

PETER KUSI ID:UD63718BAc72775

The Impact of Integrated Financial Management Information System:

Effective Accountability and Reporting.

A Case Study in the Ghana Education Service

A Final Thesis Presented to

The Academic Department

of the School of Business and Economics

in Partial Fulfilment of the Requirements

for the Degree of Doctor in Accounting

Supervisor: Cyndy Dominguez

ATLANTIC INTERNATIONAL UNIVERSITY

HONOLULU, HAWAII

JULY, 2021.



DECLARATION

Nothing in this thesis has been approved for the award of a graduate certificate or any other higher degree by any educational institution. To the best of my knowledge and belief, this thesis is an entirely original work authored by me, with the exception of passages where the appropriate citation is provided to the work of others. The work that is being presented has also been done since the program's formal commencement date.



CERTIFICATION

I Peter Kusi hereby affirm that the content of this thesis is my own original work.

.....

Signature

Date

.....

SUPERVISOR/DIRECTOR OF THESIS

I hereby certify that I have given my consent for this thesis to be submitted as a University's supervisor/director of the thesis.

Signature

.....

Date

Cyndy Dominguez

INTERNAL EXAMINER

ATLANTIC INTERNATIONAL UNIVERSITY

.....

Signature

Date

.....

Name



DEDICATION

This thesis is dedicated to:

Jesus Christ, my great teacher, and mentor who demonstrated love through his life and showed us what love and life are all about.

My lovely wife (Mrs. Vera Kusi), sweet mother (Rebecca Asantewaa), and guardian father (Kofi Kusi, of blessed memory) whose words of inspiration and prodding to perseverance echo in my ears.

My beloved kids (Lordina Akosua Asantewaa Kusi, Clara Abena Frema Kusi, Kepha Yaw Kusi, Nathaniel Owusu Asante, Peniel Ama Ankoma Kusi, Theophany Kwame Adu Kusi, Jacqueline Esi Nusenu, Vivian Kissiwaa, Christabel Asantewaa, Mathilda Owusu, and Kissiwaa Boansi) cannot be left out of this gratitude whom I can't stop loving

Other personalities includes, Prof. Kwasi Opoku-Amankwa (Director General, GES), Mr. Anthony Boateng (Deputy Director General in charge of Management Service, GES) and Dr. Kwabena Bempah Tandoh (Deputy Director General in charge of Quality and Access).

The Atlantic International University (AIU)

For all the people in my life who touched my heart in one way or the other, I dedicate this research.



ACKNOWLEDGEMENT

My first and foremost appreciation goes to God Almighty, who is my creator, my steadfast supporter, and my wellspring of insight, understanding, and wisdom. Throughout this program, He has been my source of strength, and I have only been able to fly on His wings. I gratefully acknowledge the assistance from the academic committee that kept me on this track, my academic advisors, tutors, and the entire management team of AIU who led me through this journey. The next appreciation goes to my basic school teachers and classmates, who encouraged me to pursue and aspire to a higher level of education. Moreover, this thesis is written as a tribute to my numerous friends, family, and church family who have supported me throughout the process. Notwithstanding the above, it is worth acknowledging the following important personalities who have contributed to my life positively to be what I am today: Apostles Dr. Christian Koramoah (Financial Controller, GES), Mrs. Evelyn Naa-Dei Thompson (Chief Accountant, GES), Mrs. Akua A. Debrah (former Regional Director of Education, B/A), Mr. Samuel Twi Sakyi, Mr. Anokye Sarfo and Mr. Eric Acquah (Retired Regional Accountants), the able Accounts Staff at GES Headquarters (Mrs. Sarah Edem K. Keelson, Mrs. Rita Aboagye, Mrs. Elizabeth Opare Owusu, Mrs. Beatrice Sallah, Mr. James Okine, and Mr. Fred Okai), Mrs. Victoria Amonoo-Assane (Head of Staff Dev. Unit/Training, GES Hq.) Mr. Daniel Anokye Mensah, Mr. Michael Boamah-Wiafe (Staff at GES Council), Michael Nketiah, Didier Pabic, Lawrence Osei, and Ahmed Jafaru (Former National Service Personnel at GES Hq.), Mr. and Mrs. Adu Kyeremeh (Sunyani), Paul Newman Amoh, Grace Ewoenam Torvor, Mrs. Josephine Tetteh- Obodai, and Patience Naa Abekah (Staff at GES Hq.) and Ali Abudu Pambong (Teshie Technical Institute)



TABLE OF CONTENT

DECL	LAR	ATION	ii
CERT	TIFI	CATION i	ii
DEDI	CA'	ГІОN ii	V
ACKN	NOV	VLEDGEMENT	v
TABL	E C	DF CONTENT	vi
LIST	OF	FIGURES x	ii
LIST	OF	TABLES xi	ii
ABST	'RA	CTxi	V
СНАР	PTE	R ONE	1
INTR	OD	UCTION	1
1.0 I	ntro	oduction	1
1	l .1	Background of the Study	1
1	1.2	Statement of the Problem	5
1	1.3	Purpose of the study	7
		1.3.1 Research Objectives	7
1	l .4	Research Questions	8
1	1.5	Significance of the Study	8



	1.6	Definition of Terms	9
	1.7	Delimitations, Limitations, and Assumptions of the Study	9
	1.8	Useful Modules and Theories	0
	1.9	Methodology 1	0
	1.10	Conclusion 1	1
CHA	АРТЕ	R TWO1	2
LIT	ERAT	TURE REVIEW1	2
2.0	Intro	oduction1	2
	2.1	Understanding Public Financial Management 1	2
	2.2	Overview of GIFMIS 1	5
	2.3	Advantages of GIFMIS 1	6
	2.4	Objectives of GIFMIS 1	7
		2.4.1 Strengthen Fiscal Discipline by Enhance Budget Implementation and	
		Expenditure Control1	7
		2.4.2 Transparency and Accountability for Improved Public Service Delivery 1	8
		2.4.3 Reduce Corruption in Public Financial Management	0
		2.4.4 Real-Time Information Sharing/ Timely Reporting 2	2
	2.5	Approaches to Implementing IFMIS in Public Financial Management2	2
		2.5.1 Top-Down Approach	3
		2.5.2 Bottom-Up Approach	5



	2.6	Theoretical Framework 2		27
		2.6.1	Institutional Theory	27
		2.6.2	Force-Field Theory	28
		2.6.3	Fiscal Decentralization	29
		2.6.4	Resource Dependency Theory	31
	2.7	Usefu	l Models	33
		2.7.1	A statistical Model	33
		2.7.2	Technology Acceptance Model	34
	2.8	Summ	nary and Conclusion	35
CHA	APTE	CR THE	REE	36
ME	ГНО	DOLO	GY	36
3.0	Intr	oductio	Dn	36
	3.1	Resea	rch Design	36
	3.2	Resea	rch Strategy	38
	3.3	Resea	rch Paradigm	39
	3.4	Targe	et Population	40
	3.5	Samp	le Design	40
	3.6	Data S	Source	41
	3.7	Data 4	Analysis	41
	3.8	Ethica	al Considerations	43



	3.9	The L	egal Frameworks	44
	3.10	Sumn	nary and Conclusion	45
CHA	APTE	R FOU	J R	46
RES	SULT	AND I	DISCUSSION OF FINDINGS	46
4.0	Intro	oductio	Dn	46
	4.1	Demo	graphic Features of Respondents	46
		4.1.1	Gender of Respondents	47
		4.1.2	Age of Respondents	48
		4.1.3	Marital Status of Respondents	49
		4.1.4	Educational Background of Respondents	49
		4.1.5	Working Experience of Respondents	50
		4.1.6	Number of years respondents have been using GIFMIS	51
		4.1.7	Position of Respondent at GES	52
		4.1.8	Rank of Respondents at the GES	53
	4.2	Analy	sis of Objective	54
		4.2.1	The Impact of GIFMIS on Effective and Efficient Revenue Collection !	54
		4	.2.2 The Extent to Which GIFMIS has Helped to Enhance Efficiency,	
			Transparency, and Accountability in Financial Management at GES	57
		4.2.3	Fimely Dissemination of Information for Public Financial Management	59
		4.2.4	Maximization of Payment and Commitment Controls of Budget	61



		4.2.5	Challenges Associated with the use of GIFMIS in GES6	;3
	4.3	Chap	ter Summary 6	55
CHA	APTE	R FIV	Е6	6
SUN	IMA	RY, CO	ONCLUSIONS, AND RECOMMENDATION6	6
5.0	Intr	oductio	on6	6
	5.1	Sumn	hary of the Study 6	66
	5.2	Main	Findings 6	58
		5.2.1	Revenue Collection through GIFMIS6	8
		5.	.2.2 Efficiency, Transparency, and Accountability of Public Financial	
			Management7	'1
		5.2.3	Fimely Dissemination of Information for Public Financial Management 7	'3
		5.2.4	Maximization of Payment and Commitment Controls of Budget	′5
		5.2.5	Challenges Encountering the use of GIFMIS7	'6
	5.3	Concl	usions 7	79
	5.4	Recon	nmendations 8	80
		5.4.1	Policy Makers (Governments)	80
		5.4.2	Policy Implementers - Ghana Education Service8	31
		5.4.3	Suggestions for Future Research8	32
REF	ERE	NCES		34



APPENDIX 1 - The detailed analysis of main findings being averaged as depicted in

Chapter Five	
-	
APENDIX 2 - QUESTIONNAIRE	



LIST OF FIGURES

Figure 4.1.1: Pie Chart Depicting Gender of the respondents47
Figure 4.1.2: Pie Chart depicting the age groups of the respondents48
Figure 4.1.3: Pie Chart showing the marital status of the respondents
Figure 4.1.4: Pie Chart depicting the educational backgrounds of the respondents50
Figure 4.1.5: Pie Chart depicting the number of years respondents have been working with
GES51
Figure 4.1.6: Pie Chart depicting the number of years respondents have been using
GIFMIS
Figure 4.1.7 Showing Current Position Occupied as a Staff of GES53
Figure 4.1.8 Showing Rank of Respondents at the GES54
Figure 4.2.1: The Impact of GIFMIS on Effective and Efficient Revenue Collection56
Figure 4.2.2 Showing the Extent to Which GIFMIS has Helped to Enhance Efficiency,
Transparency and Accountability in Financial Management at GES58
Figure 4.2.3 Showing Timely Dissemination of Information for Public Financial
Management61
Figure 4.2.4 Showing Maximization of Payment and Commitment Controls of Budget63
Figure 4.2.5 Showing Challenges Associated with the use of GIFMIS in GES65



LIST OF TABLES

Table 4.2.1: Showing the Impact of GIFMIS on Effective and Efficient Revenue Collection
Table 4.2.2 Showing the Extent to Which GIFMIS has Helped to Enhance Efficiency,
Transparency and Accountability in Financial Management at GES58
Table 4.2.3 Showing Timely Dissemination of Information for Public Financial
Management60
Table 4.2.4 Showing Maximization Of Payment And Commitment Controls Of Budget62
Table 4.2.5 Showing Challenges Associated with the use of GIFMIS in GES



ABSTRACT

Research indicates that effective and efficient public financial management is one of the most effective and efficient ways to ensure accountability for promoting good governance. Lack of proper financial records leads to failure in sound financial management and accountability. This may happen as a result of non-compliance with the legal framework governing public funds that may lead to poor expenditure control, mismanagement of cash, and the mismanagement of financial records. To achieve financial accountability for better reporting, there is the need to adopt a sound system that leads to effective and efficient financial management. All over the world, every government is looking for a way to render proper accountability in the area of human and material resources such as the people in the country, revenue, expenditure, assets, and liabilities to its citizens. In light of this, the World Bank championed a system known as Integrated Financial Management Information System (IFMIS) globally to improve management decision-making to ensure efficient timely resource allocation and distribution in accelerating economic growth through good governance. Moreover the UN 17 Sustainable Development Goals (SDG) can be achieved globally in 2030 by appreciating the IFIMIS since it is a worldwide policy. Ghana is no exception.

In its quest to ensure proper financial management and accountability, the government of Ghana has adopted IFMIS. By adding Ghana, it is termed as Ghana Integrated Financial Management Information System (GIFMIS). This study's main objective is to ascertain the Integrated Financial Management Information System's effectiveness and determine whether its uses will enhance timely accounting and reporting.



This study analysis questionnaire for 113 respondents who are staff of Ghana Education Service (GES) to find out whether:

Evolving Information and Communication Technology (ICT) can play a crucial part in fighting corruption in public finance systems by promoting greater comprehensiveness and transparency of data across government institutions.

Finally, the study will analyze Financial Management Information and integrate them for effective accountability and reporting within the Ghana Education Service.



CHAPTER ONE

INTRODUCTION

1.0 Introduction

The study's background, problem statement, aims, research questions, and importance are all presented in this chapter. Additionally, it covers the study's objectives, constraints, useful modules, methodology, definitions of key terminology, and chapter structure.

1.1 Background of the Study

Financial information is vital in developing every economy, especially the public sector. The public sector plays a crucial role in the development of every nation, and Ghana is no exception. The private sector of every economy can do better if the public sector is performing well. This is because the public sector stands as a pivot around which the economy operates. The public sector enhances the well-being of the economy by providing a sound environment in the country to enable the private sector to flourish. Banerjee and Chau (2004) contend that economic sustainability and development as well as economic growth in every country are mostly stirred up by a well-functioning private sector. This statement is confirmed by the challenges developing nations with weaker public sectors mostly encounter (Uddin, 2003). As a corrective measure to address the challenges being faced by the various areas of the economies due to poor public sector performance, there are a lot of steps that the governance and other stakeholders have put in place to mitigate these challenges associated with the public sector that have ripple effects on other sectors of the economy. Against this background, several reform policies have been developed to target different areas of the economies around the world. The reforms include Public



Sector Reforms, Public Sector Management, and New Public Management, among others that target different divisions of the public sector. Commonwealth (2018), public sector reforms continue to be an integral part of the government's efforts to modernize the public service, making it more citizen-centric and responsive. Commonwealth fully supports these reforms and it is working through its member states and other partners to achieve the reform objectives. Public sector reform policies have become important due to the call by the governments around the world to ensure and enhance the efficiency of public sectors that are considered an engine of growth by some researchers. According to Curristine, Lont, and Journard (2007), the public sector, particularly in developing countries, is frequently seen to be the most corrupt, inefficient, and lacking in accountability. The broad bad impression of the public sector might place unnecessary pressure on governments to implement more pragmatic policies aimed at reducing the perceived threat of the public sector. It is well known that supranational institutions such as the World Bank, IMF, and the European Union frequently supervise the bulk of public sector reform projects (EU). The amount of World Bank and IMF-initiated initiatives and projects in the mid-1970s and mid-1980s demonstrates this. According to Andrews (2013), the number of World Bank-initiated and funded projects aimed at various nations' public sectors increased from 469 in the 1980s to around 3,235 in the early part of 2000. Moloney (2009) also said that this tendency may be seen in the portfolios of other development institutions, such as the Asian and African Development Banks. It is well known that supranational institutions such as the World Bank, IMF, and the European Union frequently supervise the bulk of public sector reform projects (EU). The amount of



World Bank and IMF-initiated initiatives and projects in the mid-1970s and mid-1980s demonstrates this. According to Andrews (2013), the number of World Bankinitiated and funded projects aimed at various nations' public sectors increased from 469 in the 1980s to around 3,235 in the early part of 2000. Moloney (2009) also said that this tendency may be seen in the portfolios of other development institutions, such as the Asian and African Development Banks.

Despite this, studies have revealed that the majority of changes started in the public sector of multiple economies were motivated by a desire to respond to political, social, and economic constraints on governments (Therkildsen, 2000). Other research on public sector reforms have discovered that the New Public Management (NPM) paradigm is frequently used to inspire public sector improvements (Lapsley & Pallot, 2000).

The NPM was the principal administrative blueprint that guided most of the Organization for Economic Cooperation and Development (OECD) countries' public administration reform agenda in the 1970s. The NPM concentrates mainly on the structural, organizational, and managerial changes in the public sectors of the OECD countries that embraced and used it. Pollit (2002) reflects on the NPM as ideas, vision, and a set of management approaches and techniques that emanate from the private sectors. The study concluded that NPM has succeeded in shifting the emphasis of the public sector from traditional public administration to general management. Therefore, the NPM intends to eliminate the line between the public and private sectors so that both the public and private sectors appreciate equally good management practices. NPM thus recommends some public administration theories



that will restructure the public sector, making it more efficient and consistent (Hood & Lodge, 2006).

Numerous public-sector changes are centered on financial management improvements. Most emerging economies throughout the world have undertaken and implemented financial management reforms such as the Integrated Financial Management Information System and the medium-term spending framework. The reforms were implemented in order to shape and improve the efficiency and accountability of public monies allocated to various organizations and ministries. According to Brignall and Modell (2000), public sector financial management encompasses all tasks related to budget implementation, control, accounting, reporting, monitoring, and evaluation. Effective and efficient public financial management has proven to be one of the most effective ways to ensure accountability and promote good governance (Muhammed, 2014)Pretorius and Pretorius (2008) also affirmed the previous work of Brignall and Modell (2000) and reiterated that public financial management concerns mobilizing revenues, spending, and all activities concerning debt management. Financial management also involves planning, controlling, implementing, and monitoring fiscal policies and activities, including accounting and auditing assets, revenue, expenditure and liabilities (Barata & Cain, 2011). Peterson (2007) observed that effective financial management is a recipe for good governance and, therefore, essential for accountability.

Public sector changes in Ghana predate the days of the Economic Recovery Program (ERP) in 1983. The ERPs were launched under the auspices of the World Bank and



the International Monetary Fund (IMF). Accountability is vital for Ghana to fulfill the social, economic, and political contracts between the government and the inhabitants who voted them to power. The general public who merits accountability from government officials needs access to certain vital information, without which serious assessment cannot be made. In its pursuit of making information accessible to people, the government has introduced some initiatives, including Budgeting and Public Expenditure Management Systems (BPEMS). The system is geared toward effective budget formulation, implementation, accounting, and reporting. Finally, it provides a computerized platform that runs the entire financial management systems of the government of Ghana. The BPEMS has encountered numerous challenges, hence the need for the government to implement a more transparent and workable system known as Ghana Integrated Financial Management Information Systems (GIFMIS). The GIFMIS uses the computerization of budget management and the government's accounting system to provide a more integrated financial plan that provides practical and transparent management of public resources.

1.2 Statement of the Problem

One of the most effective methods to establish accountability and promote good governance is through smart and efficient public financial management (Muhammed, 2014). According to Vani and Dorotinsky (2008), failing to achieve financial responsibility is a breeding ground for poor public accounting, poor spending control, cash mismanagement, and financial record mismanagement. A system that provides good financial management is required to establish financial responsibility 2.1



Understanding Public Financial Management. The government of Ghana, for the past decades, has rolled out programs that aim at providing financial accountability and essentially good governance. The reforms the government has pursued over the years aim to enhance and ensure financial accountability in Ghana's public sector. The reforms specifically target robust budget formulation and implementation and proper responsibility for government revenues, expenditure, assets, and liabilities. The reform programs have been embraced by World Bank and other donor agencies, which support the implementation and enforcement with some financial support (Minogue, 2000).

There have been many scholarly works on public sector management reforms. Most studies have concluded that the reforms' success depends on how effectively they are implemented. Polidano (2001) concluded that most reforms fail not because the contents are not laudable or ethical issues are not adequately followed but because of a lack of proper implementation programs. This is because any reform program's effective implementation needs the government's political will and improved infrastructure (Conrad, 2005).

In 2014, the government of Ghana launched the GIFMIS program for the 2015 budget implementation, which was intended to ensure proper financial management, accountability, and timely reporting. Studies have proven that implementing IFMIS has faced challenges in developing countries despite the considerable resources committed to its success (Barata & Cain, 2011). Therefore, this study examines the



implementation of GIFMIS and how it has impacted accountability and timely reporting in Ghana.

1.3 **Purpose of the study**

The purpose of the study is to ascertain the effectiveness of the Integrated Financial Management Information System and to find out whether its uses will enhance effective accountability, probity, transparency, and timely reporting.

1.3.1 **Research Objectives**

The objectives of the study include:

- To assess whether GIFMIS has played a crucial role in fighting corruption in public finance systems through effective and efficient revenue collection.
- ii. To examine whether the implementation of GIFMIS has promoted greater comprehensiveness and transparency of data across government institutions in the light of efficiency, transparency, probity, and accountability in financial management.
- iii. To evaluate whether GIFMIS has helped in promoting effective timely dissemination of information.
- iv. To find out how the introduction of GIFMIS has assisted in budget execution and the realization of revenue mobilization targets (Maximization of payment and commitment controls of budget).
- v. To examine the challenges in GIFMIS implementation.



1.4 Research Questions

This study seeks to find solutions to the following research questions

- i. Has GIFMIS helped in fighting corruption in the public sector in Ghana?
- ii. Has GIFMIS assisted in promoting greater comprehensiveness and transparency of data in public sector organizations in Ghana?
- iii. Has GIFMIS helped in promoting effective timely dissemination of information?
- iv. Has the introduction of GIFMIS assisted in budget execution and the realization of revenue mobilization targets?
- v. What are the main challenges of GIFMIS implementation?

1.5 Significance of the Study

This study will create awareness of GIFMIS implementation and other vital issues of public concern. This study will also help the policymakers of government machinery to identify the challenges facing the implementation of the GIFMIS in public sector institutions. The findings will therefore serve as a future guide in formulating policies in the reform setups in the public sector of the Ghanaian economy. The results of the research will further inform the donor partners and researchers about the performance of the implementation of GIFMIS in Ghana. This will help them in their future decision-making to contribute their quota to the system's success. This research will further come out with extant literature on Information and Communications



Technology-based reforms and GIFMIS in the public sector of the Ghanaian economy and neighboring countries.

1.6 **Definition of Terms**

Ghana Integrated Financial Management Information System (GIFMIS): This is an IT solution that can collect and organize financial information in a central database to support budget preparation, management, execution, and financial reporting.

Ghana Education Service (GES): Implementer of pre-tertiary educational policies and programs in Ghana.

Financial Statement Generator (FSG): is a powerful report-building tool for Oracle General Ledger.

Financial Report or Financial Statement: This is a formal record that depicts the financial position of a business at any point in time.

1.7 Delimitations, Limitations, and Assumptions of the Study

There are sixteen regional education offices, 260 districts, and more than 827 public Second Cycle Institutions in Ghana. Still, the study does not cover all the cost centers due to some limiting factors like



financial, logistics, and time constraints. As such, selected individuals within some of the cost centers were interviewed to represent the education sector in the whole country. The study's findings are believed to depict a fair representation of GIFMIS in the Ghana Education Service.

1.8 Useful Modules and Theories

The study of the integrated financial management information system should be essential in creating the relationship between the public and private sectors of the economy. The study will be done in a way that appraises IFMIS modules available in the Oracle Financials application. The Oracle Financials applications to be used in analyzing, making recommendations, and making conclusions in this research will include the following;

- a. General Ledger (GL)
- b. Cash Management (CM)
- c. Accounts Payable (AP)
- d. Accounts Receivable (AR)
- e. Fixed Assets (FA)
- f. Financial Statement Generator (FSG)
- g. Property Management (PM)

1.9 Methodology

In collecting data and facts for this research, a personal interview was conducted; questionnaires were prepared through google to collect responses from respondents.



Moreover, secondary data were gathered from the internet, libraries, notes, textbooks, journals, articles, and similar research.

1.10 Conclusion

This research work is grouped into five main chapters. The first chapter deals with the introduction and the general overview of the study. The second chapter covers the literature review. In this chapter, the study will review theories and writings of closely related studies and recognized authorities relevant to the study. In the third chapter, which is captured, methodology gives the reader an insight into various methods used in the research report to arrive at the study's findings. These include sources of information and how the information was gathered. The fourth chapter highlights the results of the findings, which consists of the presentation and analysis of data and information received. Finally, the fifth chapter puts the study's findings in a summary form, draws a conclusion, and gives recommendations and areas for future research.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter evaluates current theories or theoretical frameworks that can best explain the results or conclusions of the investigation. It reviewed the literature on GIFMIS, ICT in government operations, its applicability, and various ideas and aspects of accountability, probity, transparency, and timely reporting. The initial section highlights the meaning of Public Financial Management (PFM). The next section looks at the overview, merits, and goals of the GIFMIS. The chapter further focuses on the techniques to implement GIFMIS in public financial management. Theoretical framework and applicable models connecting the objective to the available literature for the study are also considered in this chapter. Finally, it gives the summary and conclusion of the chapter.

2.1 Understanding Public Financial Management

An examination of the literature on public financial management finds numerous definitions of general financial management (Pretorius & Pretorius, 2008). According to the Chartered Institute of Public Finance and Accountancy (CIPFA), public financial management is the system through which financial management resources are planned, directed, and regulated to enable and influence the efficient and successful fulfillment of public service goals. This definition of general financial management applies to dealing with the pressures of balancing limited resources with



expanding demands and expectations of the citizenry and with their obligation to spend the public funds judiciously. In another development, Simson, Sharma, and Aziz (2011) define general financial management as the collection of revenue and the allocation of these revenues to various activities in the form of expenditure and accounting for utilized funds. This means that public financial management has to do with the efficient and effective use of funds. They continue to explain that it is about taxing (raising revenue) and spending by the government and the impacts this has on resource allocation and income distribution. A comprehensive agreement points out that effective institutions and systems of public financial management have a critical responsibility in supporting the implementation of national development policies and ensuring poverty reduction (Public Expenditure Financial Accountability (PEFA), 2005). The nation's development is influenced, in part, by how effectively its government raises, manages, and expends public resources (Burger, 2008). Task Force on Public Financial Management (2009-2011) further submits that public expenditure should link more closely with the revenue side of the budget (especially taxation). Aid dependence can be reduced drastically if effective mobilization of resources and accountability for same by the government to the taxpayer citizens is embarked on regularly for the people to feel the long-term positive effects of their resources contributed.

According to CIPFA (2010), local governments contend with greater demands with little resources. They must progressively look to fresh and creative business models to generate revenue to meet service delivery in their localities. This is possible if there is trust in the utilization of these resources collected. The trust can therefore be



exhibited through exercising standards of probity and proper accountability in the use of public resources. Langlois and Beschel (1998) indicate that sound public financial management systems are potentially powerful instruments for preventing, discovering, or facilitating the punishment of fraud and corruption. There is the need to ensure inclusiveness in decision-making around the use of funds through the collection and collation of the units' and divisions' budgets during the preparation of the budget. Transparency in allocating and procuring resources should be one of the hallmarks of government institutions. There should be regular monitoring and independent audits and a rolling program of reporting and evaluation. Furthermore, the Department of Budget and Management (2012), stresses that public financial management encourages the local government to generate its sources of revenues and ensure the availability of resources to meet the people's priority necessities. At the same time, it inspires the public sector to manage limited financial resources to safeguard effectiness and efficiency in the delivery of outputs needed to achieve desired outcomes that will serve the needs of the community (International Federation of Accountants (IFAC), 2012). The local, district, and national policies are better transformed into actions to achieve value for money through effective and efficient public financial management systems by the public officers. An avenue for collective decision-making should be created to enable average citizens in the country to express their views on the matter of national interest.



2.2 Overview of GIFMIS

To replace the Budget and Public Expenditure Management System (BPEMS) Project, which was in operation between 1999 and 2008, Ghana Integrated Financial Management Information System (GIFMIS) was introduced in May 2009. GIFMIS was introduced to ensure authentic public financial management through reliable financial reporting, informed decision-making, and well-grounded planning for national growth. The components of GIFMIS are GIFMIS Financial, GIFMIS Budget module, and the Human Resource Information System (HRMIS). GIFMIS project was the 4th component of the Electronic Ghana Projects which was initiated to enhance efficiency, effectiveness, integrity, accountability, and timely reporting of the public resources entrusted to the hands of spending officers. It is an IT-based system for managing a budget and ensuring proper accountability of public sector funds. The project was funded by pool donor partners at the cost of US\$120.52 Million and was expected to end on 31st December 2014.

Following the Public Financial Management Act, 2016 (Act 921) of the Republic of Ghana, GIFMIS is the electronic platform used by the Government to

- a. manage commitments made against appropriation,
- b. process payment claims,
- c. record revenue and expenditure transactions, and

d. produce monthly, quarterly, and annual financial reports.

In effect, it is an integrated IT solution that can assemble and consolidate financial information in a central database to assist in budget preparation, management, execution, and financial reporting.



2.3 Advantages of GIFMIS

The impact of GIFMIS was found to improve and easily consolidate financial data, timely production of public accounts, transparency and record keeping, improved budgetary control, efficiency in payment processes, and a host of budget execution reports.

Unlike public financial management issues, attention paid to public expenditure outcomes has been less systematic in the recent past. A wealth of literature on general financial management systems in Ghana contains several policy recommendations. The government embraced the latter, which implements the Ghana Integrated Financial Management and Information System (GIFMIS) to improve budget comprehensiveness and consolidated cash management, monitoring and control of outstanding commitments, and payroll management. These efforts are expected to reduce aggregate and compositional budget deviations and prevent the accumulation of arrears. Indeed, a regular and comprehensive review of public expenditure is lacking in Ghana from an effectiveness, efficiency, equity, and sustainability perspective. Outcome reports are still scarce and do not provide functional categories. Significant statutory monies for health or education are not included in the consolidated fund (and lack accurate reporting systems), making aggregation of expenditure by program difficult. The National Development Planning Commission's annual progress reports (APRs) do not demonstrate a relationship between expenditures and outcomes beyond the alignment of expenditure to the general aims of successive Poverty Reduction Strategies. Only a few Ministries disclose APRs at the sector level, despite the fact that all are mandated to do so. Domestically financed



public investment project decision-making does not consistently require comprehensive cost-benefit analysis, the computation of financial and social economic returns, or the release of completion reports and effect evaluations.. The adequacy of the public sector labor force (in terms of skills composition, remuneration, and location) to ongoing and emerging challenges remains un-assessed. Implementation of GIFMIS is believed to have been addressing all these pertinent issues.

2.4 Objectives of GIFMIS

2.4.1 Strengthen Fiscal Discipline by Enhance Budget Implementation and Expenditure Control

Every country needs fiscal discipline to build a strong economy and maintain social justice. According to Paula Wagner, n.d, any good business person applies fiscal discipline to everything they do. The IFMIS system allows the government to track public expenditure using the budget and commitment modules and thus, provide a basis for controlling budget spending (Tsamenyi et.al., 2006; Diamond & Khemani, 2006; Kasumba, 2009). IFMIS has a budget and commitment modules. The budget module of the IFMIS enables the central government to set expenditure ceilings. On the other hand, the commitment module allows for the control of fund balances not disbursed at specific periods. According to Peterson (2007), the commitment module is critical or essential in avoiding public expenditure arrears.



Fiscal discipline is the ability of any government to maintain smooth monetary exercise and to sustain long-standing budgetary conditions. Failure to maintain fiscal discipline may lead to currency depreciation and inflation in the economy. Fiscal discipline leads to substantial economic stability. To maintain fiscal discipline, there should be a balance between government revenue and expenditure to avoid excess spending over income. Lack of fiscal discipline often results in a deficit.

Credit rating agencies are shown to be guardians of fiscal restraint in Paul Vaaler's "Credit Rating Agencies and Elections in Emerging Democracies: Guardians of Fiscal Discipline?" Governments in many "new democracies" of the developing world borrow and spend excessively in the lead-up to elections. However, better sovereign credit-rated nations borrow less, indicating that these organizations "punish" politicians who exhibit such political budget cycle behavior. According to Vaaler's study, organizations might assist young democracies in Sub-Saharan Africa avoid electorally motivated policy distortions that hinder long-term economic development.

2.4.2 Transparency and Accountability for Improved Public Service Delivery

In recent years, boosting public accountability has emerged as a vital method for improving public services and achieving the Millennium Development Goals (MDGs) (World Bank, 2004; Deverajan and Widlund, 2007). Debates regarding accountability have increasingly centered on two sorts of initiatives: (a) enhancing government transparency (putting previously opaque



information or procedures into the public domain) and (b) societal accountability (citizen-led action for demanding accountability from providers). The number of articles attempting to conceive, describe, and analyze social responsibility has increased. The literature has highlighted a lack of transparency and accountability as key elements that promote or contribute to the emergence of corrupt practices and inefficient financial management, particularly in the public sector (Oye, 2013; Ameen & Ahmad, 2011; Pathak et al., 2009). Transparency and accountability are viewed as the cure for eliminating or decreasing corruption, hence increasing the efficacy and efficiency of public financial administration (Pathak et al., 2009; Pretorius & Pretorius, 2009). The considerable literature on public financial management, on the other hand, finds that implementing IFMIS increases openness and accountability in public financial management. Kiilu and Ngugi (2014), for example, state that using IFMIS in public financial management enhances effective financial controls and accountability. Introducing IT and/or integrated systems in public financial management offers objectivity, transparency, accountability, and traceability of transactions and events in the financial management systems.

It is worthy to note that transparency leads to proper accountability in public service delivery. Every government is responsible for rendering transparency service to its citizenry and rendering fair accounts to them to maintain integrity. GIFMIS, if properly used, can address this challenge to ease the burden of improper accountability. Transparency gives access to the users of



the information to track the records to their satisfaction. It enables proper disclosure of financial and non-financial information in audited financial reports.

2.4.3 Reduce Corruption in Public Financial Management

Rose-Ackerman (2004) defines corruption as the abuse of public power for private gains or benefits. Corruption has significantly hindered economic development, especially in public financial management. The works of Toatu (2004) and Andersen (2009) confirm this assertion. According to Toatu (2004), corrupt practices in the public sector impeedes economic growth. The study by Toatu (2004) and Andersen (2009) identifies that there is a very strong correlation between the level of corruption and the size of the public sector. Developing countries are noted to have very huge public sectors. In effect, most developing countries record a high rate of corruption among their public sectors.

Literature on governance and accountability has recognized several factors or drivers of corruption in public management. The monopoly of power, discrimination, and lack of accountability and transparency has been recognized as the key drivers of corruption in the public sector (Ameen & Ahmad, 2011; Ameen & Ahmad, 2012; Bertot, Jaeger, & Grimes, 2010). Other authors also classified the drivers of corruption in the public sector as cultural, economic, and political factors (Oye, 2013). The identification of the drivers of corruption is vital to enable experts to put in place the correct



mechanism to deal with the situation. This will easily help to put an end to or decrease to barest minimal corrupt practices with the introduction of ICT initiatives in public financial management.

Several solutions to minimize the rampant corrupt practices in public financial management have been identified. The conventional method to battling or eradicating corruption in public financial management, according to Ameen and Ahmad (2012); Bertot et al (2010), has frequently focused on institutional changes, law enforcement, and social change. However, a plethora of current studies on public financial management and corruption have projected the introduction of ICT or integrated information systems in public financial management. For instance, Oye (2013), and Ameen and Ahmad (2012) argue that the introduction of IT in public financial management or the automation of public financial management processes enhances effective information sharing and monitoring of transactions. Rahman, Smith, and Agarwal (2009) also note that experience from many countries, both developed and developing, indicate that e-governance or the introduction of ICT initiatives in public financial management promotes greater transparency resulting in a reduction in corruption. Ameen and Ahmad (2011) note specifically that the introduction of ICT in public financial management can reduce corruption by lessening the discretion of officials and increasing transparency. These notwithstanding, Mahmood (2004) notes that introducing ICT or integrated information systems in public financial management will reduce corruption if both policymakers and public managers understand it. It also calls for the



willpower to transform and change the mindset. Moreover, the introduction of IFMIS or ICT in general financial management will only be practical if the system is designed with an appropriate conceptual framework that is enforceable.

2.4.4 Real-Time Information Sharing/ Timely Reporting

The literature has highlighted a lack of transparency and accountability as key elements that promote or contribute to the emergence of corrupt practices and inefficient financial management, particularly in the public sector (Oye, 2013; Ameen & Ahmad, 2011; Pathak et al., 2009). Transparency and accountability are viewed as the cure for eliminating or decreasing corruption, hence increasing the efficacy and efficiency of public financial administration (Pathak et al., 2009; Pretorius & Pretorius, 2009). The considerable literature on public financial management, on the other hand, finds that implementing IFMIS increases openness and accountability in public financial management. Kiilu and Ngugi (2014), for example, state that using IFMIS in public financial management enhances effective financial controls and accountability.

2.5 Approaches to Implementing IFMIS in Public Financial Management

Different authors have identified many approaches to implementing public policy or programs from the era of the pioneering work of Pressman and Wildavsky (1984). Extant literature on public policy or program implementation has come out with two



approaches: top-down and bottom-up as the conventional approaches to implementing public programs or policies. The two methods or perspectives of policy or program implementation will be discussed later.

Implementation has been conceptualized in several ways by diverse authors. For example, the pioneers of the implementation concept, Pressman, and Wildavsky (1984), described it as the numerous activities directed towards achieving set goals. O'Toole (1995), on the other hand, described policy implementation as the developments between the government's intention and the plethora of actions geared towards the realization of the objects of the choice. In effect, policy implementation embodies all activities that facilitate the achievement of a predetermined goal or set objective. Paudel (2009) succinctly hypothesized policy implementation as process, output, and outcome. Public policy implementation involves interrelated activities to execute set objectives or goals. These activities include the actions and inactions of the government or the policy decision maker. These activities aim to achieve a predetermined goal or objective(s). The achievement of the set or predetermined purposes of the various activities is or represents the output of the implementation. The results of the implementation should reflect the impact of the policy on the economy or cost center. The outcome of the implementation should also reflect the measurable and visible changes stemming from the implementation of the policy.

2.5.1 **Top-Down Approach**

In the top-down approach to implementing public policy or programs, a higher author formulates policy goals and the strategies to achieve them (Paudel,



2009). In this case, authorities exercise control over the environment and the various implementers or actors (Younis & Davidson, 1990). The higher authority here could be the head of the department, management of organizations, or political leadership of a country or an economy. The implementation strategies under this school of thought, reflect the views of the policy maker or the implementing authority without cognizing the input of the personnel at lower levels of the organization. According to Paudel (2009), the top-down model or approach to implementing policy or program highlights formal steering of problems and factors. Paudel (2009) further recapitulate that the foundations of the top-down approach are rooted in statutory language. This means rule promulgation emphasizing clarity, , monitoring, and independent decision-making of implementing authorities based on technical criteria.

The implementation of public policy and programs under this approach has received many criticisms in the literature. In the case of Berman (1978), it is argued that the top-down implementing approach could lead to resistance to new programs and policies. The author quickly adds that the top-down approach refuses to consider the necessity of earlier actions taken as it relies primarily on statutory language as its beginning point. The method further sees policy or statute framers as the important actors in the implementation of public policies or programs. In light of this, the views or inputs of the actors involved in the performance are disregarded.



2.5.2 Bottom-Up Approach

Contrary to the top-down approach, the bottom-up approach directs attention to formal and informal relationships (Paudel, 2009; Howlett & Ramesh, 2002). In this approach, the inputs of lower-level personnel (referred to as street-level bureaucrats) are considered in developing policies or programs and implementation procedures. These are deemed analytical in the implementation of the policies or programs. Several players are identified at the initial stages of the policy formulation and implementation in this implementation approach. According to Paudel (2009), the purpose is to establish a good relationship. The street-level bureaucrats are considered to have a better understanding of the challenges. To this, Paudel (2009) and Winter (2003) argue that the identification and involvement of several players in implementing public policies and programs facilitate the title of an effective and efficient implementation structure.

Bogason (2000) also contributes that the bottom-up approach to implementing policies and programs decreases resistance to change and facilitates the effective and efficient implementation of public policies and programs. Notwithstanding the upsides of the bottom-up approach, other authors have identified two main weaknesses of the bottom-up implementation approach. Thus, DeLeon and DeLeon (2002) note that the bottom-up implementation approach ignores the policy or program design processes. The author iterate that almost all programs are designed or initiated by people in authority and



'pushed' down on the people. Weaver (2009) also indicated that the streetlevel bureaucrats might sabotage the efforts of elected public officials since they (street-level bureaucrats) are not accountable to the public. The extant literature has identified two other essential strategies within the above identified conventional approaches for executing public financial management reforms in the public sector-phased and one-time implementation approaches or strategies (Hendriks, 2012). It is vital to note that the majority of these authors favor the phased approach to the implementation of IFMIS. For instance, Hendriks (2012) notes that IFMIS is a very complex and expensive system or program and thus, requires patience and a step-by-step approach to implementing the IFMIS activity. Rodin-Brown (2008) echoes a similar sentiment. According to Rodin-Brown (2008), a phased approach is ideal for implementing programs that affect organizational processes and functions. Hendriks (2012) adds that a phased implementation approach allows for regular monitoring, evaluation, and review of the project as it is being implemented. Frequency monitoring, evaluation, and review of the implementation will thus assist in the early detection of potential future challenges. To this, Rodin-Brown (2008) argues that it is hazardous to simultaneously implement too many components of a system. A phased or gradual implementation approach to implementing public financial management gives the best chance for the effective and efficient implementation of IFMIS.



2.6 Theoretical Framework

Institutional theory, Force-field theory, Fiscal decentralization, and resource dependency theories are chosen as the theoretical framework to guide this research. This section shall review these theoretical frameworks of public financial management that are considered relevant for the study.

2.6.1 Institutional Theory

Institutional Theory is a theory that has tried to address the issue of organizational behavior or actions. In light of this, Dacin, Goodstein, and Scott (2002) realized that institutional theory had been applauded as a potent theory in explaining individual and organizational action. According to Miles (2012), various organizational forms denote the distinguishing marks that characterize the organization at the initial stage of the corporate life cycle. The fundamental principle for the concept underlying the institutional theory, according to Miles (2012) and Scott I (2008), is that organizational structures and processes acquire meaning and stability in their downright rather than their effectiveness and efficiency in the pursuit of desired goals or objectives Despite several objections, the institutional theory has been used in numerous research projects or academic studies (Hoque, 2005; Collier, 2001; Greenwood & Hinings, 1996; Guthrie, Olson, & Humphrey, 1999). Hoque (2005) used institutional theory, for instance, to explain the motives behind the construction of management and accounting systems in the public sector.



According to the premise behind this study, the GIFMIS might serve as one of the organizational structures and procedures used by the government to assure effectiveness and efficiency in the management of public funds.

2.6.2 Force-Field Theory

The Force-field theory was first created to analyze occurrences in the physical sciences. The approach makes an effort to examine causal relationships and use scientific icon structures. (2003) (Bozak). Lewin extended and implemented the force-field theory in social research in 1951. Since then, the force-field idea has been widely applied in designing and executing change or reform programs in organizations or institutions. According to Kurt Lewin's force field theory, certain variables or forces present in or absent from the environment influence human actions and behavior. The approach gives a thorough overview of the several or distinct forces influencing organizational transformation and policy change (s). The idea emphasizes that other elements function as drivers and hurdles or restrictions to organizational or policy change. In developing nations, the implementation problems with the IFMIS and other public financial management reform programs might be explained using the force-field theory. Most public financial management reform programs have failed, particularly in developing nations. This failure has been linked to the inability to solve implementation problems. The efficient execution of the program necessitates a consistent commitment and enough resources because IFMIS is a complicated integrated computerized system.



Therefore, political and administrative support and the availability of appropriate resources are among the aspects that will help the efficient execution of the IFMIS program. The lack of these noted variables might make it more challenging to implement the IFMIS program effectively.

2.6.3 Fiscal Decentralization

There are several kinds of decentralization, such as political, administrative, fiscal, and others (Vu, Le, & Vo, 2007). The theory of Fiscal Decentralization is becoming a more widespread approach to promote public sector efficiency, accountability and effectiveness (Bahl & Linn, 1992). This study, therefore, focuses on fiscal decentralization. Amid fiscal decentralization, some responsibilities for revenues and expenditures are entrusted to the hands of lower levels of government. A UNDP (2005) report described fiscal decentralization as exerting more power on local governments to have authority and control in using and managing their financial resources. This is the extent to which sub-national entities are given autonomy to determine the allocation of their expenditures (Osoro, 2003).

Fiscal decentralization has become noteworthy for governments in their quest to attain their anticipated development aims and objectives at the local levels (Dick-Sagoe, 2012). Fiscal decentralization has become the considerable deliberation in the decentralization process of which Ghana is not in isolation. It involves internally and externally generated sources of revenue and



utilization of expenditure. To support the decentralization process, the primary features of a system for decentralized financial management should include:

- a. transparency of allocation,
- b. predictability of the amounts available to local institutions, and
- c. local autonomy of decision-making on resource utilization (Dick-Sagoe, 2012).

Fiscal decentralization is considered better equipped to provide an adequate service to the local population than the central government (Ebel & Yilmaz, 2002). According to Ezcurra and Pascual (2008), decentralization may improve the potential for achieving Pareto efficiency and greater economic equality across territories. Many authors have indicated that fiscal decentralization is regularly viewed as a means of increasing democratic participation in the decision-making process and allowing for greater transparency and accountability (Ebel & Yilmaz, 2002; DablaNorris, 2006). Notwithstanding this top view, there is little empirical support to substantiate the claims of the economic benefits of fiscal decentralization at the local level (Rodríguez-Pose & Bwire, 2004). In general, the literature on decentralization and economic growth in development is still in its genesis (Bardhan, 2002). This cynicism is influenced by challenges often associated with decentralization, such as increasing deficits, lower quality of government decisions, corruption, increased influence of interest groups, and greater interregional and interdistrict inequalities, which may lead to lower overall



local economic growth (Prud'Homme, 1995). Rodden (2002) even considers it unfavorable, especially in the case of developing and transition economies. The decentralization process in Ghana provides a framework for a locallycontrolled development and planning system. To achieve this process, district assemblies were established and charged as the local planning authorities responsible for the general development and governance of their metro, municipal and district assemblies (Dick-Sagoe, 2012). This has made the metro, municipal, and district assemblies in Ghana the pivot point in the provision of service delivery at the local government levels.

2.6.4 **Resource Dependency Theory**

The resource dependency theory is attributed to Pfeffer (1973); Pfeffer and Salancik (1978). In their study, Pfeffer, and Salancik (1978), resource dependency theory argues that "the key to organizational survival is the ability to acquire and maintain resources". In addition, Hatch (2013) throws more highlights on this definition by explaining that the district's reliance on its environment is a function of its need to acquire resources to meet the service delivery. The Resource dependency theory describes in detail that all organizations rely on help from their environment (Fadare, 2013). These resources are in the custody of other organizations within the environment. This theory advocates that the holders of these resources can exert power and control over organizations that need help. Thus, organizations' survival and success are contingent on the ability to control the flow of resources (Fadare,



2013). According to Hillman, Canella, and Paetzold (2000), the resource dependency theory concentrates on assemblies' role in providing or securing essential resources to the district through their connections with the external environment. The growth and development of the community are, to a large extent, dependent on the number of resources available to it. This theory is seen to rely on a few straightforward principles.

Firstly, the district needs resources to embark on its purposes for development.

Secondly, the community can acquire help from its environment or other organizations. Resource dependency theory provides assemblies with a perspective for comparing different strategies, emphasizing the short-term coordination costs and the long-term prospects of the district's growth and development (Hillman, Canella & Paetzold, 2000).

Nevertheless, Fadare (2013) recommends that the district cannot develop if it cannot guarantee the continued supply of resources critical for its development. Using a predictive resource dependency model, Sheppard (1995) found significant, consistent positive relationships between district development and the present level of the district's resources, geared toward critical resource providers and the stability of the district environment. Against this background, robust efforts are made to ensure the availability of resources needed for the growth and development of the district. Resource dependency theory provides valuable guidance for decision-makers and managers in making decisions. The fiscal landscape changes and challenges



public managers (Malatesta& Smith, 2014). National Governors Association (NGA) and the National Association of State Budget Officers (NASBO) (2012) report a drastic decrease in state and local government revenues and collections. The presumption in this theory is that district assemblies, apart from their local sources of funds, are also funded from a central source of government revenue, where the limited funds available create competition with other government bodies for funding. Assemblies must have resources and capabilities, consider their environment, negotiate with relevant resources, and exploit their opportunities (Matthews & Shulman, 2005). According to Nienhuser and Werner (2008), resource dependence theory significantly explains organizational behavior, structure, stability, and change.

2.7 Useful Models

Models are helpful tools in science education that may enhance explanations, spark debate, make predictions, offer visual representations of complex topics, and create mental models (Treagust, Chittleborough, and Mamiala, 2003). Models are useful tools in research that enable data collected to be examined and interpreted for understandable information. The researcher would apply statistical and technology acceptance models, among others.

2.7.1 A statistical Model

The mathematical description of observing data is referred to as a statistical model. Data analysts can comprehend and interpret the information when they use multiple statistical models to analyze the data they are looking at. A



statistical model, to put it simply, is a means to approximate reality (i.e., the thing that creates your data) in a simplified, mathematically codified fashion and, if desired, to make predictions based on this approximation. The mathematical equation that is applied is the statistical model.

2.7.2 Technology Acceptance Model

According to Chuttur (2009), the essential elements of the Technology Acceptance Model (TAM) are those causal connections that emerge from beliefs, attitudes, intentions, and behaviors. The TAM, created by Fred Davis and Richard Bagozzi, aims to describe how users—or those who are supposed to employ new technology—come to embrace it. Davis (1989), and Venkatesh, Morris, Davis, and Davis (2003) highlighted perceived utility and ease of use as the two essential characteristics that substantially impact whether consumers or intended users adopt IT. According to Davis (1989), perceived usefulness is "the extent to which a person feels that utilizing a certain technology will better his or her employment." Davis (1989) added the definition "the degree to which a person feels utilizing a certain system will be free from effort" to their definition of perceived ease of use. This tends to indicate that people or IT system users are more likely to accept and/or employ a new IT system if it merely enhances work processes or is pertinent to their work. The idea has been extensively used to explain and forecast users' acceptance of information technology, particularly in private organizations. However, Lin, Fofana, colleagues (2011), Gupta and Jana



(2003), and others utilized the TAM to evaluate the adoption of e-government projects in the public sector. The findings of their experiments show that core TAM theory constructs considerably impact user intentions concerning egovernment goods.

2.8 Summary and Conclusion

The scholarly literature and theories on the topic were reviewed in this chapter. The existing research has been reviewed, and it is evident that more needs to be done to determine how effective and efficient GIFMIS has been in ensuring accountability, probity, transparency, and prompt reporting in identifying corrupt practices in Ghana. To the best of the researcher's knowledge, this is the first piece of literature of its kind. Therefore, there is a serious need for this study because there is a gap in the literature that needs to be filled.



CHAPTER THREE

METHODOLOGY

3.0 Introduction

The methodology, according to Bryman and Bell (2004), offers the framework or approach for doing the research or study. The methodology is crucial to every research project since it outlines the systematic methods that must be followed to achieve reason and communication. The methods, strategies, and/or processes used to accomplish the study's objectives are covered in this chapter. The respondents are described in depth along with their meticulous selection in the chapter that contains information on the research population. The chapter also gives a brief overview of the study design, the data collecting instruments utilized, the method for administering the research instrument, the data gathering process, and data analysis.

3.1 Research Design

The project is a comparative case study and will employ exploratory qualitative research as its technique of information gathering. Berg (2001) explains the comparative case of entities as the methodical collection of information or data about a certain organization or phenomena to provide the researcher with a greater understanding of the existence of the entity or issue under investigation. Research design, according to Kerlinger (1986), is the thought-out strategy and framework of an inquiry that enables the researcher to discover or gain answers to research-related problems. In this study, the researcher used the exploratory research



design. The qualitative approach to the research was used in this study. The qualitative method to study is the best way to examine phenomena, people/subjects, and the significance that people/subjects give to social or human problems (Creswell, 2009). The implementation of public financial management reform programs is seen by the researcher as a complicated phenomenon; as a result, a qualitative research technique is the best one to use.

In the qualitative research approach, the researcher uses the case study technique to accomplish the study's objectives. According to Ahrens and Chapman (2006), the case study methodology is the predominant method used in qualitative accounting research. The authors go on to say that the qualitative case study technique serves as a useful way to develop a thorough grasp of organizational procedures and accounting practices. The primary goal of the study is to analyze how the GIFMIS program being implemented has aided in effective accountability and timely reporting. The researcher may better understand the reason for adopting the GIFMIS as well as the effective accountability and timely reporting the qualitative case study technique. As a result, the case study methodology aids the researcher in gaining a thorough grasp of the reasons for the adoption of the GIFMIS program as well as the effective accountability and timely reporting methods and procedures.

The researcher chose to utilize a qualitative technique because he wanted to gather detailed information and rich data about how ICT affected financial management in Ghana, using GIFMIS as a case study. Peninsula Research and Development Support Unit (RDSU, 2009) claims that qualitative study enables research participants to reply



to queries with greater explanations. This claim made by RDSU is supported by Sofaer (1999), who argued that qualitative research techniques are crucial for producing thorough and high-quality descriptions of complex phenomena and, as a result, highlighting the experiences and interpretations of different events by research participants with different stakes. On the other hand, the exploratory method will be used for several reasons. It helps the researcher gain new information or insight, come up with fresh ideas, or add to their understanding of a topic, among other things (Burns & Grove, 1998).

3.2 Research Strategy

A research strategy, according to Creswell (2009), is a set of studies that may be conducted using qualitative, quantitative, or mixed methodologies designs or models and that provide detailed instructions on how to carry out a particular study. Thus, the five main methodologies accessible within the qualitative approach were characterized by Creswell (2007) and Baxter and Jack (2008) as narrative research, phenomenology, ethnographies, grounded theory studies, and case studies. The exploratory case study was used in this research project as part of the case study approach. A case study, according to Yin (2003), is an empirical investigation that explores current phenomena in-depth and in the context of real-world events, particularly when the distinction between the phenomenon and the setting is ambiguous. In an area where little is known or little research has been done, an exploratory case study entails the acquisition of thorough, intensive information about a single case or a limited number of related instances (Yin, 1994). To better



understand how the use of ICT has enhanced financial management in Ghana's public sector, GIFMIS was utilized as a case study. To improve and maintain openness in financial dealings, particularly in Ghana's public sector, GIFMIS, a software system that aids in synchronizing financial processes, was adopted. The researcher was particularly interested in this method because he wanted to fully comprehend the background of the study and the procedures being used. Additionally, there isn't much existing literature in the subject field, and there hasn't been much in-depth research done. As a result, more research is needed before this topic can be explored. Data was mostly gathered through interviews to address the study topics. It was also utilized to observe supplementary material, such as the GIFMIS operational manual.

3.3 Research Paradigm

The paradigm is the core worldview or belief system that directs the researcher in important ontological and epistemological decisions as well as technique choices (Guba & Lincoln, 1994). A paradigm was only described as the inquirer's perspective by Creswell (2007). This worldview is significantly impacted by the student's field of study, the opinions of advisors and instructors in a field of study, and prior research experiences. Also in Guba and Lincoln (1994), five key paradigms—Critical Theories, Positivist, Post-positivist, Constructivist, and Cooperative/Participatory Paradigms—were recognized for application in modern research. Similar to Creswell, who recognized four main worldviews employed in research, include postpositivist/positivist, advocacy/participatory, constructivism/interpretive, and pragmatism. The paradigm framework, according to Joubish et al. (2011), is



composed of philosophy, ontology, epistemology, and methodology. As a result, Krauss and Putra (2005) revealed that epistemology, ontology, and methodology are closely related. While ontology involves understanding reality, epistemology explains how we know that reality exists, and methodology involves the specific practices created to obtain knowledge of reality.

3.4 Target Population

A population, according to Burns and Grove (2003), is made up of all components that meet the requirements to be included in a given study. In essence, the target population is made up of all participants in a group of actual or imagined individuals, activities, or goals from which the researcher hopes to draw general conclusions (Grove, 2003). The directors, financial officers, budget officers, procurement officers, storekeepers, internal auditors, and general personnel of Ghana Education Service who may or may not use GIFMIS in their everyday duties make up the target group for this study. The study's focus was on the Ghana Education Service's personnel at headquarters, regions, districts, and second-cycle institutions.

3.5 Sample Design

To pick personnel and expenditure officers from various institutions and offices within the Ghana Education Service, the research employed a deliberate criteria sampling strategy. This kind of sampling entails searching for instances, people, or events that meet a specific need (Plays, 2008). The Ghana Education Service's staff, administration, and directors serve as the study's sample population. Respondents



who worked for the GES Headquarters, Regional Education Offices, District Education Offices, and public Second Cycle Institutions received a lot of attention from the research.

3.6 Data Source

The data for the study was obtained from primary sources that came in the form of well-structured questionnaires. The questions were designed in such a way to suit the respondents for the survey. Interview questions were presented to the respondents on a google link in their Whatsapp or emails. A total of 113 respondents were interviewed in the Ghana Education Service, out of which 59 respondents were top-level management staff, 40 middle-level staff, and 14 junior staff working across the length and breadth of Ghana.

3.7 Data Analysis

Data analysis is a crucial part of the research process; thus, it must be done correctly to communicate the appropriate messages to the decision-makers and other players who may require them. Data analysis highlights what would have been essential to examine if we had known (Patton, 2002). Since the study used the qualitative research technique, content analysis, a procedure for the categorization of verbal and behavioral data for classification, summarization as well as tabulation will be employed as the means of analyzing the data collected from the field (Hancock, 1998). Data analysis, according to LeCompte (2010), is the conversion of data into research findings. A variety of qualitative data analysis procedures or techniques have



been developed by researchers. In qualitative data analysis, for instance, LeCompte (2010) identified five primary processes. The five processes include clearing up, locating stuff, generating groupings of items that are repeatable, developing patterns, and putting together structures. According to Miles and Huberman (1984), data analysis may be divided into three different flows of activity. Data reduction, data presentation, and conclusion are the current activities in data analysis, as indicated by Miles and Huberman (1984).

In data reduction, raw data that appears in edited notes is chosen, focused, simplified, abstracted, and transformed. This happens throughout the data collection phase of the investigation. At this point, there are substantial amounts of data that have been obtained or collected and summarized in such a way that inferences may be made and validated. The data display shows the next flow of the qualitative data analysis as described by Miles and Huberman (1984). The organization of information that allows a researcher to conclude is what data presentation is all about. Data reduction, data presentation, and data exclusion are the current tasks in data analysis as outlined by Miles and Huberman (1984). Hancock (1998) asserts that there are two ways to analyze the content of data gathered from the field: at the most basic level, which entails a descriptive account of the data gathered, and at a higher level, which entails interpretative analysis and also examines the attribution of meaning to various respondents' responses.

Making conclusions or meanings from the reduced and presented data constitutes the ultimate activity in the concurrent flow of data analysis operations. Drawing conclusions, patterns, irregularities, explanations, causal hypotheses, and potential



configurations must all be taken into account, according to Miles and Huberman (1984). The information acquired for the study was qualitatively analyzed using the concurrent techniques of qualitative data analysis recommended by Miles and Huberman. The Miles and Huberman methodology for analyzing qualitative data has been adopted and employed in a broad variety of qualitative investigations. The information received from the interviews would first be organized into topics per the study's goals. The data would next be analyzed under the prominent themes that were discovered in the empirical materials or supporting data. The most important issues that came out of the data processing are the history and background of the GIFMIS program, the motives for its execution, prevention of fraud and promotion of good governance, as well as the effective accountability, transparency, probity, and timely reporting to stakeholders to assist in achieving Sustainable Development Goals (SDG) – agenda 2030. Analysis and discussion of the results were conducted following these principles.

3.8 Ethical Considerations

The researcher solicited the respondents' voluntary involvement and agreement. The researcher also got the interview subjects' permission to record the conversation when required to facilitate accurate transcription. The respondents received guarantees that the information they had submitted would be kept in strict confidence. The researcher gave respondents plenty of time to respond to the questions to prevent mistakes and inaccuracies. Finally, participants were only included after their informed consent was acquired. They were informed that it was their choice whether or not to participate and that their participation had nothing to do with evaluating their jobs.



3.9 The Legal Frameworks

Some Acts have been enacted, and others have been changed to guarantee compliance with the application of the GIFMIS in the effort to have it implemented throughout Ghana's public sector. The 1992 Constitution and Local Governance Act 2016 (Act 936) is intended to provide a general legal framework for the governance of Ghana; it further enjoins the Parliament of Ghana to enact essential laws to ensure the smooth implementation of the decentralized program which GIFMIS seeks to achieve. In light of the above, the following acts or regulations have been created or amended to ensure the smooth implementation of GIFMIS in Ghana.

- Public Financial Management Act, 2016 (Act 921)
- Public Financial Management Regulations, 2019 (L.I. 2378)
- Public Procurement (Amendment) Act, 2016 (Act 914)

Financial and Accounting Instructions for Schools and Offices (Amended,2021) Three fundamental principles that form the basis of effective public financial management are transparency, accountability, and probity. According to Sustainable Development Goal (SDG) 16.6, establishing effective, transparent, and accountable institutions at all levels calls for strong coordination across critical institutions. To strengthen good governance through efficient public financial management systems and processes, the Commonwealth Secretariat has identified effective partnerships between key oversight institutions. These institutions include internal audit and public procurement oversight on the one hand and oversights by supreme audit institutions and public accounts committees on the other, as essential. Public procurement, which often makes up a significant portion of government spending, has



a direct impact on effective leadership, corruption, and the provision of public services. Therefore, as SDG 16.5 aims, strong control of public procurement may significantly lower bribery and corruption in all of its manifestations. The audit procedure must thus enhance and accurately represent the internal audit's control of public procurement.

3.10 Summary and Conclusion

This chapter looked at the data and methodology for this study. Specifically, the chapter discussed the research design, data source, and collection to achieve the study's objectives.



CHAPTER FOUR

RESULT AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter considers an analysis of the data and a discussion of the outcomes based on the study's objectives. The respondents were selected based on their experience and the proportional importance of their responsibilities in implementing the GIFMIS program. The empirical and theoretical literature on GIFMIS and other comparable software was described in the second chapter of this study. The study findings are presented in this chapter in three main sections, including descriptive analysis, data analysis, and result discussion. Preliminary data analysis was performed before the study of the primary data. All 113 questionnaires presented to the staff of Ghana Education Service were returned with 100%t valid success rates. The study presents the results and findings at this stage, beginning with the data's description.

The study used the Likert Scale to identify respondents who strongly agreed with the efficacy of GIFMIS in each of the pertinent questions through to the respondents who strongly disagreed with the effectiveness of GIFMIS applications.

4.1 **Demographic Features of Respondents**

The study sought to identify some characteristics of the 113 respondents surveyed for the study. The researcher selected the sample based on targeted units using the nonprobability sampling method of random sampling, precisely the purposive sampling technique. This method ensured that representative samples of all the known elements



of the population were covered. Figures 4.1.1 to 4.1.8 depict the demographical characteristics of 113 respondents in the research.

4.1.1 Gender of Respondents

Regarding the gender of respondents, data was gathered to assess the sex grouping of respondents. The survey shows that out of 113 respondents surveyed for the study, 87, representing 77%, are Males, while 26, representing 23%, are females. This implies that majority of the respondents who agreed to respond to the questionnaire were males. However, the skewness of this gender information did not change the outcome of the findings and hence does not make the results of the finding invalid. Details are represented below.

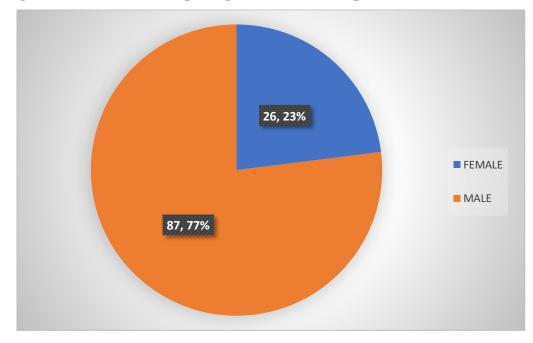


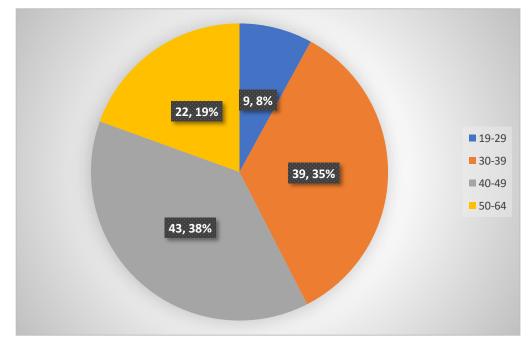
Figure 4.1.1: Pie Chart Depicting Gender of the respondents

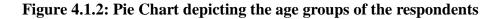
Source: Field Survey, June 2021



4.1.2 Age of Respondents

Again, data on the age of respondents were sampled for the study. Five age categories were created from 19 years to 64 years. The survey result indicates that respondents who fall within the age group of 40-49 years constitute the majority of 43, representing 38.1 percent, followed by the age group of 30-39, which recorded 39 respondents representing 34.5 percent of the total respondents. Respondents from 50-64 years also recorded 20 respondents representing 19.5 percent of the total respondents. The minority age group of the respondent was between 19-29 years inclusive, constituting 9 respondents representing 8% of the respondents.



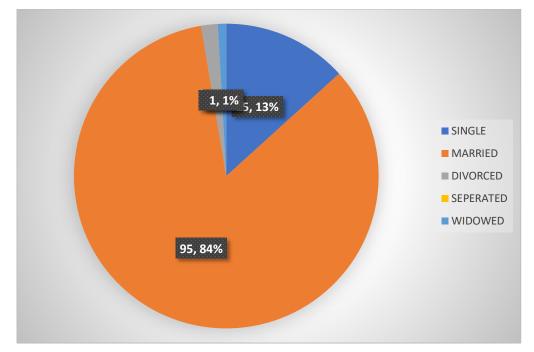


Source: Field Survey, June 2021

4.1.3 Marital Status of Respondents

The data analysis further examined the marital status of the respondents who accepted to respond to the questionnaire. The study result showed that 95 respondents representing 84 percent are married, followed by 15 respondents representing 13.3 percent are singles, while 2 respondents representing 1.8 percent are divorced and finally, 1 respondent representing 0.9 is a widow.

Figure 4.1.3: Pie Chart showing the marital status of the respondents



Source: Field Survey, June 2021

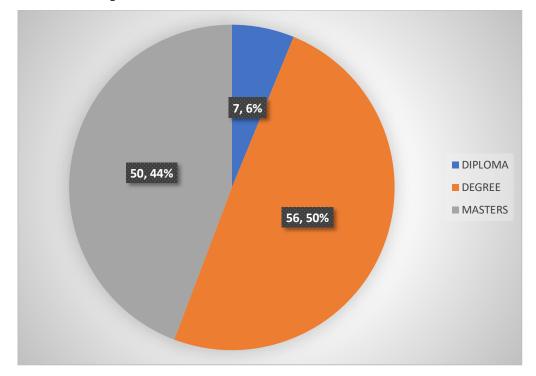
4.1.4 Educational Background of Respondents

The data analysis continued to examine the educational background of the respondents who accepted to respond to the questionnaire. The study result showed that at least all of the respondents have a standard level of education from College, Polytechnic, or University. The survey found that 56 of the respondents, representing 49.6%, had first degrees, 50, representing 44.2%,



also had master's degrees, while the remaining 9, representing 6.2%, were diplomats. The respondent's level of education means respondents could read and understand the questions with little assistance, thus abolishing any partiality in answering the questions.

Figure 4.1.4: Pie Chart depicting the educational backgrounds of the respondents



Source: Field Survey, June 2021

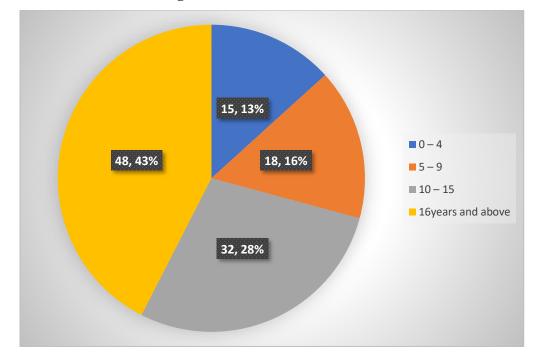
4.1.5 Working Experience of Respondents

Moreover, the researcher wanted to know when respondents have been working with the Ghana Education Service. The study results show that the majority of respondents have been working with the Ghana Education Service for 16 years and above; thus, 48 respondents represented 42.5%, followed by the 10-15 years group of 32 representing 28.3%, while 5-9 years group are the



next with a total of 18 respondents representing 15.9% and finally 0-4 years category who are 15 in number representing 13.3% of the respondents. This analysis shows how most of the respondents have many working experiences in the Ghana Education Service.

Figure 4.1.5: Pie Chart depicting the number of years respondents have been working with GES



Source: Field Survey, June 2021

4.1.6 Number of years respondents have been using GIFMIS

The study further focuses on the working experience of the respondents so far as GIFMIS is concerned. The outcome indicated that 72 out of 113 respondents, representing 63.7%, had 0-4 years of experience working with GIFMIS. This is followed by 28 respondents representing 24.8% who have 5-9 years of experience. Moreover, 4 respondents representing 3.5%, had 16 years or more experience, while 2.7% representing 3 respondents had 10-15



years of experience. However, 6 respondents, who represented 5.3%, had

never worked on GIFMIS.

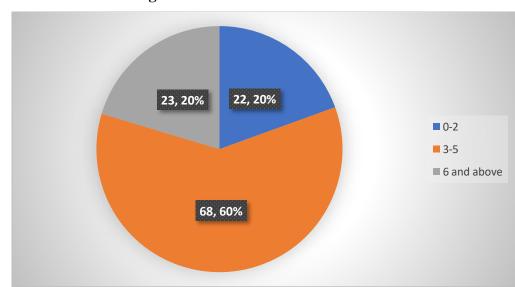


Figure 4.1.6: Pie Chart depicting the number of years respondents have been using GIFMIS

Source: Field Survey, June 2021

4.1.7 **Position of Respondent at GES**

The study further looked at the positions currently held by the respondents in the Ghana Education Service. The outcome indicated that 82 of the respondents were accounting personnel representing 73%, 10 of them were general staff representing 9%, and six respondents each from Directors and internal auditors representing 5%. It also showed that five respondents were headmasters, two supply officers, and two payroll officers, representing 4%, 2%, and 2%, respectively. It is worth noting that the majority of the users of the GIFMIS in GES at the time of the research were accounting staff; hence the skewness provides fair representation.



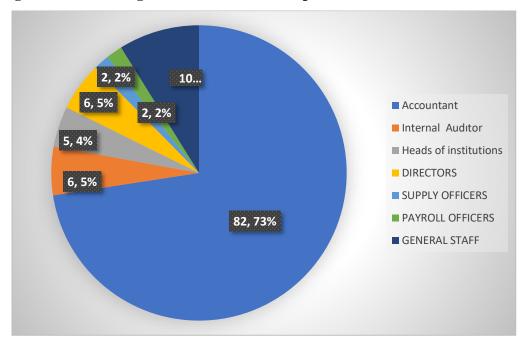


Figure 4.1.7 Showing Current Position Occupied as a Staff of GES

Source: Field Survey, June 2021

4.1.8 Rank of Respondents at the GES

At this juncture, the research looked at the managerial ranks and positions of the respondents in GES. The results indicated that 59 respondents representing 52%, were those at the senior executive levels of the service. Moreover, 40 out of 113, representing 36%, were middle-level staff of GES, while 14 respondents representing 12%, were lower-level employees. The results at this stage may be unbiased since most respondents fall within the senior executive and middle-level management.



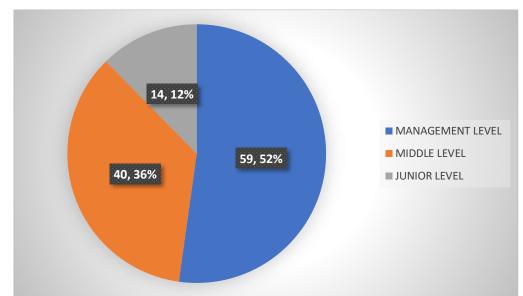
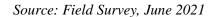


Figure 4.1.8 Showing Rank of Respondents at the GES



4.2 Analysis of Objective

The research looked at the five thematic areas to analyze. These areas are:

- a. Effective and efficient revenue collection
- b. Efficiency, transparency, and accountability in financial management
- c. Timely dissemination of information
- d. Maximization of payment and commitment controls of budget
- e. Challenges associated with the use of GIFMIS

4.2.1 The Impact of GIFMIS on Effective and Efficient Revenue Collection

From figure 4.2.1, 22 respondents representing 19.3%, and 39 respondents representing 34.2% strongly agreed and agreed, respectively, that the GIFMIS has a high impact on effective and efficient revenue collection. 26 respondents representing 22.6%, remained neutral about this contention. Only 17



participants represented 15.3%, and 10 respondents represented 8.6% disagree and strongly disagree, respectively. The results at this stage indicated that GIFMIS has significantly contributed to meeting the revenue target of the economy. This is similar to the research of Owusu (2016), who established that GIFMIS had contributed significantly to efficiency in tax payments through electronic fund transfer.

The daily operational activities cost has decreased due to the incorporation of GIFMIS. This is in line with the ability of GIFMIS to lessen the cost of reporting budgetary and financial statements, as seen in the study of Tchao, Keelson, Aggor, and Amankwa (2017). It has also enhanced the revenue generation of the Ghana Revenue Authority through Electronic Fund Transfer (EFT). Moreover, the results also showed that it has the potential to strengthen internal controls to safeguard public resources. Again it has aided in reporting budgetary and financial statements in a timely and cost-efficient manner. Finally, the inference indicated that the operation of GIFMIS in a single treasury account would reduce borrowing costs in financing government activities.

Similar research conducted by Oro and Ogar (2016) indicated that GIFMIS had made a significant stride in reducing borrowing costs of financing government activities through the operation of the Treasury Single Accounts system. This suggests that the majority of respondents believe that GIFMIS has a high impact on effective and efficient revenue collection.



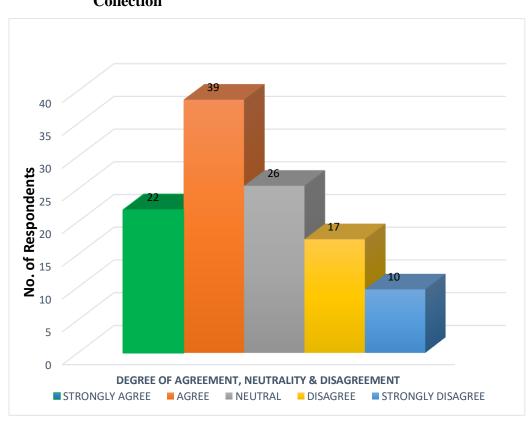
Table 4.2.1: Showing the Impact of GIFMIS on Effective and Efficient Revenue Collection

THE IMPACT OF GIFMIS ON EFFECTIVE AND EFFICIENT REVENUE COLLECTION

DEGREE OF AGREEMENT, NEUTRAL OR DISAGREEMENT	FREQUENCY	PERCENTAG E
STRONGLY AGREE	22	19.3
AGREE	39	34.2
NEUTRAL	26	22.6
DISAGREE	17	15.3
STRONGLY DISAGREE	10	8.6
TOTAL	113	100.0

Source: Field Survey, June 2021

Figure 4.2.1: The Impact of GIFMIS on Effective and Efficient Revenue Collection



Source: Field Survey, June 2021



4.2.2 The Extent to Which GIFMIS has Helped to Enhance Efficiency,

Transparency, and Accountability in Financial Management at GES

Aduam (2016) stipulated that the introduction of GIFMIS has aided to advance the operation of government agencies in Ghana. From figure 4.2.2, 22 respondents representing 19.6%, and 37 respondents representing 32.4% strongly agreed and agreed, respectively, that the GIFMIS has immensely aided in promoting transparency, accountability, and efficiency in financial management at GES agrees with the findings of Yeboah (2015). 24 respondents representing 21.1%, remained neutral about this assertion. Only 20 participants represented 17.7%, and 10 respondents represented 9.2%, disagree, and strongly disagree, respectively. The responses indicate that GIFMIS effectively promotes transparency in budget execution at Ghana Education Service and highly encourages accountability in financial reporting to stakeholders. The research response showed that GIFMIS facilitates payments from MDAs and Treasury to government suppliers through EFT, and the Inventory of government assets is loaded into the GIFMIS to safeguard transparency in the management of government property. The researcher's responses point to the fact that GIFMIS prevents fraud and promotes good governance. This suggests that most respondents believe that GIFMIS has a high impact on Efficiency, Transparency, and Accountability in Financial Management. This is consistent with studies done by Kwakye (2016), who found that GIFMIS significantly decreased the chance of fraud.



Table 4.2.2 Showing the Extent to Which GIFMIS has Helped to EnhanceEfficiency, Transparency and Accountability in FinancialManagement at GES

THE EXTENT TO WHICH GIFMIS HAS HELPED ENHANCE EFFICIENCY, TRANSPARENCY AND ACCOUNTABILITY IN FINANCIAL MANAGEMENT AT GHANA EDUCATION SERVICE.

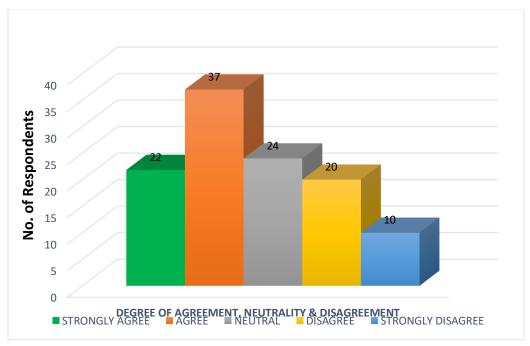
DEGREE OF AGREEMENT, NEUTRAL OR DISAGREEMENT	FREQUENCY	PERCENTAGE
STRONGLY AGREE	22	19.3
AGREE	39	34.2
NEUTRAL	26	22.6
DISAGREE	17	15.3
STRONGLY DISAGREE	10	8.6
TOTAL	113	100.0

Source: Field Survey, June 2021

Figure 4.2.2 Showing the Extent to Which GIFMIS has Helped to Enhance

Efficiency, Transparency and Accountability in Financial

Management at GES



Source: Field Survey, June 2021



4.2.3 Timely Dissemination of Information for Public Financial Management

From figure 4.2.3, 17 respondents representing 14.7%, and 41 respondents representing 36.3%, strongly agreed and agreed, respectively, that the GIFMIS enhances timely information sharing among agencies and departments. 29 respondents representing 26%, remained neutral about this claim. Only 18 participants representing 15.6% and 8 respondents representing 7.4%, disagree and strongly disagreed, respectively. This is in line with a study by Bawole and Adjei-Bamfo (2019) who hold the view that GIFMIS has reduced the time wasted among staff drastically as a result of the reduction of paper works in the daily activities of workers. The research indicators proved that GIFMIS had enhanced the timely dissemination of information among agencies and departments because it is just a click of a mouse or a key on a computer to send a message. Again, at this stage, the results showed that decision-making is based on reliable information due to GIFMIS. The system makes daily activities easier and faster by ensuring timely cash and treasury management. Moreover, it has improved upon delivery of services by making information readily available to citizens in the country. Data for management decision-making is provided accurately and timely by this system. Information sharing among management and other relevant stakeholders is made more accessible as a result of the incorporation of GIFMIS services. This suggests that information sharing among management and other relevant stakeholders is made easier by incorporating GIFMIS services. This supports a similar study conducted by Nwankwo,

59



(2017) in Nigeria where it was observed that GIFMIS has impacted positively

the smooth and timely dissemination of information. The key function of

GIFMIS is to ensure proper service delivery (Ohemeng & Asiedu, 2016). As

can be observed, the respondents agree with the statement that GIFMIS has

helped improve service delivery by providing citizens with better access to

information concerning public financial management.

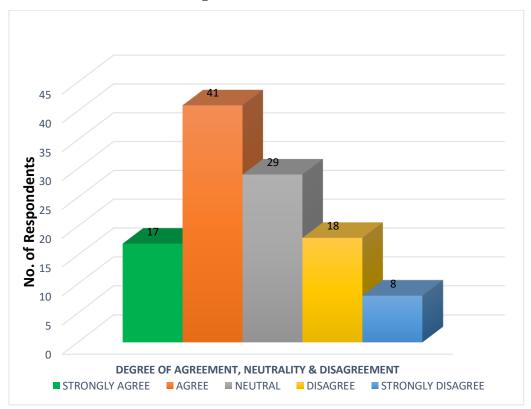
Table 4.2.3 Showing Timely Dissemination of Information for Public Financial Management

TIMELY DISSEMINATION OF INFORMATION FOR PUBLIC FINANCIAL MANAGEMENT

DEGREE OF AGREEMENT, NEUTRAL OR DISAGREEMENT	FREQUENCY	PERCENTAGE
STRONGLY AGREE	22	19.3
AGREE	39	34.2
NEUTRAL	26	22.6
DISAGREE	17	15.3
STRONGLY DISAGREE	10	8.6
TOTAL	113	100.0



Figure 4.2.3 Showing Timely Dissemination of Information for Public





4.2.4 Maximization of Payment and Commitment Controls of Budget

Aboelazm (2018) indicated that one of the main tenets of GIFMIS is to ensure that government properties are safe and properly managed. From figure 4.2.4, 28 respondents representing 24.4%, and 37 respondents representing 32.7%, strongly agreed and agreed, respectively, that the GIFMIS maximizes payment and commitment controls of budget. 22 respondents representing 19.6%, remained neutral about this claim. Only 14 participants represented 12.2% and 12 respondents represented 11% disagree and strongly disagree respectively.

Source: Field Survey, June 2021



The research indicators show that GIFMIS is well trusted to reject payments

when funds are not available and has a control mechanism to track budget

multiple process statuses, Moreover, the GIFMIS is believed to be capable of

generating Local Payment Orders (LPO) and providing a proper record of

subsidy and grants received from the government for administrative purposes.

Essentially, the responses indicate that there is a uniform format for

submission of expenditure returns and preparation of the final account using

the GIFMIS chart of accounts. This suggests that GIFMIS is highly effective

in maximizing payment and commitment controls of budget.

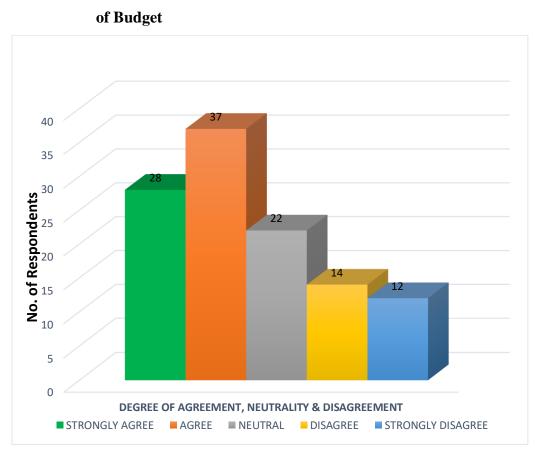
Table 4.2.4 Showing Maximization Of Payment And Commitment Controls Of Budget

DEGREE OF AGREEMENT, NEUTRAL OR DISAGREEMENT	FREQUENCY	PERCENTAGE
STRONGLY AGREE	22	19.3
AGREE	39	34.2
NEUTRAL	26	22.6
DISAGREE	17	15.3
STRONGLY DISAGREE	10	8.6
TOTAL	113	100.0

MAXIMIZATION OF PAYMENT AND COMMITMENT CONTROLS OF BUDGET



Figure 4.2.4 Showing Maximization of Payment and Commitment Controls



Source: Field Survey, June 2021

4.2.5 Challenges Associated with the use of GIFMIS in GES

From figure 4.2.5, 26 respondents representing 22.7%, and 32 respondents representing 28.5%, strongly agreed and agreed, respectively, that there are challenges associated with the use of GIFMIS. 24 respondents representing 121.4%, remained neutral about this claim. Only 17 participants representing 15% and 14 respondents representing 12.4% disagree.

Challenges are bound to happen in all human endeavors. GIFMIS, as well as its users, are no exception. The study indicated that the commitment level of the management of GES to change all its activities to GIFMIS had not been



enhanced to achieve its full potential. The staff was not well trained before the introduction of GIFMIS and hence lacked the ability and skills to fully apply the system. The staff training and development procedure on using GIFMIS was not up to expectation. Again the feedback level on how the GIFMIS has aided in achieving the revenue targets was not regularly updated. In another development, it was found that GIFMIS is not applied in other agencies, making it difficult to share information on the system's platform with agencies that do not use GIFMIS. Finally, the research proved that GIFMIS has connectivity challenges, especially in urban areas. This suggests the majority of respondents believe that there are challenges associated with the use of GIFMIS despite its effectiveness.

Table 4.2.5 Showing Challenges Associated with the use of GIFMIS in GES

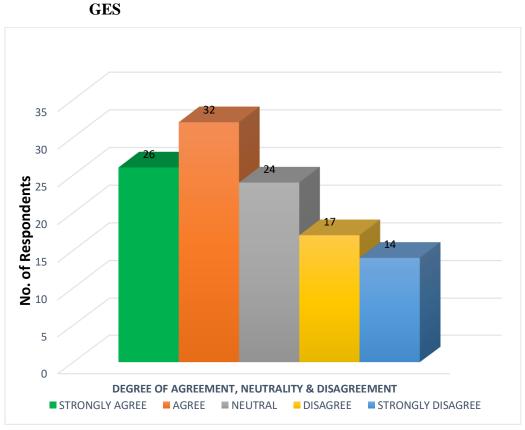
CHALLENGES ASSOCIATED WITH THE USE OF GIFMIS IN

GHANA EDUCATION SERVICE							
DEGREE OF AGREEMENT, NEUTRAL OR DISAGREEMENT	FREQUENCY	PERCENTAGE					

DEGREE OF AGREEMENT, NEUTRAL OR DISAGREEMENT	FREQUENCY	PERCENTAGE
STRONGLY AGREE	22	19.3
AGREE	39	34.2
NEUTRAL	26	22.6
DISAGREE	17	15.3
STRONGLY DISAGREE	10	8.6
TOTAL	113	100.0



Figure 4.2.5 Showing Challenges Associated with the use of GIFMIS in



Source: Field Survey, June 2021

4.3 **Chapter Summary**

This chapter covered the implementation of GIFMIS in Ghana's public sector financial management and the findings concerning the objectives. These goals were to examine the development of the GIFMIS program in Ghana, the efficiency of the GIFMIS implementation procedure, as well as the variables that impede GIFMIS' successful implementation. The objectives were examined based on the performed interview.



CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATION

5.0 Introduction

This chapter of the study takes into consideration the summary of the study, provides a reasonable conclusion based on the objectives and the findings of the study, and lastly suggests recommendations for policymakers, practitioners, and scholars on the success or otherwise of GIFMIS in the Ghana Education Service and other agencies to a large extent. The recommendation section of this chapter informs the researcher on the potential areas to conduct future research in the related area of this study. In essence, the final section of this study is the recommendation that provides the gaps that need to be filled in future research studies.

5.1 Summary of the Study

Unquestionably, the public sector plays a significant role in any economy. It is impossible to overstate the important functions that the public sector plays in the growth of every nation. It is commonly known that the public sector's primary goal is to improve the economic situation of its citizens and create an atmosphere that will allow the private sector of the economy to prosper. The economy plays a variety of functions in advancing the development of its population, but it also faces several obstacles, particularly when it comes to collecting and disbursing revenue. States and stakeholders have implemented a wide range of strategies to reduce the issues related to public sector concerns that have repercussions on the other sectors of the economy



as a remedy for the money management issues countries confront. These reforms, which focus on various public sector divisions in Ghana, include New Public Management, Public Sector

Reforms, Public Sector Management, and many others. According to studies, the effectiveness of the changes' implementation will determine their success. For appropriate financial management and accountability, the Ghanaian government implemented GIFMIS. This study aimed at examining the implementation of GIFMIS and how it has impacted accountability and timely reporting in the Ghana Education Service and by extension other ministries, departments, and agencies in Ghana. Specifically, this study aimed at achieving five (5) main objectives which are:

- to examine how effective and efficient revenue collection has been enhanced in Ghana,
- b. to find out whether GIFMIS has promoted efficiency, transparency, probity, and accountability in financial management in Ghana, especially GES,
- c. to evaluate how GIFMIS has helped in timely dissemination of information in Ghana,
- d. to examine the extent to which GIFMIS can assist in budget execution and the realization of revenue mobilization targets, and
- e. to find out the challenges associated with the use of GIFMIS.

For clarity, the results are given as tabular and graphical data. The study used a qualitative study with 113 respondents from the Ghana Education Service and found that the implementation of GIFMIS has aided in revenue mobilization and promoted



efficiency, transparency, and accountability of public financial management. Last but not least, the researchers discovered that GIFMIS has improved the timely distribution of crucial information in the Ghana Education Service, and by extension other Ministries, Departments, and Agencies (MDAs)/Metropolitan Municipal and District Assemblies (MMDAs).

5.2 Main Findings

An overview of the study's key findings is given in this section. For clarity on the final analysis of the findings, the responses were further analyzed and averaged into 'agree (i.e. strongly agree and agree), neutral, and disagree (i.e. disagree and strongly disagree)'. The main conclusions are given following the study's specific aims. (See Appendix 1 for the details).

5.2.1 Revenue Collection through GIFMIS

The Accomplishment of Income Goals: The study indicated that 6.2% of the respondents strongly agree with the statement that the GIFMIS has helped to achieve a target in revenue collection, while 37.2% of the respondents also stated that they agree with the statement that the GIFMIS has helped in achieving a target in the mobilization of revenue. 35.2% of the respondents remained neutral. However, 13.3% and 8% of the respondents disagree and strongly disagree respectively. In effect, an average of 43.4% of the respondents it.

68



Decrease in Daily Operational Activities and Cost: the research showed that 8.8% of the respondents indicated that they strongly agree while 38.9% were in an agreement with the statement that GIFMIS has reduced operational activities hence operating cost has decreased. 27.4% of the respondents remained neutral. Meanwhile, 16.8% of the respondents disagree while 8% strongly disagree. On average, 47.8% of the respondents are in support that the cost has come down as well as the operational activities while 24.8% of the respondents disagreed. The bottom line can therefore be drawn that the system has aided in reducing daily operational activities and costs.

Enhancement of Tax Payment: This study's findings revealed that, on average, 59.3% of respondents agreed with the assertion that GIFMIS helps with Electronic Fund Transfer (EFT) tax payments to the Ghana Revenue Authority. This suggests that the introduction of GIFMIS has been crucial in keeping track of taxes that must be paid and in lowering public tax evasion. The research above indicates that GIFMIS has facilitated employee electronic fund transfers to the Ghana Revenue Authority to pay taxes.

Safeguard Public Funds: At this juncture, an average of 63.7% of the respondents are in the assertion that the implementation of GIFMIS has strengthened internal controls to safeguard public funds. Internal control is put in place for the smooth running of the activities of an organization by ensuring



compliance with the applicable laws, regulations, contract policies, and procedures.

Timely and Efficient Manner in Reporting: the results of the study indicated that an average majority of 66 respondents representing 58.4% agree that the introduction of GIFMIS has aided in reporting budgetary and financial statements in a timely and cost-efficient manner. This is true in the sense that ministries, agencies, and departments' finance officers have to be assembled periodically by the Controller Accountant General's Department in Ghana to submit financial information on those fund sources which have not been enrolled in the GIFMIS. This exercise always leads to delays in reporting financial information about the economy to the various stakeholders. In conclusion, the implementation of the GIFMIS has reduced the cost of reporting both financial and non-financial information on a timely basis to numerous users.

Reduction in borrowing cost: An average total number of 55 respondents representing 48.7% are of the view that GIFMIS has helped contribute to the reduction in borrowing costs of financing government activities through single treasury accounts operation. 39 respondents representing 34.5% remained neutral in this assessment. However, an average total number of 19 respondents representing 16.8% disagreed with this statement. Considering



the above analysis, the majority are of the view that the borrowing cost has decreased with the introduction of GIFMIS.

5.2.2 Efficiency, Transparency, and Accountability of Public Financial Management

Transparency in Budget Execution: The research indicated that an average number of 60 out of 113 respondents supports that GIFMIS has promoted transparency in budget execution at Ghana Education Service. 15.9% of the respondents remained neutral, while an average of 31% of the respondents were in disagreement. Most respondents believed budget implementation is currently done through GIFMIS, making it difficult to make frequent changes once budget data is uploaded into the system unless the head of the agency approves.

Accountability in Financial Reporting to Stakeholders: The study observed that an average number of 68 respondents representing 60.2% asserted that GIFMIS had promoted accountability in financial reporting to the stakeholders. This is because responders who use GIFMIS directly may quickly access records by entering them into the GIFMIS system. The GIFMIS is once again fully capturing all transactions, ensuring that everyone is accountable for how they use public funds.



Facilitation of payments: An average of 54.9% of the respondents from Ghana Education Service hold the view that the use of GIFMIS facilities payments from Ministries, Departments, and Agencies (MDAs) and Treasury to suppliers of goods, services, and contracts to government through Electronic Fund Transfer (EFT). In effect, the introduction of GIFMIS has made the payment to third-party providers of goods and services more convenient and easier.

Transparency in Managing Government Assets: The study indicated that an average of 51 respondents representing 45.1% are in support that GIFMIS had enhanced the transparency in managing government properties. Thirtyfive (35) respondents representing 31% remained neutral, while 27, representing 23.9%, disagreed. The majority of respondents are in agreement since the inventory of government assets is always loaded into the GIFMIS.

Prevention of Fraud and Promotion of Good Governance: The study observed that an average total number of 53 respondents from the Ghana Education Sevice are in support that GIFMIS prevents fraud and promotes good governance in the public sector. However, an average of 27 and 33 respondents were neutral and disagreed, respectively.



5.2.3 Timely Dissemination of Information for Public Financial Management

Timely Information Sharing: The study showed that an average number of 58 of the respondents representing 51.3% of the respondents were in agreement that GIFMIS has enhanced the timely dissemination of information among agencies and departments. However, 27.4% of the respondents were neutral in this questionnaire. Meanwhile, an average of 21.2% of the respondents disagreed that GIFMIS has enhanced the timely dissemination of information. The majority were in support that the system has reduced the bureaucratic way of disseminating information hence information is timely distributed.

Reliable Information for Decision Making: An average number of 58 respondents representing 51.3% were in an agreement that decision-making is based on a piece of reliable information due to the introduction of GIFMIS. However, 29 out of the 113 respondents neither agree nor disagree with the effectiveness of GIFMIS in making information accessible promptly. Meanwhile, an average of 26 respondents were in disagreement that GIFMIS facilitates reliable information for decision making.

Making Daily Activities Easier and Faster: An average number of 52 respondents assert that GIFMIS makes daily activities easier and faster by ensuring timely cash and treasury management. However, 29 of the respondents remained neutral, while an average number of 32 respondents



disagreed with this assertion. In conclusion, the majority were of the view that GIFMIS has simplified procedures because it has ensured timely cash and treasury management within the public sector and this goes a long way to promoting timely dissemination of information within the public sector.

Improvement of Service Delivery: An average of 54 respondents are in agreement with the statement that GIFMIS has improved upon service delivery by making information readily available to citizens on the issues of public financial management. On the other hand, 32 were neutral while an average of 27 disagreed.

Provision of Accurate and Timely Data: An average number of 62 respondents representing 54.9% are in agreement that GIFMIS has helped in providing accurate and timely data for management budget decision-making. This is because data are being gathered and stored in the system, where they are easily accessible whenever necessary.

Timely Information Sharing Among Stakeholders: An average number of 62 respondents representing 54.9% are in agreement that information sharing among management and other relevant stakeholders is made easier as a result of the incorporation of GIFMIS services. This means that GIFMIS allows financial management implementers to share timely information and transactions online making it easier to disseminate information quickly within



the Ghana Education Service and other related agencies, departments, and ministries.

5.2.4 Maximization of Payment and Commitment Controls of Budget

Rejection of Payments: The study also indicated that an average number of 65 respondents representing 57.5% are in agreement that GIFMIS can reject payments due to the unavailability of the funds in the system. This ensures that only prudent payments are made. This allows for value for money payments.

Control Mechanism: The research came out that an average number of 63 respondents representing 55.8% were in support that GIFMIS can put up a control mechanism to track multiple budget processes status. In effect, it helps the government to plan and use its financial resources more effectively and efficiently.

Generation of Local Payment Orders (LPO): The study showed that an average number of 56 respondents representing 49.6% assert that GIFMIS can generate local payment orders (LPO). This helps in keeping an accurate record of all the items purchased to guide against duplicating purchases.

Appropriate Record of Subsidy and Grants: An average of 58.4% of the respondents are in agreement that GIFMIS has helped in preparing correct



records for subsidies and grants received from the government for administrative reasons. This means that all records are maintained intact in the system to ensure proper information at all times.

Expenditure Returns and Final Accounts: The study iterated that an average number of 73 respondents representing 64.6% were in agreement with the statement that there is a uniform format for submission of expenditure returns and preparation of final accounts using the GIFMIS chart of accounts. This ensures the standardization of accounting information.

5.2.5 Challenges Encountering the use of GIFMIS

Lack of commitment by the Management: The study pointed out that an average of 48 respondents out of 113 representing 42.5% were in agreement that one major challenge associated with the use of GIFMIS is the lack of management commitment to change from the use of the old systems to the new system. However, 31 respondents representing 27.4% were indifferent in their responses. Meanwhile, an average number of 34 respondents representing 30.1% could not support the assertion that a lack of management commitment is a major challenge in the implementation of GIFMIS.

Inadequate Training of Staff: The study observed that an average number of 57 respondents representing 50.4% responded that the staff were not well trained before the introduction of GIFMIS and hence lacks the potential to



fully apply the system. This means that they lack the necessary skills. Notwithstanding the above, 24 respondents representing 21.2% remained indifferent. However, an average number of 32 respondents representing 28.3% did not attest to the fact that the staff lacks the skills.

Lack of Laid Down Procedure for Staff Training and Development: The study showed that an average number of 58 respondents representing 51.3% wereof the view that there are no laid down plans for staff training and development on the use of GIFMIS at the Ghana Education Service. On the other hand, 27 respondents representing 23.9% were indifferent to this questionnaire. However, an average number of 28 respondents representing 24.8% believed that training and development for staff on GIFMIS implementation were enough. Therefore, management should put in place mechanisms to offer staff members regular training and seminars for those whose responsibilities directly relate to the usage of GIFMIS.

Lack of Regular Feedback: The research indicated that an average number of 60 respondents representing 53.1% were in agreement that there is no regular feedback on how GIFMIS has assisted in achieving revenue goals. Moreover, 20 respondents representing 17.7% remained neutral. However, an average of 33 respondents representing 29.2% were of the view that GIFMIS has helped in receiving responses on how frequently income targets have been achieved. There is a need to ensure that regular feedback is given on how well budgets are prepared with the aid of the GIFMIS.



Lack of GIFMIS in many Agencies: The study resulted that an average of 54 respondents representing 47.8% are in agreement with the fact that one of the challenges encountered in the implementation of the GIFMIS is that it is not applied in many agencies hence making it difficult to share information on GIFMIS platforms with agencies that do not use the system. 28 respondents representing 24.8% were neither here nor there. Meanwhile, an average of 31 respondents representing 27.4% disagreed that there is a lack of GIFMIS in other government departments.

It can be concluded that the Ministry of Finance and Economic Planning in collaboration with the Controller and Accountant General Department and Ghana Audit Service should ensure that all ministries, departments, and agencies are enrolled in GIFMIS by the GIFMIS Secretariat. This can be achieved through the application of the right legal framework governing the implementation of the GIFMIS.

Connectivity Challenges: An average of 61.9% of the participants agreed that one of the major challenges for the smooth, effective, and efficient implementation of the GIFMIS is internet connectivity. The government in its quest to implement the system in all parts of the country should ensure that there is a power supply in all parts of the economy, including remote and cottage areas, free or minimal cost in internet connectivity, supply of free ICT equipment to all ministries, departments, and agencies among others.

78



Finally, the study found that the challenges facing GIFMIS comprise legislative limitations, inadequate ICT infrastructure, the low computer literacy rate in the Ghana Education Service, and slow change management.

5.3 Conclusions

The main purpose of this study was to ascertain the effectiveness of the Integrated Financial Management Information System and to find out whether its uses would enhance timely accounting and reporting in the Ghana Education Service. The research collected primary data from the staff of the Ghana Education Service for which the majority of about 90% apply GIFMIS in their work frequently or periodically. It was observed from the respondents that GIFMIS has a great positive impact on their daily job, which is in line with the purpose of the research. It is prudent to conclude that the implementation of GIFMIS has necessitated effective and efficient probity, transparency, accountability, and timely reporting of financial and non-financial information. In the broad sense, the objectives of the GIFMIS are said to have been achieved.



5.4 **Recommendations**

Considering the findings of the study, the following recommendations concerning GIFMIS are being made to policymakers (governments), policy implementers, academians, and researchers among others:

5.4.1 Policy Makers (Governments)

This study found that GIFMIS users underline how valuable the system has been for official tasks, proving that it has served its intended function. Therefore, the study suggests that decision-makers implement policies and procedures that are designed to make GIFMIS more accessible. This might significantly reduce the challenges that GIFMIS users now have while using the system regularly. The study further recommends that the government of Ghana and by extension all governments globally should put in place mechanisms to make the GIFMIS user-friendly to contribute to achieving the Sustainable Development Goals (SDG) by 2030. The SDG can be achieved if there is the prudent financial management of the public resources that GIFMIS seeks to achieve.

Moreover, it is recommended that the GIFMIS secretariat be resourced enough to undertake the training exercise for the policymakers and all public sector employees since it is a system every public officer must know and use in their daily routine job for both internal and external reporting. The secretariat is also being recommended to ensure regular upgrades of the security system to prevent hackers from hacking the system.

80



Furthermore, it is recommended that the policymakers ensure that the MDAs and MMDAs publish their Annual Reports (ARs) to ensure accountability to all stakeholders.

A speech delivered by the vice president of the Republic of Ghana, DR. Mahamudu Bawumia on the 15th of July 2022 on Ghana television that highlighted the importance of digitalization to the youth is also recommended. In his speech, he spoke about the national identification card process in Ghana and how it will benefit Ghanaians. He pointed out that banks will issue credit cards to enhance the activities of the economy. He also made it known that Ghana Revenue Authority (GRA), Ghana Ports and Harbours Authority (GPHA), Driver and Vehicle Licensing Authority (DVLA), National Lottery Authority (NLA), and banking sectors, among others, are now operating mobile funds through an electronic system. Once funds are electronically generated, it becomes easy to access funds electronically, hence the budget will have to be loaded on the GIFMIS before funds are assessed; this will contribute to achieving the aim of the GIFMIS.

5.4.2 **Policy Implementers - Ghana Education Service**

The study recommends that since knowledge is power, the staff of GES should be given regular training on GIFMIS to enhance their knowledge to motivate them to boast their confidence to be in line with the global world. On a broader spectrum, all the ministries, departments, and agencies should organize periodic training for their staff on GIFMIS because the whole world



is moving gradually to IFMIS and Ghana cannot be left behind. It is no surprise the management of GES has taken initiative recently by engaging the National Information Technology Agency (NITA) to train the staff at its headquarters on the Smart workplace – Government as a genesis point to train all staff eventually across the length and breadth of the country to gain knowledge on ICT; an initiative that is recommended. The management of GES is also being recommended to ensure regular upgrades of the security system to prevent hackers from hacking the system.

5.4.3 Suggestions for Future Research

This study recommends future research consider conducting a similar study taking into consideration other ministries departments and agencies in the country. One limitation of this study is that data were collected from only the staff of the Ghana Education Service. Therefore, the discoveries in this study may not give a true reflection of the views of other ministries, departments, and agencies on the profitableness of GIFMIS.

Moreover, there are different techniques for scrutinizing data; quantitative method, qualitative method, and mixed method. This research selected the qualitative method. It is recommended that future research employs an alternative method to examine the reliability and the authenticity of this study. In another development, cross-sectional data were used in this study. Crosssectional data is a sort of study strategy in which data are collected from several individuals at a particular moment in time. Here, variables are

82



recorded without being changed. This is a constraint to the study because variables alternate as time changes. This study suggests that future researchers may consider using longitudinal data to analyze the impact of GIFMIS in augmenting its effectiveness. the efficiency of probity, transparency, accountability, and timely reporting in the public sector. It is further recommended that future studies consider how effective and genuine the financial report generated by the controller and accountant general department (CAGD) through GIFMIS. And how International Public Sector

Accounting Standards (IPSAS) accruals system be captured in the GIFMIS to generate an authentic financial report for the economy.



REFERENCES

Abdulai, M. S. (2020). Public financial management in Ghana: A move beyond reforms to consolidation and sustainability. International Journal of Industrial and Manufacturing Engineering, 14(6), 419-433.

Aboelazm, K. S. (2018). Reforming public procurement and public financial management in Africa: Dynamics and influences. Journal of Advances in Management Research.

Adika, G. (2003). Internet use among faculty members of universities in Ghana. Library Review, 52(1), 29-37.

Aduam, J. (2016). Assessing the effectiveness of internal controls mechanism of the Techiman Municipal Assembly (Doctoral dissertation).

Al-Ghobali, K.H.R., 1994. Factors considered in contractors prequalification process in Saudi Arabia (Doctoral dissertation, MS thesis, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia).

Al-Ghobali, K.H.R., 1994. Factors considered in contractors prequalification process in Saudi Arabia (Doctoral dissertation, MS thesis, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia).

Al-Harbi, K.M.A.S., 2001. Application of the AHP in project management. International journal of project management, 19(1), pp.19-27. Ameen, A., & Ahmad, K. (2012). Towards harnessing financial information systems in reducing corruption: a review of strategies. Australian Journal of Basic and Applied Sciences, 6(8), 500-509.



Asah, S. A. (2015). Assessment of the Ghana Integrated Financial Management InformationSystem (GIFMIS) in public sector procurement in Ghana (Doctoral dissertation).

Asare, T. (2009). Internal auditing in the public sector: Promoting good governance and performance improvement. International Journal on Governmental Financial Management, 9(1), 15-28.

Baker, B.N., Murphy, D.C. and Fisher, D., 1997. Factors affecting project success. Project management handbook, pp.902-919.

Bawole, J. N., & Adjei-Bamfo, P. (2019). Public Procurement and Public Financial Management in Africa: Dynamics and Influences. Public Organization Review, 1-18.

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. The qualitative report, 13(4), 544-559.

Besner, C. and Hobbs, B., 2006. The perceived value and potential contribution of project management practices to project success. Project Management Journal, 37(3), pp.37-48.

Betley, M., Bird, A., & Ghartey, A. (2012). Evaluation of public financial management reform in Ghana, 2001–2010. Final Country Case Study Report, Joint Evaluation, 27.

Boynton, A.C. and Zmud, R.W., 1984. An assessment of critical success factors. Sloan management review, 25(4), pp.17-27.

Bryde, D.J. and Robinson, L., 2005. Client versus contractor perspectives on project success criteria. International Journal of project management, 23(8), pp.622-629.



Canagarajah, S. (2005). Public Expenditure and Financial Accountability (PEFA)-Lessons from Uganda's Integrated Fiduciary Assessment Process.

Chou, J.S. and Ngo, N.T., 2014, December. Identifying critical project management techniques and skills for construction professionals to achieving project success. In Industrial Engineering and Engineering Management (IEEM), 2014 IEEE International Conference on (pp. 1204-1208). IEEE.

Chou, J.S., Irawan, N. and Pham, A.D., 2013. Project management knowledge of construction professionals: Cross-country study of effects on project success. Journal of construction engineering and management, 139(11), p.04013015.

Da, C., Ramos, S., & Ramos, C. D. S. (2006). Declaration.

Diamond, J., & Khemani, P. (2005). Introducing financial management information systems in developing countries. Available at SSRN 888065.

DiMaggio, P., & Louch, H. (1998). Socially embedded consumer transactions: for what kinds of purchases do people most often use networks? American sociological review, 619-637.

Esteves, L.E., 2013. Project management in nonprofit organizations (Doctoral dissertation).

Feger, A.L.R. and Thomas, G.A., 2012. A framework for exploring the relationship between project manager leadership style and project success. The International Journal of Management, 1(1), pp.1-19.



Felix, O., & Rufus, O. S. (2018). Pedagogy and Impact of Gifmis Adoption as a Tool for Public Finance Management. Canadian Social Science, 14(1), 1-8.

Gaventa, J., & McGee, R. (2013). The impact of transparency and accountability initiatives. Development Policy Review, 31, s3-s28.

Gcora, N., & Chigona, W. (2019). Post-implementation evaluation and challenges of Integrated Financial Management Information Systems for municipalities in South Africa. South African Journal of Information Management, 21(1), 1-12.

González, M. E., Mueller, R. D., & Mack, R. W. (2008). An alternative approach in service quality: an e-banking case study. Quality Management Journal, 15(1), 41-58.

Ika, L.A., 2009. Project success as a topic in project management journals. Project Management Journal, 40(4), pp.6-19.

Kerzner, H., 2017. Project management metrics, KPIs, and dashboards: a guide to measuring and monitoring project performance. John Wiley & Sons.

Khalfan, A. M., & Alshawaf, A. (2004). Adoption and implementation problems of ebanking: A study of the managerial perspective of the banking industry in Oman. Journal of Global Information Technology Management, 7(1), 47-64.

Kiilu, M. R., & Ngugi, K. (2014). Effect of public financial management reforms in the effective management of public funds in Kenya: a case study of the National Treasury. European Journal of Business Management, 2(1), 161-169.

Kwakye, A. K. (2016). Benefits and challenges of integrated financial management information system (Case study GES Obuasi municipal) (Doctoral dissertation).



LeCompte, M. D., & Schensul, J. J. (2010). Designing and conducting ethnographic research: An introduction (Vol. 1). Rowman Altamira.

Locke, D., 1984. Project Management St Martins Press, New York

Machado, F. and Martes, C.D., 2015. Project management success: a bibliometric analisys.

Martin, C C., 1976. Project Management Amaco, New York

Miles, M. B., & Huberman, A. M. (1984). Drawing valid meaning from qualitative data: Toward a shared craft. Educational researcher, 13(5), 20-30.

Mir, F.A. and Pinnington, A.H., 2014. Exploring the value of project management: linking project management performance and project success. International journal of project management, 32(2), pp.202-217.

Morris, P.W. and Hough, G.H., 1987. The anatomy of mayor projects.

Muwema, T., & Phiri, J. (2020). The Impact of Integrated Financial Management Information Systems on Procurement Process in Public Sector in Developing Countries— A Case of Zambia. Open Journal of Business and Management, 8(2), 983-996.

Nahod, M.M. and Radujković, M.V.M., 2013. The impact of ICB 3.0 competences on project management success. Procedia-Social and Behavioral Sciences, 74, pp.244-254.

Nwankwo, S. N. P. (2017). Transition to Treasury Single Account (TSA) Scheme in Nigeria; Issues, Challenges and Prospects. International Journal of Innovative Finance and Economics Research, 5(2), 21-32.



Ohemeng, F., & Asiedu, E. A. (2016). Changing the dynamics of human resources management in the public services of Ghana: an organizational learning perspective. Ghana Social Science Journal, 13(2), 232- 62.

Oro, B. L., & Ogar, G. U. (2016). Treasury Single Account (TSA), Integrated Payroll and Personnel Information System (IPPIS), and Integrated Financial Management Information System (IFMIS): Applicability and Implementability Effect on Fraud Management in the Public Sector. In MSc Seminar Department of Accounting University of Calabar.

Owusu, V. A. (2015). Assessing the contributions of internally generated funds in the development Of Metropolitan Assemblies in Ghana: a case study of the Kumasi Metropolitan Assembly (KMA). MBA Thesis submitted to the Department of Accounting and Finance, Kwame Nkrumah University of Science and Technology, Kumasi.

Papke-Shields, K.E., Beise, C. and Quan, J., 2010. Do project managers practice what they preach, and does it matter to project success? International journal of project management, 28(7), pp.650-662.

Perera, N., & Paudel, R. C. (2009). Financial development and economic growth in Sri Lanka.

Pimpong, S., & Tei, F.(n.d). Fiscal responsibility legal framework: New paradigm for fiscal discipline during elections in Ghana?.

Pinto, J.K. and Prescott, J.E., 1988. Variations in critical success factors over the stages in the project life cycle. Journal of management, 14(1), pp.5-18.



Radujković, M. and Sjekavica, M., 2017. Project Management Success Factors. Procedia Engineering, 196, pp.607-615.

Radujković, M., 2000. Project Leader. Građevinar, 52 (03.), pp. 143-151.

Radujković, M., 2014, January. The role of project management in construction industry modernization. In 13th China International Construction Project management Summit.

Rodin-Brown, E., 2008, Integrated Financial Management Information Systems:

A practical guide, viewed 06 April 2011, from http://pdf.usaid.gov/pdf_docs/

PNADK595.pdf

Saaty, T.L., 1980. The Analytical Hierarchy Process, Planning, Priority. Resource Allocation. RWS Publications, USA.

Secretariat, C., Nwasike, J., & Maina, D. (2018). Key principles of public sector reforms.

Serrador, P. and Turner, R., 2015. The relationship between project success and project efficiency. Project Management Journal, 46(1), pp.30-39.

Shih, Y. Y., & Fang, K. (2004). The use of a decomposed theory of planned behavior to study Internet banking in Taiwan. Internet research, 14(3), 213-223.

Singhal, D., & Padhmanabhan, V. (2008). A study on customer perception towards internet banking: Identifying major contributing factors. Journal of Nepalese business studies, 5(1), 101-111.

Skibniewski, M.J. and Chao, L.C., 1992. Evaluation of advanced construction technology with AHP method. Journal of Construction Engineering and Management, 118(3), pp.577-593.



Skulmoski, G., 2001. Project maturity and competence interface. Cost Engineering, 43(6), p.11.

Tchao, E. T., Keelson, E., Aggor, C., & Amankwa, G. A. M. (2017, December). E-Government Services in Ghana—Current State and Future Perspective. In 2017 International Conference on Computational Science and Computational Intelligence (CSCI) (pp. 624-631). IEEE.

Thomas, J. and Mullaly, M., 2008. Researching the value of project management. Project Management Institute.

Tversky, A., 1972. Elimination by aspects: A theory of choice. Psychological review, 79(4), p.281.

Vani, S., & Dorotinsky, W. (2008). PFM Global Landscape: What Can We Say about PFM Systems and Trends around the World. Washington: World Bank and IMF.

Westerveld, E., 2003. The Project Excellence Model®: linking success criteria and critical success factors. International Journal of project management, 21(6), pp.411-418.

Yang, L.R., Huang, C.F. and Wu, K.S., 2011. The association among project manager's leadership style, teamwork and project success. International journal of project management, 29(3), pp.258-267.

Yeboah, S. K. (2015). Public Sector Financial Management Reforms In Ghana: The Case Of Ghana Integrated Financial Management Information System (Gifmis) (Doctoral dissertation, University of Ghana).



Yusif, G. E. O. F. F. R. E. Y. (2019). The Impact of the Ghana Integrated Financial Management Information System (GIFMIS) on Accountability and Transparency; A Case Study of Ministry of Lands and Natural Resources (Doctoral dissertation, University of Ghana).

92



Appendix 1

The detailed analysis of main findings being averaged as depicted in chapter five.

AF=AVERAGE FREQUENCY , AP = AVERAGE PERCENTAGE

Table 5.2.1: THE IMPACT OF GIFMIS ON EFFECTIVE AND EFFICIENT REVENUE COLLECTION

DEGREE OF AGREEMENT,	The introduction of GIFMIS has significantly contributed to the meeting of our revenue targets		Cost incurred in daily operational activities have reduced as a result of the incorporation of GIFMIS		GIFMIS enhances the payment of taxes to GRA through Electronic Fund Transfer (EFT)	
AUREEMENT, NEUTRAL OR DISAGREEMENT AVERAGE	AF	AP	AF	AP	AF	AP
AGREE	49.0	43.4	54.0	47.8	67.0	59.3
NEUTRAL	40.0	35.4	31.0	27.4	19.0	16.8
AVERAGE DISAGREE	24.0	21.2	28.0	24.8	27.0	23.9
TOTAL	113.0	100.0	113.0	100.0	113.0	100.0

			GIFMIS has aided in		GIFMIS operates a single		
	GIFMIS has the p	otential	reporting budget	reporting budgetary and		treasury accounts that	
	to strengthen in	ternal	financial stateme	ents in a	reduces borrowing	g cost of	
DECDEE OE	controls in ord	ler to	timely and cost e	efficient	financing gover	rnment	
DEGREE OF AGREEMENT,	safeguard public	e funds	manner		activities		
NEUTRAL OR							
DISAGREEMENT	AF	AP	AF	AP	AF	AP	
AVERAGE	711	111	711	711	711	7.11	
AGREE	72.0	63.7	66.0	58.4	55.0	48.7	
NEUTRAL	11.0	9.7	13.0	11.5	39.0	34.5	
AVERAGE							
DISAGREE	30.0	26.5	34.0	30.1	19.0	16.8	
				1005			
TOTAL	113.0	100.0	113.0	100.0	113.0	100.0	



Table 5.2.2: THE EXTENT TO WHICH GIFMIS HAS HELPED ENHANCE EFFICIENCY, TRANSPARENCY AND ACCOUNTABILITY IN FINANCIAL MANAGEMENT AT GHANA EDUCATION SERVICE.

					GIFMIS facilitates	
	GIFMIS pron	notes			payments from	MDAs
	transparency in	budget	GIFMIS prom	notes	and Treasury	y to
	execution at G	Shana	accountability in	financial	government sup	opliers
DEGREE OF	Education Ser	rvice	reporting to stake	eholders	through EF	T
AGREEMENT,						
NEUTRAL OR						
DISAGREEMENT	AF	AP	AF	AP	AF	AP
AVERAGE						
AGREE	60.0	53.1	68.0	60.2	62.0	54.9
NEUTRAL	18.0	15.9	19.0	16.8	20.0	17.7
AVERAGE						
DISAGREE	35.0	31.0	26.0	23.0	31.0	27.4
		100.0		100.0		100.0
TOTAL	113.0	100.0	113.0	100.0	113.0	100.0

	Inventory of gove assets is loaded i GIFMIS to en	nto the			
DEGREE OF	transparency management of go property	' in	GIFMIS prevents fraud and promote good governance		
AGREEMENT, NEUTRAL OR DISAGREEMENT	AF	AP	AF	AP	
AVERAGE AGREE	51.0	45.1	53.0	46.9	
NEUTRAL	35.0	31.0	27.0	23.9	
AVERAGE DISAGREE	27.0 23.9		33.0	29.2	
TOTAL	113.0	100.0	113.0	100.0	



Table 5.2.3: TIMELY DISSEMINATION OF INFORMATION FOR PUBLICFINANCIAL MANAGEMENT

DEGREE OF AGREEMENT,	GIFMIS enhance timely information sharing among agencies and departments		Decision making is based on reliable information due to GIFMIS		GIFMIS makes daily activities easier and faster by ensuring timely cash and treasury management	
NEUTRAL OR						
DISAGREEMENT	AF	AP	AF	AP	AF	AP
AVERAGE						
AGREE	58.0	51.3	58.0	51.3	52.0	46.0
NEUTRAL	31.0	27.4	29.0	25.7	29.0	25.7
AVERAGE						
DISAGREE	24.0	21.2	26.0	23.0	32.0	28.3
TOTAL	113.0	100.0	113.0	100.0	113.0	100.0

					0
				0 0	
It improves upon	delivery	GIFMIS provides	s timely,	stakeholders is	made
of services by m	naking	accurate data	for	easier as a result	t of the
information readily		management b	udget	incorporating of (GIFMIS
available to citizens		decision-mak	king	services	
	4.0	4.5	4.0		4.0
AF	AP	AF	AP	AF	AP
54.0	47.8	62.0	54.9	62.0	54.9
	• • •	• •	•••		• • •
32.0	28.3	27.0	23.9	28.0	24.8
27.0	23.9	24.0	21.2	23.0	20.4
113.0	100.0	113.0	100.0	113.0	100.0
	of services by n information re available to cit AF 54.0 32.0	available to citizens AF AP 54.0 47.8 32.0 28.3 27.0 23.9	of services by making information readily available to citizensaccurate data management b decision-makAFAPAF54.047.862.032.028.327.027.023.924.0	of services by making information readily available to citizensaccurate data for management budget 	of services by making information readily available to citizensaccurate data for management budget decision-makingeasier as a result incorporating of 0 servicesAFAPAFAPAF54.047.862.054.962.032.028.327.023.928.027.023.924.021.223.0



Table 5.2.4: MAXIMIZATION OF PAYMENT AND COMMITMENT CONTROLS OFBUDGET

DEGREE OF AGREEMENT,	GIFMIS is able to reject payments when funds are not available		GIFMIS has control mechanism to track budget multiple process status.		The system is able to generate local payment orders (LPO)	
NEUTRAL OR						
DISAGREEMENT	AF	AP	AF	AP	AF	AP
AVERAGE						
AGREE	65.0	57.5	63.0	55.8	56.0	49.6
NEUTRAL	17.0	15.0	28.0	24.8	34.0	30.1
AVERAGE						
DISAGREE	31.0	27.4	22.0	19.5	23.0	20.4
TOTAL	113.0	100.0	113.0	100.0	113.0	100.0

DEGREE OF AGREEMENT,	There is a proper of subsidy and received fro government administrative pr	grants om for	There is a uniform format for submission of expenditure returns and preparation of final account using GIFMIS chart of accounts		
NEUTRAL OR DISAGREEMENT	AF	AP	AF	AP	
AVERAGE AGREE	66.0	58.4	73.0	64.6	
NEUTRAL	22.0	19.5	10.0	8.8	
AVERAGE	25.0	22.1	30.0	26.5	
TOTAL	113.0	100.0	113.0	100.0	



Table 5.2.5: CHALLENGES ASSOCIATED WITH THE USE OF GIFMIS IN GHANAEDUCATION SERVICE

	The management is not		The staff were not well		There is no laid down	
	committed to change in		trained before the		procedure for staff	
	Ghana Education Service hence GIFMIS has not		introduction of GIFMIS		training and development	
			and hence lacks the		on the use of GIFMIS at	
	been able to achieve its		potential to fully apply		the Ghana Education	
DEGREE OF	full potential		GIFMIS		Service	
AGREEMENT, NEUTRAL OR						
DISAGREEMENT	AF	AP	AF	AP	AF	AP
AVERAGE						
AGREE	48.0	42.5	57.0	50.4	58.0	51.3
NEUTRAL	31.0	27.4	24.0	21.2	27.0	23.9
AVERAGE						
DISAGREE	34.0	30.1	32.0	28.3	28.0	24.8
				100.0		
TOTAL	113.0	100.0	113.0	100.0	113.0	100.0

DEGREE OF	There is no regular feedback on how GIFMIS has aided in achieving revenue targets		GIFMIS is not applied in other agencies hence making it difficult to share information on GIFMIS platforms with agencies that do not use GIFMIS		GIFMIS has connectivity challenges	
AGREEMENT, NEUTRAL OR						
DISAGREEMENT	AF	AP	AF	AP	AF	AP
AVERAGE						
AGREE	60.0	53.1	54.0	47.8	70.0	61.9
NEUTRAL	20.0	17.7	28.0	24.8	15.0	13.3
AVERAGE						
DISAGREE	33.0	29.2	31.0	27.4	28.0	24.8
TOTAL	113.0	100.0	113.0	100.0	113.0	100.0



Appendix 2

QUESTIONNAIRE

This research questionnaire is to assist in a study on THE IMPACT OF INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEM, EFFECTIVE ACCOUNTABILITY AND REPORTING: A CASE STUDY OF GHANA EDUCATION SERVICE.

The research forms part of the requirement for the award of Doctorate degree in Accounting, a programme the researcher is currently pursuing at the Atlantic International University of USA. The findings of this research are solely for academic purposes; respondents are therefore assured of complete confidentiality regarding any information given in this questionnaire. Thank you for your cooperation.

SECTION A. DEMOGRAPHIC OF RESPONDENTS

- 1. Gender: Male [] Female []
- 2. Age: 19 29 [] 30 39 [] 40 49 [] 50 64 []
- 3. Marital status: Single [] Married [] Divorced [] Separated [] Other []
- 4. Indicate your Highest qualification: Diploma [] Degree [] Masters []

5. Number of years you have been working in Ghana Education Service 0 - 4 [] 5 - 9 [] 10 - 15

[] 16years and above []

6. Numbers of years you have been directly involved in using GIFMIS at work 0 - 2[] 3 - 5[] 6years and above []



7. What is your rank at Ghana Education Service? (Please indicate).....

Director [] Head of institution [] Accountant[] Internal Auditor [] Supply officer[] Payroll officer [] General staff []

8. What is your current position you occupy as a staff of Ghana Education Service

Management Level [] Middle Level [] Junior Level []

SECTION A: THE IMPACT OF GIFMIS ON EFFECTIVE AND EFFICIENT REVENUE COLLECTION

This section of the questionnaire is to solicit your level of agreement or disagreement on how GIFMIS has helped improved revenue mobilization.

Kindly answer the questions by ticking the box of your choice. It should be noted that 1 is strongly agree, 2 agree, 3 neutral, 4 disagree and 5 strongly disagree.

9) The introduction of GIFMIS has significantly contributed to the meeting of our revenue targets

1[]2[]3[]4[]5[]

10) Cost incurred in daily operational actives have reduced as a result of the incorporation of GIFMIS

1[]2[]3[]4[]5[]

11) GIFMIS enhance the payment of taxes to GRA through Electronic Fund Transfer (EFT)1[] 2[]3[]4[]5[]



12) GIFMIS has the potential to strengthen internal controls in order to safeguard public funds

1[]2[]3[]4[]5[]

13) GIFMIS has aided in reporting budgetary and financial statements in a timely and cost efficient manner

1[]2[]3[]4[]5[]

14) GIFMIS operated a single treasury accounts that reduces borrowing cost of financing government activities

1[]2[]3[]4[]5[]

SECTION B: THE EXTENT TO WHICH GIFMIS HAS HELPED ENHANCE EFFICIENCY, TRANSPARENCY AND ACCOUNTABILITY IN FINANCIAL MANAGEMENT.

This section attempts to seek your response on how the introduction of GIFMIS has either positively or negatively influence efficiency, transparency and accountability in financial management at Ghana Education Service. Kindly indicate your choice of response by ticking box1 for strongly agree, 2 agree, 3 neutral, 4 disagree and 5 strongly disagree.

15) GIFMIS promotes transparency in budget execution at Ghana Education Service.

1[]2[]3[]4[]5[]

16) GIFMIS promotes accountability in financial reporting to stakeholders



17) GIFMIS facilitates payments from MDAs and Treasury to government suppliers through EFT

1[]2[]3[]4[]5[]

18) Inventory of government assets is loaded into the GIFMIS to ensure transparency in management of government property

1[]2[]3[]4[]5[]

19) GIFMIS prevents fraud and promote good governance

1[]2[]3[]4[]5[]

SECTION C: TIMELY DISSEMINATION OF INFORMATION FOR PUBLIC FINANCIAL MANAGEMENT

Section C of the questionnaire takes into consideration how GIFMIS has succeeded in disseminating information across departments.

20) GIFMIS enhance timely information sharing among agencies and departments

1[]2[]3[]4[]5[]

21) Decision making are based on reliable information due to GIFMIS

1[]2[]3[]4[]5[]

22) GIFMIS makes daily activities easier and faster by ensuring timely cash and treasury management



23) GIFMIS improves upon delivery of services by making information readily available to citizens

1[]2[]3[]4[]5[]

24)GIFMIS provides timely, accurate data for management budget decision-making

1[]2[]3[]4[]5[]

25) information sharing among management and other relevant stakeholders are made easier as a result of the incorporating of GIFMIS services

1[]2[]3[]4[]5[]

SECTION D: MAXIMISE PAYMENT AND COMMITMENT CONTROLS OF BUDGET

Section C of the questionnaire takes into consideration the extent to which GIFMIS is able to assist in budget execution and the realisation of revenue mobilisation targets.

26) GIFMIS is able to reject payments when funds are not available, that is where commitment and cash control would be breached

1[]2[]3[]4[]5[]

27) GIFMIS has control mechanism to track budget multiple process status.

1[]2[]3[]4[]5[]

28) The system is able to generate local payment orders (LPO)



29) There is a proper record of subsidy and grants receive from government for administrative purposes

1[]2[]3[]4[]5[]

30) There is uniform format for submission of expenditure returns and preparation of final account using GIFMIS chart of accounts

1[]2[]3[]4[]5[]

SECTION E: CHALLENGES ASSOCIATED WITH THE USE OF GIFMIS IN MINISTRY OF LANDS AND NATURAL RESOURCES AND ITS AGENCIES

You are requested to indicate the challenges that you encounter in the use of GIFMIS in your daily activities. Please answer by ticking from each of the questions in the section your level of agreement or otherwise

31) The management is not committed to change in Ghana Education Service hence GIFMIS has not been able to achieve its full potential

1[]2[]3[]4[]5[]

32) The staff were not well trained before the introduction of GIFMIS and hence lacks the potential to fully apply GIFMIS

1[]2[]3[]4[]5[]

33) There is no laid down procedure for staff training and development on the use of GIFMIS at the Ghana Education Service



34) There is no regular feedback on how GIFMIS has aided in achieving revenue targets

1[]2[]3[]4[]5[]

35) GIFMIS is not applied in other agencies hence making it difficult to share information on

GIFMIS platforms with agencies that do not use GIFMIS

1[]2[]3[]4[]5[]

36) GIFMIS has internet connectivity challenges