Integrated Financial Management Information System is intended to systematically monitor and control public resources, which is bound to stimulate quality internal service delivery.

The study established that there is a significant weak positive relationship between governance and internal service delivery. In the same line, the researcher emphasizes that as long as users of integrated financial management systems are aware that their actions are

strictly followed up, they will try as much to render services that match their expectations. In congruence, Chêne, (2017) reveal that failure to comply with governance systems is one of the major barriers ensuring internal service delivery within public universities. On that premise, it can be argued that an Integrated Financial Management Information System provides assessment reports on activities can propel users to stick to the services recognized by the institution because they would not want to rank among the least compliant. This research also teaches that a system which reports key areas which need improvement is essential because it helps users to devote their attention towards identified issues to make sure they achieve internal service delivery.

### **5.3 Conclusions of the Study**

Using an integrated financial management system is one-way Kyambogo University is improving the services it provides to its users. Specifically, this study demonstrates that the foundational components of the Integrated Financial Management Information System- budgeting and governance systems are what enable customers to receive services. However, as far as providing consumers with services is concerned, cash management - an additional component of an integrated financial management system should not be overemphasized. This research gives managers and policy makers a clear direction for applying the Integrated Financial Management Information System to improve internal service delivery, specifically pointing them toward budgeting and governance systems. It improves the methods for creating, implementing, and monitoring budgets.

### **5.4 Recommendations**

Based on the results from the study, several scholarly recommendations are proposed to enhance internal service delivery through the Integrated Financial Management Information System (IFMIS) at Kyambogo University:

Given that cash management showed a significant positive relationship with internal service delivery, the study recommends that it should be optimized through improved training and tighter financial control mechanisms to address data inaccuracies and inefficiencies.

Since budgeting, particularly budget preparation and implementation significantly associated with internal service delivery, Kyambogo University should focus on streamlining budget processes and ensure that budgeting aligns with timelines for better execution of institutional activities.

The significant positive relationship between governance systems and internal service delivery highlights the need for better authorization protocols, performance measurement, and alignment to institutional goals. These efforts will improve accountability and operational efficiency.

The study showed poor user understanding and adoption of IFMIS. Regular user training should be prioritized to improve task completion, reduce errors, and encourage user confidence in the system. To minimize delays and inefficiencies, the university should invest in upgrading the technological infrastructure supporting IFMIS, ensuring stable connectivity and reliable hardware.

The study recommends that a performance measurement system that monitors the effectiveness of cash flow management, budgeting, and governance regularly should be developed. This would ensure that IFMIS continuously aligns with internal service delivery objectives.

### **5.5 Areas for further Research**

In light of the above recommendations, further research should be conducted in the following areas;

Investigate the relationship between integrated financial management systems and internal service delivery in Kyambogo University considering both users and students.

Longitudinal research to investigate the effect of Integrated Financial Management Information System and effectiveness of the procurement system in Kyambogo University.

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**Section B: The Relationship between cash management and internal service delivery at Kyambogo University.**

1. Which of the following statements explain the relationship between cash management and internal service delivery at Kyambogo University? Please indicate the extent to which you Strongly Disagree, SD (1), Disagree, D (2), Not sure NS (3), Agree, A (4), Strongly Agree SA (5).

<b>Cash Management and Internal service delivery</b>		SD(1)	D(2)	NS(3)	A(4)	SA(5)
B1	Automated Cash Management has improved revenue collection and disbursements.					
B2	Automated Cash Management has enhanced timely accuracy of accounts transactions.					
B3	IFMIS has improved budgetary processes as well as managerial decision making in all departments at Institutions of Higher Learning for better internal service delivery					
B4	IFMIS has led to quick and easy tracking of transactions to significantly reduce wasteful expenses and irregular expenditure.					
B5	Using IFMIS, cash limits is made available in a reliable and timely manner.					
B6	IFMIS makes bank reconciliation automatic thus allowing a closer monitoring of debtors (cash inflows) and bank account balances.					
B7	IFMIS allowing a closer monitoring of creditors (cash outflows) and cash in bank account.					
B8	Timely release of funds affects the delivery of education service.					
B9	IFMIS has made use of cash projections relatively easy.					
B10	Adoption of IFMIS at Institutions of Higher Learning facilitates production of monthly, quarterly, yearly reports quickly.					

**Section C: Relationship between budgeting and internal service delivery at Kyambogo University.**

2. Which of the following statements explain the relationship between budgeting and internal service delivery at Kyambogo University? Please indicate the extent to which you: Strongly Disagree, SD (1), Disagree, D (2), Not sure NS (3), Agree, A (4), Strongly Agree SA(5).

<b>Statements on budgeting and internal service delivery at Kyambogo University</b>		SD(1)	D(2)	NS(3)	A(4)	SA(5)
C1	IFMIS has ensured that Public Institutions of Higher Learning budget is prepared timely in accordance with rules and policies.					
C2	I use IFMIS to execute the budget to reduce wasteful/irregular expenditures at the University					
C3	Using IFMIS has assisted me allocate adequate resources on its projects without biased opinions.					
C4	IFMIS has streamlined all the University financial processes on allocations without budget unauthorized in various units/departments.					
C5	IFMIS modules have improved on the financial allocations and public expenditure management in public Institutions of Higher Learning.					
C6	Public Institutions of Higher Learning use of IFMIS has reduced misappropriation of public funds through un-approved expenditures.					
C7	IFMIS has reduced the number of audit queries on un-planned expenditure at public Institutions of Higher Learning.					
C8	Budget implementation allows efficient and effective communication at public Institutions of Higher Learning.					
C9	IFMIS has enhanced confidence and credibility of the public Institutions of Higher Learning budget.					

**Section D: The relationship between governance system and internal service delivery at Kyambogo University.**

3. Which of the following statements explain the relationship between governance systems on internal service delivery at Kyambogo University? Please indicate the extent to which you: Strongly Disagree, SD (1), Disagree, D (2), Not sure NS (3), Agree, A (4), Strongly Agree SA (5).

<b>Governance system and internal service delivery at Kyambogo University</b>		SD(1)	D(2)	NS(3)	A(4)	SA(5)
D1	Governance prevails at public Institutions of Higher Learning due to proper Accountability.					
D2	IFMIS budgetary monitoring and review has compelled transparency in financial management at public Institutions of Higher Learning.					
D3	The quality of social services provided by public Institutions of Higher Learning signifies good governance.					
D4	Efficient and effective communication to stakeholders is an indicator of proper governance system at public Institutions of Higher Learning.					
D5	Delegation and segregation of duties permit team work at public Institutions of Higher Learning.					
D6	Reporting systems indicates streamlined flow of activities.					
D7	Organisation structure permits proper flow of information and responsibilities.					
D8	Administrative procedures and policies portray a good image of public Institutions of Higher Learning governance.					

### Section E: Internal service delivery

Which of the following statements explain the internal service delivery at Kyambogo University? Please indicate the extent to which you Strongly Disagree, SD (1), Disagree, D (2), Not sure NS (3), Agree, A (4), Strongly Agree SA (5).

No	Statements on internal service delivery	SD(1)	D(2)	NS(3)	A(4)	SA(5)
	<b>Efficient internal service delivery</b>					
F1	Public Institutions of Higher Learning lecturers committedly teach students.					
F2	Public Institutions of Higher Learning students are provided with feeding allowances in time to get meals in time.					
F3	Leaving out allowances at Public Institutions of Higher Learning are paid in IFMIS directly to meet desired accommodation services.					
F4	Public Institutions of Higher Learning library services/facilities needed by students to learn effectively as expected are prioritized.					
F5	Public Institutions of Higher Learning budgets for laboratory equipment/materials needed by students for effective teaching and learning.					
F6	Public Institutions of Higher Learning staff demonstrate professionalism when teaching students.					
F7	Public Institutions of Higher Learning Staff perform services dependably.					
	<b>Quality in internal service delivery</b>					
F8	Public Institutions of Higher Learning provide recreational facilities needed by students to develop their games and sports talents.					
F9	All information services/facilities students need to research, be informed and enrich knowledge are in place at Public Institutions of Higher Learning.					
F10	Public Institutions of Higher Learning have adequate internal service delivery capacity.					

F11	There is assurance of educational services at Public Institutions of Higher Learning.					
F12	Reliability of educational services is observed at Public Institutions of Higher Learning.					
F13	Public Institutions of Higher Learning provide responsiveness to students' educational needs.					
	<b>Customer satisfaction</b>					
F14	Services provided to students by Public Institutions of Higher Learning meet students' educational needs.					
F15	Staff provide educational services to students in a timely manner.					
F16	The University's management/employees promptly solve students' complaints regarding educational services.					
F17	Services provided to students by Public Institutions of Higher Learning staff members are dependable.					
F18	The information provided to students by my university staff is accurate.					

***“Thank you for your cooperation”***

## **Appendix II: Interview Guide for Management**

1. What does cash management under IFMIS involve?
2. What is the relationship between cash management and internal service delivery in Kyambogo University?
3. How is the budgeting process carried out under IFMIS in your institution?
4. What is the relationship between budgeting and internal service delivery in Kyambogo University?
5. Explain the concept of governance under IFMIS in public institutions of higher learning?
6. What is the effect of the governance system on internal service delivery in Kyambogo University?
7. To what extent has cash management, budgeting, governance system enhanced internal service delivery in Kyambogo University?
8. What is the effect of cash management, budgeting, governance system and internal service delivery in Kyambogo University?
9. What is the relationship between cash management, budgeting, governance system and internal service delivery in Kyambogo University?
10. What strategies can be adopted to transform internal service delivery in Kyambogo University?

***“Thank you for your cooperation”***

### Appendix III: Sample Size Determination Table

<i>Table for Determining Sample Size of a Known Population</i>									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384
<i>Note: N is Population Size; S is Sample Size</i>					<i>Source: Krejcie &amp; Morgan, 1970</i>				

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## **Appendix IV: Introductory Letter**

## **Appendix V: Plagiarism Index Test**