#### KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

# KNUST

THE IMPACT OF ACCOUNTING INFORMATION SYSTEMS ON ORGANIZATIONAL PERFORMANCE: THE MEDIATING ROLE OF INFORMATION TECHNOLOGY AT GHANA WATER COMPANY LIMITED.

 $\mathbf{BY}$ 

NAME: SAMUEL AZURE ASANDAGO

**INDEX NUMBER; PG9371321** 

**STUDENT ID; 20848452** 

#### **DECLARATION**

I hereby declare that this work was produced as a result of extensive field research except for where specific references have been made and duly acknowledged. The work has not been submitted for the award of any other degree or publication. I have therefore personally, under supervision, undertaken the study herein submitted.

SAMMY AZURE ASANDGO **DATE** (STUDENT) THE WAS ANE

#### **DEDICATION**

I dedicate this work to God for granting me the grace to go through this program and to my wonderful family.



#### **ABSTRACT**

The primary purpose of this research work was to assess the impact of AIS on organizational performance; the mediating role of information technology at Ghana Water Company Limited (GWCL).. The main objectives of the study were to identify the role of AIS in organizational performance at GWCL, identify the impact of AIS on organizational performance at GWCL, determine whether informational technology helps AIS to ensure high organizational performance at GWCL and to identify challenges of AIS in achieving organizational performance. The research design for this study was a survey, quantitative and descriptive in nature. The study employed the use of questionnaires which were administered to the personnel of the case under study. The sample size for the study was hundred (100) staff. In this study, random sampling technique of the probability sampling techniques was used to select the sample. It was found that guaranteeing service quality to customers in the organization. The study revealed that awareness is not very comprehensive at GWCL. The study recommends a systematic form of training and development programme to support all staff in GWCL systems Again, the study recommends that all public institutions in Ghana be urged to adopt equally these practices in order to enhance performance

TARS OF THE SAME

## TABLE OF CONTENTS

CONTENT		LICT	Pages
Declaration	\	0.01	i
Dedication			
Acknowledgement			
Abstract			
List of tables			v
List of figures			vi
	<b>6</b>		
CHAPTER ONE: INTRODU	JCTION		
1.1 Background to the study			1
1.2 Problem Statement			
1.3 Objectives of the Study			5
1.3.1 General Objective			5
1.3.2 Specific Objectives			5
1.4 Research Questions			6
1.5 Significance of the Study		<u> </u>	6
1.6 Proposed Methodology			6
1.7 Scope of the Study			7
1.8 Organization of the Study	MAZCY	ENO	7

# **CHAPTER 2: LITERATURE REVIEW**

2.1 Introduction8
2.2 Theoretical Framework8
2.2.1 Agency Theory
2.2.2 Transaction Cost Economics (TCE) Theory9
2.2.3 The Resource Based View (RBV) Theory10
2.3 Concepts Defined
2.3.1 Accounting Information System
2.3.2 Organizational Performance
2.4 Business Process Capabilities and Accounting Information System14
2.5 Empirical Review16
2.5.1 Accounting Information Systems and Organizational Performance
2.5.2 Information technology and Organizational Performance
2.5.3 AIS, IT Knowledge Management and Organizational Performance
2.5.3 Accounting Information System and Financial Performance
2.5 Conceptual Framework
CHAPTER 3: METHODOLOGY
3.0 Introduction
3.1 Research Design27
3.3 Population
3.4 Sample Technique and Size 28

3.6 Data Sources
3.7 Data Collection Procedure
3.8 Data validity and reliability
3.9 Data processing and analysis
3.10 Ethical considerations
3.11 Profile of Ghana Water Company Limited
CHAPTER 4: DATA ANALYSIS AND SUMMARY OF FINDINGS
4.0 Introduction
4.1 Demography of respondents
4.1.1 Gender
4.1.2 Age of Respondents
4.1.3 Educational Background of Respondents
4.1.4 Length of service
4.2 Role of AIS in the performance of GWCL27
4.3 identify the impact of AIS on organizational performance at GWCL28
4.4 Challenges in the adoption of AIS system at GWCL30
THE THE PARTY OF T
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS
5.0 Introduction
5.1 Summary50
5.2 Conclusion 52

5.3 Recommendation
References
Appendix64
THE SANE NO BRUNE
WU SANE NO SANE

# LIST OF ABBREVIATIONS

# AIS – Accounting Information System



# LIST OF TABLES

Table4.1Age distribution of Respondent	34
Table 4.2 impact of AIS on organizational performance	40
Table 4.3 Challenges of AIS In Achieving Organizational Performance	4



# KNUST

# LIST OF FIGURES

Figure 4.1: Gender of Respondents	33
Figure 4.2: Educational Background of Respondents	37
Figure 4.3: Length of service	38
Figure 4.4 Role of AIS	39
THROWS AND SANE NO BEAT	THE STATE OF THE S

#### CHAPTER ONE

#### INTRODUCTION

#### 1.1 Background to the Study

In recent years, scholars and corporate leaders from all over the world have disputed the impact of Accounting Information System (AIS) on organization performance (Quansah, Hartz & Salipante, 2022; Al-Fasfus & Shaqqour, 2018; Nwinee, Akpos, Vincent & Ibinabo, 2016; Harash, 2015). This is due to the fact that increased competition in the corporate environment and on the global market has made it clear that there are few information systems and that technology in general needs more attention (Hernández-Linares, Kellermanns & López-Fernández, 2021; Khalil & Belitski, 2020). According to one definition, AIS are a tool that can assist organizational management in strengthening its oversight of the business's operations and in raising its performance. "Identification, collection, processing, and delivery of accounting information to staff and decision-makers at all levels of the organization are all part of AIS. It has also been described as a system that aids in documenting all of a company's financial transactions" (Urqua, Pérez, & Muoz, 2011 p.214).

To be able to track financial transactions, provide data for internal and external reporting, assist in the preparation of financial statements, provide data for internal and external reporting, assist in the preparation of financial statements, and have the potential to improve organizational performance, this system combines controls, methodologies, and accounting techniques (Pérez, Urqua, & Muoz, 2010). The conventional history of AISs, which primarily relied on paper-based systems, must be emphasized since they appear unsuited for the quickly

evolving corporate environment of today (Khalil & Belitski, 2020). Furthermore, without improved information technology, effective accounting systems are very impossible to implement.

"The nature of business operation, including accounting, has changed as a result of the information technology (IT) revolution, by IT and applications of information systems (IS). The spread of such applications improves financial performance and upholds openness inside corporate structures while enabling ongoing access to financial reports throughout the fiscal year" (Melitski & Manoharan, 2014, p.202). Additionally, successful implementation of such applications can raise customer satisfaction, which in turn improves organizational performance.

Various advantages of AIS have been demonstrated by numerous studies. According to Al-Adaileh (2018), AIS promotes better quality, lower costs, faster service, well-informed decisions, and efficient information flow. Further asserting that AIS may meet management's needs for fast, meaningful information, to help them make better judgments, information must be verified and, most importantly, accurate (Sajady, Dastgir & Nejad, 2008). Significant AIS benefits depend on a number of contextual and outside factors that may either help or impede the realization of these benefits. The user's impression of the use of IS applications may be one of these aspects (Onaolapo & Odetayo, 2012; Nabizadeh & Omrani, 2014; Kouser, Awan, Rana & Shahzad, 2011). Other potential influences include organizational and societal culture.

A study conducted by Bouwens and Abernethy (2018) examined the characteristics of AIS as prevalent in organizational performance as well as the role of AIS in strategic management decisions. The goals of AIS are to make sure that the company is effective in achieving various strategic goals. Consequently, this research aims the Ghana Water Company Limited (GWCL) as a case study to investigate the potential effects of AIS on the information technology-enabled organizational performance.

FINA

#### 1.2 Problem Statement

Today, the majority of businesses use AIS to increase their revenue, market share, and services. As a source of internal information, AIS has been and continues to be one of the most crucial instruments, according to study (Nabizadeh & Omrani, 2014; Onaolapo & Odetayo, 2012). This is true because it has the ability to improve the effectiveness of the decision-making process, which is regarded as the key enabler for achieving organizational objectives. Better organizational performance and increased effectiveness are two benefits of AIS. AIS and its effect on organizational performance has been the subject of numerous prior studies (Khairuddin et al., 2010 p.114; Kouser et al., 2011; Sajady et al., 2008). However, the majority of enterprises' manual or paper-based processes and modes of operation make the adoption of AIS in the operationalization of their daily routines absolutely necessary.

The majority of these researches have concentrated on looking into these challenges in the setting of big companies. Since it has been challenging for managers to justify investing in AIS, the utility of AIS in public enterprises has been questioned. Taking into account all the penitence and services rendered in the homes and lives of numerous. Businesses, like GWCL,

need to use improved AIS in their operations with the efficient rely on cutting-edge information technology. To use new technologies, organizations must create new business plans (Caldeira & Ward, 2013). This study makes the case that GWCL must adapt to the cutthroat business environment of today. These ideas generate a lot of questions regarding the expectation that customers or end users will always receive high-quality service in a market that is undergoing rapid change. In order to evaluate the potential impact of AIS on organizational performance, this study uses GWCL as a case study. It is based on an empirical inquiry.

#### 1.3 Objectives of the Study

#### 1.3.1 General Objective

The primary goal of the study is to evaluate how AIS affects organizational performance, with information technology serving as a mediator at Ghana Water Company Limited (GWCL)..

#### 1.3.2 Specific Objectives

- 1. To determine AIS's contribution to GWCL's organizational performance.
- 2. To determine how AIS affects GWCL's organizational performance.
- 3. To find out if information technology aids AIS in ensuring superior organizational performance at GWCL.
- 4. To recognize obstacles to AIS's attaining organizational performance?

#### **1.4 Research Questions**

- 1. What part does AIS play in GWCL's organizational performance?
- 2. Has AIS affected GWCL's organizational performance in any way?
- 3. Can AIS at GWCL guarantee good organizational performance with the use of information technology?
- 4. What difficulties does AIS face in enhancing organizational performance?

## 1.5 Significance of the Study

The review contains numerous aspects that make it incredibly applicable to all partners. The normal result of the review incorporates the way that; To start with, it will be of basic significance to GWCL. This is due to the fact that it will enable them to concentrate on making efficient use of AIS and utilizing the appropriate technology for maximum output. Second, the review will assist with recognizing the issues that might forestall compelling execution of exceptionally innovative framework for better administrations to the Ghanaian people. It is additionally expected that the discoveries of this study will be of help to strategy producers to be educated in unambiguous IT strategy plans in the utility area. Finally, it will contribute to the existing body of knowledge on the topic and provide a foundation for future research.

#### 1.6 Scope of the Study

This research focuses on how AIS affects GWCL. Information will be assembled from the board and staffs of GWCL. The study will not include any other utility companies than the one understudies.

#### 1.7 Brief Methodology

This study takes on contextual analysis research strategy. The exploration instrument which was utilized to gather the essential information was polls. Gathering data from the staff of GWCL for the essential data was utilized. Auxiliary information was assembled from diaries and articles for this study report. With the assistance of Microsoft Excel 2013 and the Software Package for the Social Sciences (SPSS 23), the questionnaire data were analyzed.

## 1.8 Organization of the Study

The review is coordinated into five parts. The first chapter begins with an introduction and a problem statement. The targets, research questions, meaning of the review and the degree have all been examined in this part. The literature review on the subject of the study is presented in the second chapter. The study's methodology is also the focus of the third chapter. This includes the study population, sampling technique, data collection instrument, and data analysis methods. Particularly so, the conclusion drawn from the primary field data is presented in the fourth chapter. The study's summary and conclusion are examined in Chapter five.



#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This part audits appropriate scholastic exploration on bookkeeping data frameworks and authoritative effectiveness. It also contains the theoretical foundation, research ideas, and actual research. The conceptual framework necessary to respond to the research topic was also presented.

#### 2.2 Theoretical Framework

The Office Hypothesis, Exchange Cost Financial matters (TCE) hypothesis, and Asset Based View (RBV) hypothesis are the best clarifications for what AIS means for an association's exhibition.

#### 2.2.1 Agency Theory

Theory of Agency In the past two decades, agency theory has emerged as one of the most popular accounting theoretical paradigms. The principal benefit of organization hypothesis that pulled in bookkeeping researchers is that it makes it more straightforward for us to integrate motivators and irreconcilable situations into our models explicitly. This is critical since the administration of pay issues is a significant main thrust behind bookkeeping and

review inspiration (Kaplan and Norton, 1993). It is normally viewed as a gamble and exertion hostile specialist that is risk-impartial. This chapter examines relevant academic research on accounting information systems and organizational performance. The producer and agent are expected to It likewise contains the hypothetical underpinnings, concentrate on topics, and exact exploration. Additionally, the conceptual framework that was required to address the research question was provided. egocentric, which could result in goals that are at odds with one another. Assertion arrangements accommodate these restricting needs (David and Smith, 1999).

Arrangements, whether they are recorded as a hard copy, are the terms for how the head and the specialist will trade results Subsequently, contingent upon the amounts of input or exertion substitution, organization hypothesis gives an instrument to efficiently and unequivocally survey the financial parts of remuneration offset agreements. Agency theory addresses the fact that the information, accounting, and compensation systems have an effect on (reduce or exacerbate) incentive issues. How does the organization and design of computer systems change if there are motivational issues? The connection between bookkeeping, inspiration, and conduct data frameworks might be completely inspected utilizing the system given by office hypothesis, which likewise gives an answer for these issues. The AIS handles both financial and non-financial transactions that directly affect the processing of financial transactions.

Wilkilson et al. claim that In addition to processing financial reports and accounting information, AIS also converts non-financial data into accounting data in 2000. Dynamic

bookkeeping information was slowly evolved from non-monetary and monetary realities. The choosing, arranging, putting away, and scattering of data to work with control and dynamic inside an association are the critical parts and interconnected pieces of AIS (Laudon and Laudon 2005).

#### 2.2.2 Transaction Cost Economics (TCE) Theory

As per the Exchange Cost Financial matters (TCE) speculation, "the utilization of Data Innovation (IT) will prompt decreased exchange costs related with the organization of exchanges" (Coase, 1937, p.104; Maltz, 1993, p.109; Demsetz and Alchian, 1972). TCE underscores that a company's essential obligation is to proficiently organize exchanges, while unequivocally recognizing the expenses of coordination across financial entertainers in business sectors (Williamson, 1985). IT "brings down coordination costs, and in store network settings, carefully empowered joining limit can significantly improve conditional efficiencies through extended data sharing and correspondences abilities, bringing about better inventory network execution" (Zhu and Kraemer, 2005 p.87). Besides, as per Lopez (2013), IT assets affect correspondence improvement. This incorporates coordination of activities, inner and outside correspondence, and the utilization of data with both inward and outer specialists, like clients and partners.

TCE explains the capability of the carefully prepared AIS in antagonistic conditions. The serious rivalry in the commercial centers is a critical part of a cutthroat climate (Ferrier, 2001). According to Samamurthy et al. (2013), in competitive situations, a business must adapt its operations to react to rival actions in order to improve performance or even survive.

If an organization's operations are frequently influenced by those of competitors, it may need to collaborate with partners more closely (Bensaou, 2017). This thought is applied in this study in light of the fact that cutthroat help conveyance markets, specifically, put a higher worth on innovation that guide in decreasing coordination costs.

#### 2.2.3 The Resource Based View (RBV) Theory

The Resource Based View (RBV) Theory was introduced by Barney (2011) and Pandza. As per this thought, assets should be heterogeneous in nature and not totally portable for a transient upper hand to turn into a determined upper hand. This successfully converts into important assets that can't be completely imitated or totally supplanted without critical exertion.

On the off chance that these conditions endure, the assortment of assets can uphold the organization's better than expected execution (Barney, 2011 p.39). According to Barney (2011), one of the most well-known and powerful theories for outlining, elucidating, and forecasting organizational linkages has evolved from a fledgling, upstart perspective. The RBV hypothesis means to make sense of how worth is made through innovation (Zhu and Kraemer, 2012). Improved firm performance is attributed to valuable resources or resource bundles, according to the RBV theory (Barney 2001, Peteraf 1993). IT has the "potential to produce value for the firm indirectly, resulting in performance improvement and competitive advantage" because it influences other resources or processes (Wade & Hulland, 2014, pp. 129–130). Using the web's network, organizations could fabricate a computerized stage that takes into consideration continuous data sharing and improves asset designation coordination

(Lee, 2014 p.111). This thought is remembered for this study since it underlines how significant it is for compelling AIS to utilize IT.



#### 2.3 Concepts Defined

#### 2.3.1 Accounting Information System

Accounting Information System is a gathering of information and handling methods that produce the client's required data (Lobby, 2012). According to Hall (2012), the production of accounting information for external individuals and groups, such as management and operational staff, is the primary objective of accounting information systems. Susanto (2008) said that the essential capability of the bookkeeping data framework is to create qualified bookkeeping data, in opposition to other examination like Zager et al. (2006), which stated that high-quality accounting information systems provide authentic accounting data. Moreover, Widjajanto (2001) characterized a bookkeeping data framework collectively of hardware and HR gathered to transform information procured into data that is shipped off different chiefs.

Moreover, accounting information system produces the change either physically or carefully, as per Mujilan and Madiun (2012). The scientist was inspired to complete the ongoing concentrate by the high mechanical execution of disciplines, particularly the bookkeeping data framework that upholds the data of worldwide organizations, where the circumstance is with the end goal that most programming are not successfully used for human asset activities,

because of the different information levels - this is valid for both creating and created nations. However, the accounting information system's accuracy and dependability are determined by the "quantity of knowledge management it uses to support the planning and execution of strategic management." This adds to the headway of the business framework and its goals, showing the commitment of information the executives to business tasks.



According to Akgün & Klç (2013), p. 26, "information systems are man-made systems created to aid in decision-making". It can likewise be portrayed collectively "of parts that cooperate to accumulate, store, cycle, and report information and data to further develop dynamic cycles" (Al-Adaileh, 2008. p. 17). Onaolapo and Odetayo (2012) expressed that AIS gives instruments to monetary division to improve hierarchical adequacy. He underscored areas of strength among AIS and authoritative viability.

It is worried about "estimation or evaluation of business occasions in money related structures (by keep in records) and bookkeeping information handling notwithstanding arrangement of fiscal reports. It very well may be viewed as the main wellspring of monetary information for inner and outer clients" (Knežević et al., 2012. p. 63). Support for the operational, tactical, and strategic organizational levels can be provided by a variety of ISs. These frameworks are equipped for conveying a continuous stream of information from inside or outer sources.

The "integration of accounting with technology, information, and managerial strategy" is what Gökdeniz (2005, p. 89) defines as AIS. Sajady et al. say that (2008), AIS is "viewed as a critical hierarchical system for the proficiency of choice administration and control in associations". Additionally, the accounting system has recently tended to be an information system that combines data with quantitative and descriptive information to assist diverse users in making decisions (Nwinee et al., 2016). The primary objective of AIS is to "value current, past, and upcoming business events. Frequently, decisions regarding pricing, production levels and product mix, outsourcing, inventory management, customer service, labor negotiations, and capital investments are guided by periodic reports or special analyses that contain accounting information" (Horngren et al., 2005 p.34; Spring, 2003)

In fact, "computerized accounting systems, a key component of AIS, are directly correlated with the economic and financial outcomes as well as the productivity of SMEs" (Urqua et al., 2011 p.186). More prominent organization of "interior deals, expanded seriousness, and better reaction to a changing climate are expected advantages of an ideal utilization of AIS in an association. There is also a boost to the dynamic nature of businesses" (Pérez et al., 2010 .98) in addition to the potential for new business on the network and stronger external relationships for the organization, particularly with international clients reached through the company website.

#### 2.3.2 Organizational Performance

According to Baral & Bhargava (2010 p.87), "the performance of the organization is critical to the survival of the business and the preservation of its most valuable asset. This suggests that an organization must actively incorporate technology and information systems, as well as competent staff, into the process in order to improve performance". Armstrong (2007, p. 103) characterizes execution with regards to creation, or "the satisfaction of the put forth quantifiable objectives" Seeing how well an association can fulfill an individual's work guidelines or targets is the best method for checking how well it is working. Every organization has distinct work objectives, just as each individual has distinct knowledge, abilities, and skills. Despite the fact that some organizations operate at a high level regardless of the systems that are in place, others may occasionally require a push. Assuming successfully made due, the result might be a lot more noteworthy, which would likewise upgrade staff spirit (Wilderom & Maslowski, 2000).

#### 2.4 Business Process Capabilities and Accounting Information System

As per Obeidat, Al-Suradi, Masadeh, and Tarhini (2016 p.23), "business process abilities are an association's ability to produce market esteem by utilizing assets in an unmistakable way". A three-group worldview for BPC characterization has been created by scholastics: outside-in capacity, back to front ability, and crossing capacity (Day, 2014; Fahy and Hooley, 2012). According to Fahy & Hooley (2012 p.88), "a company's outside-in capability is its capacity to anticipate market needs, eliminate rivals, forge long-term strategic alliances with external stakeholders, and adapt quickly to market shifts." An organization's outside-in competence, according to Wade and Hulland (2018), is its capacity to focus on and highlight the risks and opportunities in the external environment for later internal process validation.

Back to front abilities, as characterized by Financier, Bardhan, Chang, and Lin (2016), allude to an association's ability to seek after functional greatness and proficiency through inner methods. Spreading ability depicts the mixing of authoritative capacity from an external perspective in and the back to front. According to Dickinson (2009), an organization's spinning capabilities are its capacity to manage information flow between operational supply chain sectors (such as purchasing, order processing, strategy development, and information dissemination).

Using significant resources, making the most of market valuable open doors, deflecting likely shortcomings, and killing outer dangers are completely made conceivable by traversing capacities, which depend on both inner and outside examination. IS capacity can also

influence organizational performance in any circumstance, particularly during times of crisis, through the mediating function of capabilities.

Furthermore, an IT-based framework, similar to AIS, with the association's capacity to streamline BP and further develop BP the board, can increment hierarchical execution (Peng, Quan, Zhang and Dubinsky, 2016). According to Rai, Patnayakuni, and Seth (2006), AIS may not be able to support continued success on its own, despite being a useful tool for improving organizational performance.

According to Liang et al., organizational capabilities like those related to business processes are the acknowledged mediators. 2010). In order to establish a causal connection between BPC and OR, the utilization of dynamic AIS systems strengthens crucial interdependencies between inputs, processes, and outcomes. When joined with other BPs, IT-based frameworks like AIS can work on authoritative execution, as per Powell and Imprint (2013) Micallef's examination. On the basis of this, it is anticipated that advancements in BP will serve as a mediator between AIS capabilities and performance. Likewise, the AIS capacities of the business data framework should be applied to upgrade an association's general presentation to get solid, significant data for overseeing everyday tasks and key objectives in a rapidly changing business climate (Sun, Strang and Firmin, 2017).

#### 2.5 Empirical Review

#### 2.5.1 Accounting Information Systems and Organizational Performance

The accounting information system (AIS) is made up of a number of different types of documentation and equipment. These include people, computers, communication tools, and

reports that have been carefully coordinated to turn data into financial management information. In point of fact, AIS is one of the primary components of the contemporary information system (IS) (Abdallah, 2013). The effectiveness of AIS usage has been the subject of numerous studies, with the current focus on the connection between AIS use and organizational performance (Ismail, 2009; Effah and co., 2011; Harash, 2015).

Zager et al. (2006) and Ismail (2009) found that AIS might be useful for improving organizational performance if new information was incorporated into the system's implementation. Other research showed a positive correlation between the two. Estebanez et al. (2011), who contended that AIS use well affected authoritative execution, offer help for this. The accompanying speculation is proposed because of the audit of the writing referenced previously;

H1: The effectiveness of a company is positively impacted by its accounting information system.

#### 2.5.2 Information technology and Organizational Performance

In previous research, the majority of authors assessed the impact of IT components on organizational effectiveness, with some highlighting the difficulty of measuring it (Vuksic et al., 2012). As indicated by different examinations, IT decidedly affected authoritative execution (e.g., Chang and Chuang, 2011; Factories and Smith, 2011; Hussein and other, 2012), in contrast to Asli et al. 2013) shown that IT rehearses straightforwardly worked on the exhibition of SMEs. Dalfard et al. (2016) reached similar conclusions. 2013), who found that IT had a positive effect on the performance of 106 businesses after examining the results.

Related studies, as stated by Llorens-Montes et al. 2008), the relationship between groundbreaking initiative and hierarchical viability was decidedly intervened by essential factors of IT information, for example, information slack, absorptive fitness, and affability. Additionally, according to Mckeen et al. 2009) and Vayrynen (2014), IT rehearses in a roundabout way affect monetary execution. Richey et al. (McKeen et al. 2009), 2009), as well as Richey et al. 2009) likewise found that IT rehearses decidedly affect hierarchical results like representative and firm item development.

Asli et al. (2013), in the meantime, exhibited what IT straightforwardly and emphatically means for authoritative execution in SMEs. The following hypothesis emerges from the examination of the aforementioned studies:

H2: The effectiveness of organizations is positively impacted by information technology.

#### 2.5.3 AIS, IT Knowledge Management and Organizational Performance

This reason is to some extent upheld by studies (Sori, 2009; Khodadi and other, 2014), which found that AIS affects IT knowledge management and organizational performance in addition to performance. AIS is a forerunner of IT information the executives, and the last option may thusly be a predecessor of basic work results like authoritative execution (Asli et al., 2013). The role that knowledge management plays as a mediator between AIS and organizational performance may help to explain these findings. The collection of exploration on hierarchical execution gives inadequate experimental proof with respect to the factors that could intercede the connection among AIS and Over powered (Estebanez et al., 2011; Soudani, 2012), and to exacerbate the situation, studies showing the association between information ITmanagement

and organizational level effectiveness are lacking (Ai et al., 2007; Ngah & Jusoff, 2009). In order to evaluate the following hypothesis, this study intends to:

H3: IT knowledge management acts as a mediator in the connection between organizational effectiveness and AIS.

#### 2.5.3 Accounting Information System and Financial Performance

Financial managers need the accounting and financial data that AIS provides in order to plan for the future and evaluate the company's past performance. Hence, return on resources and return on value are utilized to measure authoritative achievement (ROE). These proportions act as signs of monetary execution (Majeed, 2011). In order to control and improve the company as a whole's performance, the general manager must use ROE to try to change how the debt performs in the capital structure. Miller et al. (2000) According to Armstrong and Baron (1998), performance management is a major factor in increasing an organization's overall value. The dependability, detailing organization, idealness, and choice relatedness all play a critical part in the nature of the data. The point of view of leaders in regards to the worth of the data delivered by the framework to meet enlightening necessities for functional systems, administrative revealing, planning, and control inside the association likewise influences how powerful an AIS is (Nwinee et al., 2016).

According to Hall, one of the four major subsystems that make up an AIS is the general ledger/financial reporting system, which is responsible for producing traditional financial statements like income statements, balance sheets, statements of cash flows, tax returns, and

other reports that are required by law. The other two are the decent resource framework and the proper resource the executives framework. The administration revealing framework, which offers interior administration monetary reports with explicit purposes and information vital for deciding, for example, spending plans, fluctuation reports, and obligation reports Execution the board would subsequently go about as a mediator in the communication among AIS and hierarchical execution. Utilizing bookkeeping information, direction, and interior control processes, we analyze the possibility fit between AIS, execution the executives, and authoritative execution as per the past postulation.

The blend of interconnected physical and non-actual parts is known as AIS. These parts team up to deal with monetary exchange information to resolve monetary issues (Susanto 2007). Various sorts of IS are expected, as per Laudon and Laudon (2005), to help navigation and occupation undertakings at different practical levels in an association. In order to provide information that can be used in making decisions, a significant portion of the information system (IS) needs to integrate the numerous functional layers of information and business processes.

System integration is also very important. At present, organizations use web and computerized proof in their AIS to assist them with making taught decisions (1999; Huang, Lee, and Wang). As per Conway (2009), PM is done most successfully in an activity that guarantees the targets. The Over powered is the PM's primary concentration. (Conway, 2009) The AIS has an impact on a number of divisions, which in turn have an impact on the PM and the entire organization. Management is taking a number of initiatives to obtain reliable information for the PM's development. The organization benefits decisively from its exact

comprehension. Admittance to great information fills in as an upper hand thanks to AIS (Xu 2010). In addition, businesses are investing in AIS to improve the timely flow of high-quality information for making better management decisions.

Essex and Magal (1998) battle that administration needs admittance to dependable data assembled by AIS. As a result, businesses also use AIS to back up management decisions. Monetary examination of bookkeeping data is regularly used in direction, and the examination is periodically done using AIS. AIS can deal with an enormous volume of information for entrepreneurs and chiefs utilizing undertaking innovation.

The accomplishment of a manager's milestones and goals is a measure of their effectiveness. While contrasting projections and spending plans with genuine execution, the executives frequently assesses accomplishment by recognizing any surprising results that require further examination. In addition to determining the financial risk posed by the processes, the managers are in charge of developing, implementing, and evaluating the internal control systems. As their primary function, internal controls typically deal with AIS, which involves the transfer of the organization's financial records. Managers must also use internal monitoring to evaluate and monitor the effectiveness of accounting processes for business outcomes. For the organization's typical valuation to build, PM is essential. AIS is the most average wellspring of information in an association. The AIS is made to give data that is opportune and adequately exact to all administration levels, helping them in direction and fostering the PM, which in the long run brings about high OE.

Chenhall (2003) says that different AIS topologies have different strategic organizational trajectories, which makes the organization more efficient as a whole (OE). According to Al-Najjar (2017), increased resource allocation in AIS enables the company to adapt to shifting market and environmental conditions and strengthens and streamlines corporate culture. In reality, AIS is a structure that utilizes an organization's monetary records, coordinating various bookkeeping devices and frameworks with different strategies with the guide of IT to follow publishable interior and outside information, monetary revealing, and example examination to conjecture an organization's results.

Bookkeeping data, as occasional reports or unique examinations, is many times a wellspring of data for simply deciding, including valuing, creation levels and item blend, rethinking, stock strategy, client overhauling, work talks, and capital speculations (Horngren et al., 2005; 2003 Sprinkle; Neale and Maris, 2006). Allude to propels our insight into data frameworks (IS) the executives by applying thoughts and bits of knowledge from bookkeeping. Four areas of research are covered by the development and application of an integrative cost-benefit framework: chargeback, re-appropriating, choice help, and business process re-designing and improvement.

A few hypothetical viewpoints are examined as elective approaches to review AIS examination and applications. Here, we proceed with this line of request by thinking about how to approach AIS exploration and application inside a pluralistic setting to start and support different voices taking part in exchange and discussion. Such an outlining gives

hypothetical and systemic direction in the plan, execution, and assessment of AIS in work associations (Dillard, 2008; Matthew, 2010) why chiefs use bookkeeping data in their work. First, accounting data is mostly used by managers to learn more about their workplace rather than to help them make specific decisions.

Accounting data can help managers in this position acquire the knowledge they need to anticipate unanticipated decisions and actions in the future. Second, because accounting data is just one component of a larger set of information that managers use in their work, it's important to compare it to other information sources to see how it stacks up against them. Thirdly, rather than through written reports, accounting information becomes involved in managerial work because managers communicate primarily verbally with information and other managers (Matthew, 2010).

Muhrtala and Ogundeji (2013) looked into how Nigerian accountants and IT executives felt about the security risks to Nigerian CAIS. Organizations should use physical, logical, environmental, and administrative (policies, guidelines, standards, and procedures) controls to protect IT infrastructure, according to the authors' recommendations. In addition, management should keep an eye on physical controls to control access to information assets processing facilities, computers, and telecommunications equipment and to protect CAIS. The study also said that biometric devices like scanners for the retina, hand geometry, fingerprint scanners, and electronic card readers should be used a lot.

Neogy (2014) looked at how effective AIS was in a few Bangladeshi mobile telecommunications companies. It was found that the AIS of the chose versatile media transmission organizations electronic and all exchanges are handled by the PC. Companies can use computerized AIS to record and process accounting transactions, as well as to prepare financial statements like the income statement, balance sheet, owner's equity statement, and cash flow statement. In addition, AIS provide information that aids all levels of management, including operational, middle, and top management.

The impact of an accounting information system (AIS) on an organization's profitability was examined by Patel (2015) in the study titled "Effects of Accounting Information System (AIS) on Organizational Profitability." It was observed that there was a positive critical connection between the bookkeeping data frameworks utilized by the ventures and its benefit. Additionally, the review reasoned that the adequacy of bookkeeping data frameworks helps in better decision making by supervisors, more compelling inner control frameworks, improvement of the nature of monetary reports, upgrade of execution measures, working with monetary exchange cycles and helps in extension of productivity of the association.

Nwinee et al. (2016) looked at how AIS affected the efficiency of management and costeffectiveness of Nigerian SMEs. Information was gathered through poll set on five point Likert scale and broke down with the use of Kruskal Wallis H test. Organizational effectiveness was proxied by management effectiveness and cost control. By supporting rational operational decisions, it was discovered that AIS improves management efficiency and cost control. In addition, the review investigated that Accounting Information System decidedly affects the viability of little and medium scale endeavors in Nigeria.

Ask (2018) in the examination paper named, "Effect of Bookkeeping Data Framework on the Monetary Execution of Chosen FMCG Organizations" explored the job of Accounting Information System on the monetary execution of ten significant Indian FMCG organizations. Settle, Amul, Hindustan Unilever Restricted (HUL), Asian Paints, Godrej, Britannia, Dabour, Wipro, PepsiCo, and Coca Cola were the organizations chosen by the scientist for examination. A self-regulated poll planned on five point likert scale was utilized to gather information. The sample consisted of 283 employees using judicious sampling. AIS was utilized as autonomous variable though monetary execution was utilized as reliant variable. The discoveries after utilization of straightforward direct relapse featured that there is a huge effect of bookkeeping data framework on the monetary execution in the organizations under study. Because the value of R square was higher, HUL, PepsiCo, Coca-Cola, and Nestle revealed that AIS had the greatest impact.

THE WAS ANE

# 2.5 Conceptual Framework

The conceptual framework that describes the connection between AIS and organizational performance with the aid of information technology is provided below

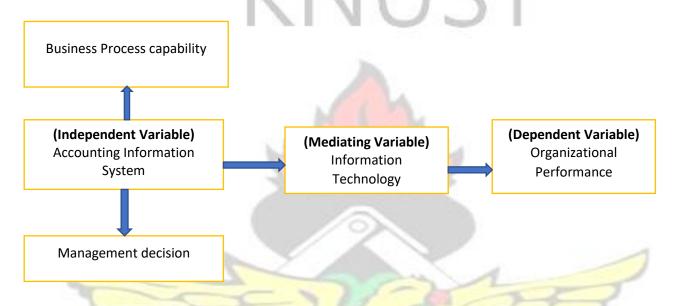


Figure 1: Conceptual Framework

**Source: Author's Construct** 

#### **CHAPTER THREE**

# **METHODOLOGY**

#### 3.1 Introduction

This section of the study captures the research design, population of the study, sample and sampling technique, data collection instrument, sources of data, data collection procedure, data analysis and interpretation of results and ethical considerations

## 3.2 Research Design

The study's design was based on a descriptive survey. Clear overviews, as per Saunders (2007), are a kind of study that yield exact outcomes and can be involved with more noteworthy confirmation comparable to explicit inquiries of unique interest. The unmistakable review, which depicts peculiarities as they are, is now and again alluded to as measurable exploration. It is utilized to distinguish and assemble information about a specific subject, similar to people, and their qualities.

# 3.3 Population

Kothari (2011) defines a population as a collection of distinct individuals or things from which samples are collected for analysis. All workers of Ghana Water Organization Restricted, especially those in the More noteworthy Accra District, made up the populace for this review. The total number of people who participated in the study was 937.

### 3.4 Sample Technique and Size

The research surveyed 286 customers

#### 3.6 Data Sources

# KNUST

# • Primary Data

A questionnaire was used to obtain the main information. This is so that information aimed at the respondents can be more easily gathered.

### • Secondary Data

#### 3.7 Data Collection Procedure

A poll was used to assemble data from respondents. The instrument was chosen because it can quickly collect a large amount of data and is easy to use. The survey included both openended and closed-ended questions. Through the open-ended questions, respondents were able to express their thoughts on some of the topics covered in the survey. Since the respondents could peruse and compose, the poll was isolated into four parcels and given to them.

# 3.8 Data validity and reliability

The validity and reliability of the data were ensured by utilizing expert knowledge and a pilot study to ensure that each statement was pertinent and would elicit the required responses. Before information gathering started, my manager's perspective was gotten. Additionally, the formal validity technique was utilized to ascertain the questionnaire's validity. Chronbach's

alpha was used to test the questionnaire's reliability. Face legitimacy and items legitimacy of the poll were made. The responses were categorized using a five-point Likert scale. The survey incorporates two sections; the initial segment contains 3 things that connected with individual data; There are 16 items in the second section that are related to the research variables.

### 3.9 Data processing and analysis

Information was unmistakably analyzed. Descriptive statistics, or percentages, were used to analyze the data. The percentage scores of the Likert scale options were tallied and presented in a table. Following the extraction of the inquiries without a right or wrong answer, they were coded. The information was dissected utilizing the PC program Measurable Bundle for the Sociologies (SPSS), which is the most involved factual program in the sociologies.

#### 3.10 Ethical considerations

Privacy and secrecy were identified as ethical concerns because respondents were led to believe that the submitted data would only be used for academic purposes.

### 3.11 Profile of Ghana Water Company Limited

"Ghana Water Company Limited (GWCL) is a state-owned utility company. All urban communities in Ghana are supplied with potable water by the company. Eighty-eight (88) of

the nation's urban water supply systems are currently managed by GWCL. Normal creation is around 800 and 71 thousand, 400 and 96 cubic meters (871,496m3) each day (192 million gallons each day). Present consumable water request is assessed at 1,000,000, one hundred and 31 thousand, 800 and eighteen point eighteen cubic meters (1,131,818.18m3) each day (249 million every day). As a result, approximately 77% of urban residents have access to water. GWCL serves seven hundred and eight thousand, five hundred and seventy customers, eighty-six percent (86%) of whom are metered and fourteen percent (14%) unmetered, with a staff of three thousand, four hundred and seventy-six" (www.ghwater.com)

"The four chiefs are helped by 17 Boss Supervisors who head different divisions at the Administrative center. The following are the departments: Project Arranging and Improvement, HR and Managerial Administrations, Lawful Administrations, Advertising and Correspondences, Corporate Preparation, Checking and Assessment, Innovation and Advancement, Money, Materials, Business and Showcasing, Review, Water Quality Confirmation/Water Assets, Unique Obligations, Low Pay Customer Backing Office (LICSD), Tasks and Support, Packaging Plant, Grounds and Homes and Business Improvement. Unit Heads (Line Managers) provide support to the 15 Regional Chief Managers. At the local level, the Area Directors oversee and control the different regions of GWCL all through the country" (www.ghwater.com)



# 4.1 Introduction

This section is focused on the research findings of this study. The responses from the respondents in this study were analyzed quantitatively to explain the meanings and understandings associated with the objectives of this study.

# 4.1 Demography of respondents

### **4.1.1 Gender**

From the study, it emerged that 72.6% of the respondents are females while the remaining 23.4% are males. This implies that the workforce of the organization under study is male dominated than females. Figure 4.1 is shown below.

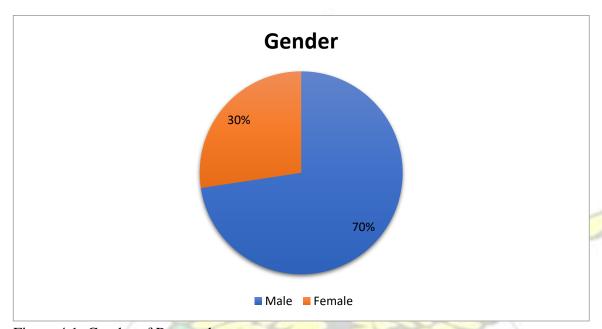


Figure 4.1: Gender of Respondents

Source: Fieldwork, 2023

### 4.1.2 Age of Respondents

From the above table, we can observe that most of the respondent 59.5% are aged group 40 to 49. Carefully followed by students aged between 50 to 59 they are 24 (28.6) of the respondent. 7 students are aged between 30 to 39 which is 7 (8.3) of the respondent. The least represented aged group is those aged between 20 to 29. The human resource is very energetic and youthful which guarantees effective workforce for Ghana Water Company Limited. See table 4.1 below.

Table4.1Age distribution of Respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
-	1	1.2	1.2	1.2
20 - 29	1	1.2	1.2	2.4
30 - 39	7	8.3	8.3	10.7
40 - 49	50	59.5	59.5	70.2
50 - 59	24	28.6	.6	98.8
Age	1	1.2	1.2	100.0
Total	84	100.0	100.0	

Source: Fieldwork, 2023

# 4.1.3 Educational Background//d of Respondents

From the below figure, it is observed that majority of the respondents are Postgraduate students. While only 4 of the respondent are Graduate undergraduate level, with only one respondent with SHS/WASSCE has the highest qualification. See figure 4.3 below.



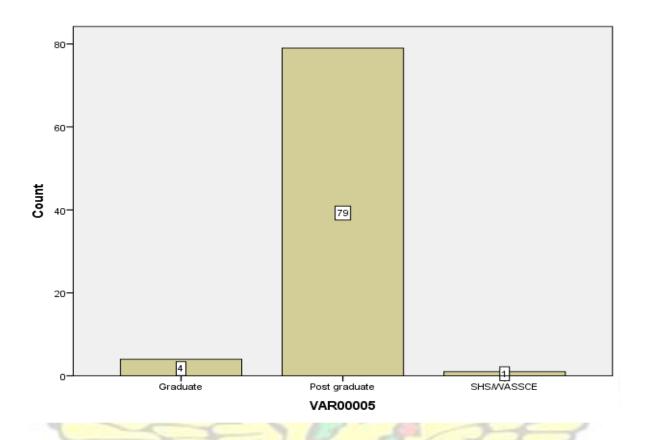


Figure 4.2: Educational Background of Respondents Source: Fieldwork, 2023

SAPSAWSANE

# 4.1.4 Length of service

Results from the study showed that 55.6% had worked for 0-4 years while 19.4% had worked for 11-15 years. Those who had worked for 5-10 years were 13.9% where as 11.1% had worked for over 16 years. See figure 4.4 below.

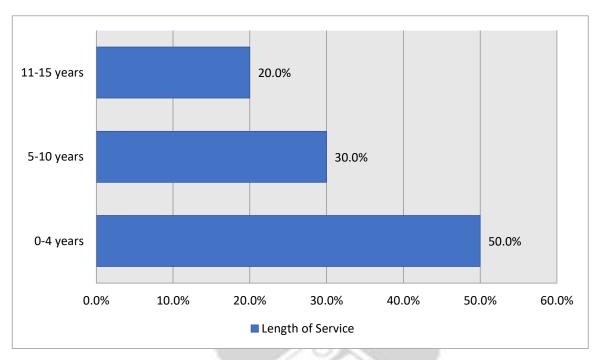


Figure 4.3: Length of service

Source: Fieldwork, 2023

# 4.3 Role of AIS in Organizational Performance

From the study, it was recorded by majority of the respondents that AIS is relevant to GWCL. Considering the main role of AIS in the performance of GWCL, it emerged that 40% of the respondents were of the view that guaranteeing service quality to customers in the organization was significant while 30% opted for effective automation of organizational operations. This is supported by empirical findings that there appears to be a linkage between AIS and performance as indicated in studies by Majeed, 2011 and Nwinee et al., 2016).

Moreover, Beamon 2014 and Chen and Paulraj (2017) affirm the above discoveries when they declared that better aggregate information AIS administration ability and upgrade of human

skills. As indicated by Chenhall (2003), different AIS geographies have different vital hierarchical directions, helping generally speaking authoritative effectiveness (OE). According to Al-Najjar (2017), increased resource allocation in AIS enables the company to adapt to shifting market and environmental conditions and strengthens and streamlines corporate culture. In reality, AIS is a structure that utilizes an organization's monetary records, coordinating various bookkeeping devices and frameworks with different strategies with the guide of IT to follow publishable interior and outside information, monetary revealing, and example examination to conjecture an organization's results.

Talaneh and Nakhajavni (2003) have an article in regards to individual decision making with utilizing of bookkeeping data. The writers in this article notice a few genuine encounters connected with the utilization of bookkeeping data framework through people and the data handling strategy by them and furthermore they have concentrated on the likelihood of utilizing of encounters in bookkeeping hypothesis improvement (Talaneh & Nakhajavni, 2003).

Additionally, AIS is the combination of interconnected physical and non-physical components. These parts team up to deal with monetary exchange information to resolve monetary issues (Susanto 2007). Various sorts of IS are expected, as per Laudon and Laudon (2005), to help navigation and occupation undertakings at different practical levels in an association. An enormous piece of the AIS should coordinate the numerous utilitarian layers of data and business processes to convey data that might be utilized for direction.

System integration is also very important. At present, organizations use web and computerized proof in their AIS to assist them with making taught decisions (1999; Huang, Lee, and Wang). As per Conway (2009), PM is done most successfully in an activity that guarantees the targets. The Over powered is the PM's primary concentration. The AIS impacts numerous divisions, which thus impacts the PM and the whole association (Conway, 2009).

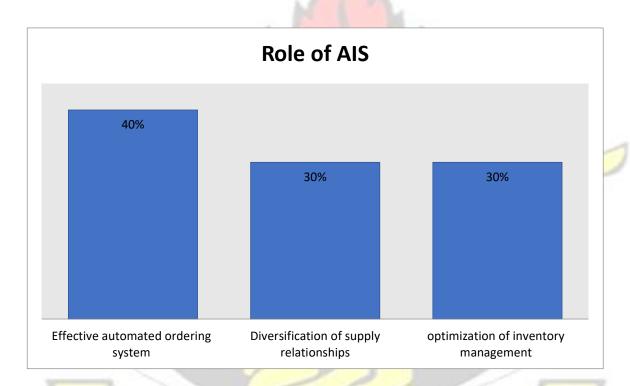


Figure 4.4 Role of AIS

(Source: Fieldwork, 2023)

# **4.4 Impact of AIS On Organizational Performance**

Table 4.2 below presents the findings from the analysis on the impact of AIS on organizational performance. The mean values with the standard deviation were interpreted such that scores above neutral represented strong agreements; scores between 3 and 4 represented moderate agreements; whereas scores below 3 represented disagreements.

Table 4.2 impact of AIS on organizational performance.

Source: F

	Mean	Standard Deviation
Our AIS is reliable	3.15	0.228
Our AIS is flexible	3.22	0.623
Our AIS is easy to use	4.43	0.252
Our AIS is easy to learn	4.14	0.196
The response time of our AIS is acceptable.	4.66	0.675
Information provided by our AIS is up to date.	2.01	0.312
Information provided by our AIS is accurate.	3.03	0.731
Information provided by our AIS is easy to read and understand.	1.93	0.423
Information provided by our AIS is sufficient for the task at hand.	2.30	0.241
Information content provided by our AIS meets and fits our needs	2.01	0.312
The staff of technical support for the AIS is available when we need it	1.02	0.423
The staff of technical support for the AIS provides assistance with fast service.	2.11	0.418

The staff of technical support for the AIS is empowered to resolve	4.09	0.112
user problems.		
The staff of technical support for the AIS understands the specific	4.77	0.209
needs of users.	and the last	
When a user has a problem, the staff of technical support for the AIS	4.14	0.202
shows sincere interest in solving it.		

fieldwork, 2023

This part of the review zeroed in on the connection between AIS authoritative execution

at GWCL. In the first place, 3.15 and 3.22 showed undecidedly that "Our AIS is solid", "Our AIS is adaptable" separately. Nonetheless, a mean score of 4.43, 414, and 4.63 firmly concurred that AIS is not difficult to utilize, AIS is not difficult to learn and the reaction season of our AIS is satisfactory separately. The studies conducted by Sprinkle in 2003 support this finding; Homgren and other, 2005) who stated that Bookkeeping data, as intermittent reports or unique examinations, is many times a wellspring of data for simply deciding, including estimating, creation levels and item blend, reevaluating, stock strategy, client overhauling, work talks, and capital ventures.

The above finding is additionally upheld by the investigations of Muhrtala and Ogundeji (2013) who declared that bookkeeping data can assist directors with creating information to plan for obscure future choices and exercises. Second, as bookkeeping data is only one piece of the more extensive data set that supervisors use to play out their work, it is basic to consider its assets and shortcomings not in confinement but rather comparative with different wellsprings of data available to a director. Thirdly, rather than through written reports,

accounting information becomes involved in managerial work because managers communicate primarily verbally with information and other managers (Matthew, 2010).

Muhrtala and Ogundeji (2013) researched the view of Nigerian bookkeepers and IT leaders on the presence of safety dangers on CAIS's in Nigeria. The creators suggested that associations ought to execute significant safety efforts to safeguard IT framework using physical, legitimate, natural and managerial (arrangements, rules, guidelines, and techniques) controls. In addition, management should keep an eye on physical controls to control access to information assets processing facilities, computers, and telecommunications equipment and to protect CAIS. The study also said that biometric devices like scanners for the retina, hand geometry, fingerprint scanners, and electronic card readers should be used a lot.

In addition, Neogy (2014) assessed the productivity of AIS in chose versatile media transmission organizations in Bangladesh. It was found that the AIS of the chose versatile telecom organizations automated and all exchanges are handled by the PC. Companies can use computerized AIS to record and process accounting transactions, as well as to prepare financial statements like the income statement, balance sheet, owner's equity statement, and cash flow statement. Moreover, AIS likewise give data which upholds all degrees of the board like functional level, center level and high level administration.

WUSANE

# 4.5 CHALLENGES OF AIS IN ACHIEVING ORGANIZATIONAL PERFORMANCE

The results of the analysis on how AIS affects organizational performance are shown in Table 4.3 below. Scores over neutral reflected strong agreements, scores between 3 and 4 showed moderate agreements, and scores below 3 represented conflicts, according to the interpretation of the mean values with the standard deviation.

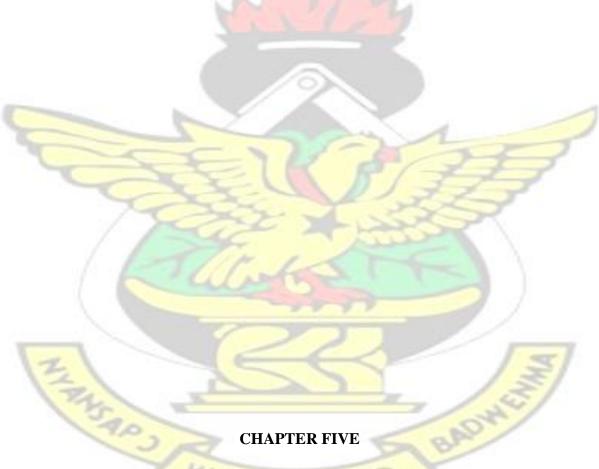
Table 4.3: Obstacles to Organizational Performance that AIS Faces

Statements	Mean	Standard
		Deviation
Political interference in at GWCL	4.14	0.202
Lack of financial resources	4.40	0.912
Efficiency in billing system	3.00	0.702
Lack of top management support	3.05	0.211
Lack of qualified personnel	4.11	0.233

Source: Fieldwork, 2023

Political interference in AIS systems, insufficient financial resources, and the high cost of IT are key examples. There is elevated degree of help as well as government obstruction that the organization gets from the public authority. It incorporates the application of sector-specific guidelines, policies, and norms. The examination led by Nwinee et al. (2016) who investigated how AIS affected the efficiency of management and cost-effectiveness of Nigerian SMEs. Information was gathered through poll set on five point Likert scale and investigated with the utilization of Kruskal Wallis H test. The executives productivity and cost control was utilized as intermediary variable to gauge hierarchical viability. By supporting rational operational decisions, it was discovered that AIS improves management efficiency and cost control. Plus, the review investigated that bookkeeping data framework emphatically affects the viability of little and medium scale endeavors in Nigeria.

Additionally, the organization under investigation is severely lacking in qualified staff. This prompts dependence on manual tasks and its related errors. The finding is straightforwardly extent to a degree of input up until this point. Thusly, it is fundamental for GWCL to keep and heighten its venture procedures to assist with working on the efficiency of laborers.



SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

# **5.1 Introduction**

This chapter's main goal is to provide an overview of the major findings and to analyze the implications for regional economic growth. Additionally, the chapter offers some suggestions for enhancing AIS at GWCL. The summary of the study, the study's findings, and its recommendations are the main topics of this chapter.

# **5.2 Summary**

The Ghana Water Company Limited (GWCL)'s information technology played a mediating role in the study's assessment of the effect of AIS on organizational performance. The study's primary goals were to define the role of AIS in GWCL's organizational performance, quantify the impact of AIS on that performance, ascertain whether information technology aids AIS in ensuring high organizational performance at GWCL, and pinpoint the difficulties AIS faces in achieving organizational performance.

First, it was discovered that 40% of respondents thought it was important for the business to guarantee service quality to its clients, while 30% preferred efficient automation of organizational processes. Empirical results that suggest a connection between AIS and performance back this up as shown in research by Majeed (2011) and Nwinee et al. (2016)).

In addition, Beamon 2014 and Chen and Paulraj (2017) confirm the above findings when they asserted that improved collective knowledge AIS service capability and enhancement of human competencies.

Additionally, it was found that 80% of the respondents, or the majority, said they were completely aware of the AIS system at GWCL, but 20% said they were not. This is also backed by research that claims to have conceptualized the dimensions relating to capabilities and performance at the firm level by looking at the impact of technology and innovations applied to processes (Straub et al. 2014).

Finally, there are issues with the AIS systems at GWCL. Political meddling in SCM systems, a lack of funding, and expensive IT costs are among the main ones. When exploiting domestic resources or importing raw materials or goods from abroad, the government provides the enterprise with both high levels of assistance and interference. It comprises applying industry-specific standards, laws, guidelines, and recommendations. According to the study done by Elzarka et al. (2011), the government can implement a number of changes to promote exports by boosting the industrial sector's competitiveness in the global market through logistical proficiency.

#### **5.3 Conclusion**

According to the study's findings, AIS should receive more attention as a technique for improving organizational performance. This appears to be essential to get a competitive advantage in GWCL's extremely appealing and competitive organizational environment. But given the rapidly evolving technical landscape, AIS should be viewed as a moving target where constant improvement is crucial to adjusting to the dynamic nature of such systems.

The management's continued support is required to increase the investment in AIS, and management awareness and willingness seem to be crucial. The results of this investigation can offer a methodical defense of this conjunction.

#### **5.4 Recommendations**

On the basis of the study's findings, the following suggestions are made:

First, the report strongly urges the implementation of an organized training and development program for all GWCL workers.

In order to achieve financial supremacy, the report advises institutions in Ghana to combine proper AIS with improved operational and marketing results.

The report also suggests that these methods be equally adopted by all public institutions in Ghana in order to improve performance.

Again, as they have the potential to improve their performance, there is a need for greater emphasis on promoting the adoption of these practices. Management in public institutions should concentrate on AIS process improvement with the production of more customer value through its effective implications.

# KNUST

#### References

- Abdallah, A. A. J. (2014) The impact of using accounting information systems on the quality of financial statements submitted to the Income and sales tax Department in Jordan. *European Scientific Journal*, ESJ, 9(10), 41-48.
- Al-Adaileh, R. (2018), Essentials of Management Information Systems. Karak-Jordan: Yazeed-Publications.
- Amidu, M., Effah, J., & Abor, J. (2011) E-accounting practices among small and medium enterprises in Ghana. *Journal of Management Policy and Practice*, 12(4), 146-155.
- Armstrong, M., & Baron, A. (1998), Performance management: The new realities. State

  Mutual Book and Periodical Service. Boston: Havard Business School Publishing

  Corporation.
- Baj, Z., Khodadadi, V., & Ahmadi, M. R. (2014) Relationship between Accounting Information Systems (AIS) and knowledge Management (A case study: Saderat Bank of Banker, R.D. Bardhan, I.R. Chang, H. & Lin, S. (2016) Plant information systems, manufacturing capabilities, and plant performance. MIS Q., 30, 315–337.
- Behbahan City) Arth prabandh: A Journal of Economics and Management, 3(6), 170-175.
- Budiarto, D. S., & Prabowo, M. A. (2015) Accounting information systems alignment and

- SMEs performance: A literature review. *International Journal of Management, Economics and Social Sciences*, 4(2), 58-70.
- Caldeira, M.M., & Ward, J.M. (2003), Using resource-based theory to interpret the successful adoption and use of information systems and technology in manufacturing small and medium-sized enterprises. *European Journal of Information Systems*, 12(2), 127-141.
- Chang, T. C., & Chuang, S. H. (2011) Performance implications of knowledge management processes: Examining the roles of infrastructure capability and business strategy. *Expert systems with applications*, 38(5), 6170-6178.
- Chen, C. J., & Huang, J. W. (2007) How organizational climate and structure affect knowledge management—The social interaction perspective. *International journal of information management*, 27(2), 104-118.
- Day, G.S. (2014) The capabilities of market-driven organizations. J. Mark., 58, 37–52.
- Dayan, R., Heisig, P., & Matos, F. (2017) Knowledge management as a factor for the formulation and implementation of organization strategy. *Journal of Knowledge Management*, 21(2), 308-329.
- Dickinson, J. B. (2009) The Role of Business Process Capabilities and Market-Based Assets

  in Creating Customer Value and Superior Performance. Ph.D. Thesis, Drexel
  University, Philadelphia, PA, USA.
- Du, R., Ai, S., & Ren, Y. (2007) Relationship between knowledge sharing and performance:

  A survey in Xi'an, China. *Expert systems with Applications*, 32(1), 38-46.
- Fahy, J. & Hooley, G. (2012) Sustainable competitive advantage in electronic business:

Towards a contingency perspective on the resource-based view. *J. Strateg. Mark*, 10, 241–253.

# KNUST

- Flynn, B. B., Sakakibara, S., Schroeder, R. G., Bates, K. A., & Flynn, E. J. (1990) Empirical research methods in operations management. *Journal of operations management*, 9(2), 250-284.
- García-Morales, V. J., Lloréns-Montes, F. J., & Verdú-Jover, A. J. (2008). The effects of transformational leadership on organizational performance through knowledge and innovation. *British journal of management*, 19(4), 299-319.
- Girard, J., & Girard, J. (2015) Defining knowledge management: Toward an applied compendium. *Online Journal of Applied Knowledge Management*, 3(1), 1-20.
- Gholami, M. H., Asli, M. N., Nazari-Shirkouhi, S., & Noruzy, A. (2013). Investigating the influence of knowledge management practices on organizational performance: an empirical study. *Acta Polytechnica Hungarica*, 10(2), 205-216.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2006), Multivariate Data Analysis. 6th ed. Uppersaddle River: Pearson Prentice Hall.
- Hair, J.F., Anderson, R.E., Tatham, R.L. & Black W.C. (2003), Multivariate Data Analysis,

- (5th edition). New Jersey: Prentice Hall.
- Hall, M. (2008), The effect of comprehensive performance measurement systems on role clarity, psychological empowerment and managerial performance. *Accounting*, *Organizations and Society*, 33(2-3), 141-163.
- Hall, J. A. (2012). Accounting information systems. Cengage Learning.
- Hammersley, M. (1992). "The paradigm wars: Reports from the front." *British Journal of Sociology of Education*. Vol 13, No. 1, pp. 131-143.
- Harash, E. (2015). The Role of Environmental Uncertainty in the Link between Accounting

  Information System and Performance Small and Medium Enterprises in Iraq. *Global Journal of Management And Business Research*, 15(2), 26-32.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. Communication monographs, 76(4), 408-420.
- Hla, D., & Teru, S.P. (2015), Efficiency of accounting information system and performance measures. *International Journal of Multidisciplinary and Current Research*, 3, 976-984.
- Horngren, C.T., Harrison, W.T., Bamber, L.S., Willis, B., & Jones, B. (2005), Accounting.

  Pearson Education. Harlow: Financial Times/ Prentice Hall.
- Hsu, R. C., Lawson, D., & Liang, T. P. (2007) Factors affecting knowledge management

adoption of Taiwan small and medium-sized enterprises. *International Journal of Management and Enterprise Development*, 4(1), 30-51.

# KNUST

- Ismail, N. A. (2009) Factors influencing AIS effectiveness among manufacturing SMEs:

  Evidence from Malaysia. *The Electronic Journal of Information Systems in Developing Countries*, 38(1), 1-19.
- Kiessling, T. S., Richey, R. G., Meng, J., & Dabic, M. (2009) Exploring knowledge management to organizational performance outcomes in a transitional economy.

  \*\*Journal of world business\*, 44(4), 421-433.\*\*
- Khairuddin, S., Ashhari, Z.M., & Nassir, A.M. (2010), Information system and firm's peformance: The case of Malaysian small medium Enterprise. *Journal of International Business Research*, 3(4), 28-35.
- Knežević, S., Stanković, A., & Tepavac, R. (2012), Accounting information system as a platform for business and financial decision-making in the company. *Management*, 65, 63-68.
- Kothari (2011) 'The origins of organization theory', in H. Tsoukas and C. Knudsen (eds) The Oxford Handbook of Organization Theory: Meta-Theoretical Perspectives. Oxford: Oxford University Press.
- Kouser, R., Awan, A., Rana, G., & Shahzad, F. (2011), Firm size, leverage and profitability:

- Overriding impact of accounting information system. *Journal of Management and Business Review*, 1(10), 58-64.
- Kpurugbara, N.; Akpos, Y.E.; Nwiduuduu, V.G. & Tams-Wariboko, I. (2016) Impact of accounting information system on organizational effectiveness: A study of selected small and medium scale enterprises in Woji, Portharcourt. *Int. J. Res. Bus. Manag.* Account. 2, 62–72.
- Lakshman, C. (2007). Organizational knowledge leadership: A grounded theory approach.

  Leadership & Organization Development Journal, 28(1), 51-75.
- Majeed, S. (2011) The impact of competitive advantage on organizational performance.

  European Journal of Business and Management, 3(4), 191-196.
- Melitski, J., & Manoharan, A. (2014), Performance measurement, accountability, and transparency of budgets and financial reports. *Public Administration Quarterly*, 38, 38-70.
- Miller, A., Boehlje, M., & Dobbins, C. (2001), Key Financial Performance Measures for Farm General Managers. West Lafayette, IN: Purdue University Cooperative Extension Service Publication ID-243. p5.
- Mills, A. M., & Smith, T. A. (2011) Knowledge management and organizational performance: a decomposed view. *Journal of knowledge management*, 15(1), 156-171.
- Mujilan, A. & U. W. M. Madiun (2012). Sistem Informasi Akuntansi. Teori dan Wawasan Dalam Dunia Ektronis (1st ed.). Madiun: Universitas Widya Mandala Madiun.
- Nabizadeh, S.M., & Omrani, S.A. (2014), Effective factors on accounting information system

- alignment; A step towards organizational performance improvement. *International Journal of Scientific and Research Publications*, 4(9), 1-5.
- Ngah, R., & Jusoff, K. (2009). Tacit knowledge sharing and SMEs' organizational performance. *International Journal of Economics and Finance*, 1(1), 216-220.

Noruzy, A., Dalfard, V. M., Azhdari, B., Nazari-Shirkouhi, S., & Rezazadeh, A. (2013).

- Relations between transformational leadership, organizational learning, knowledge management, organizational innovation, and organizational performance: an empirical investigation of manufacturing firms. *The International Journal of Advanced Manufacturing Technology*, 64(5-8), 1073-1085.
- Nwinee, K., Akpos, Y., Vincent, G. & Ibinabo, T. (2016), Impact of accounting information system on organizational effectiveness: A study of selected small and medium scale enterprises in Woji, Portharcourt. *International Journal of Research*, 3(1), 974-982.
- Obeidat, B.Y.; Al-Suradi, M.M.; Masa'deh, R. & Tarhini, A. (2016) The impact of knowledge management on innovation: An empirical study on Jordanian consultancy firms.

  Manag. Res. Rev., 39, 1214–1238
- Onaolapo, A.A. & Odetayo, T.A. (2012), Effect of accounting information system on organisational effectiveness: A case study of selected construction companies in Ibadan, Nigeria. *American Journal of Business and Management*, 1(4), 183-189.

WJ SANE NO

Osman, A., Lamis, D. A., Freedenthal, S., Gutierrez, P. M., & McNaughton-Cassill, M.

- (2014). The multidimensional scale of perceived social support: Analyses of internal reliability, measurement invariance, and correlates across gender. *Journal of Personality Assessment*, 96(1), 103-112.
- Peng, J.; Quan, J.; Zhang, G. & Dubinsky, A.J. (2016), Mediation effect of business process and supply chain management capabilities on the impact of IT on firm performance: Evidence from Chinese firms. *Int. J. Inf. Manag.* 36, 89–96.
- Pérez, E.R., Urquía, G.E., & Muñoz, C.C. (2010), Information technology implementation:

  Evidence in Spanish SMEs. *International Journal of Accounting and Information Management*, 18(1), 39-57.
- Pollanen, R., Abdel-Maksoud, A., Elbanna, S., & Mahama, H. (2017) Relationships between strategic performance measures, strategic decision-making, and organizational performance: empirical evidence from Canadian public organizations. *Public Management Review*, 19(5), 725-746.
- Rai, A.; Patnayakuni, R.. & Seth, N. (2016) Firm performance impacts of digitally enabled supply chain integration capabilities. *MIS Q*. 30, 225–246.
- Rasula, J., Vuksic, V. B., & Stemberger, M. I. (2012) The impact of knowledge management on organisational performance. *Economic and Business Review for Central and South-Eastern Europe*, 14(2), 147-168.
- Sačer, I. M., Žager, K., & Tušek, B. (2006). Accounting information system's quality as the

- ground for quality business reporting. In IADIS International conference, e-commerce 2006.
- Sajady, H., Dastgir, M., & Nejad, H.H. (2008), Evaluation of the effectiveness of accounting information systems. *International Journal of Information Science and Technology*, 6(2), 46-59.
- Saunders, M. (2007), 'Competing paradigms in qualitative research', in N. K. Denzin & Y S. Lincoln (Eds.), *Handbook of qualitative research*. Thousand Oaks, CA: Sage, pp. 105–116

- Singh, G., & Kumar, M. (2014) Exploratory factor analysis of service quality dimensions for higher educational institutes: A students perspective. *Global Journal of Management and Business Research*, 14(8), 39-48.
- Saunders, M. Gill, J. & Johnson, P. (2009) 'Reflexivity in qualitative research', in C. Cassell and B. Lee (eds) Challenges and Controversies in Management Research. New York:

  Routledge.
- Saunders, M.N.K. (2012). 'Choosing research participants' In G. Symon, G. and C. Cassell (eds.), The Practice of Qualitative Organizational Research: Core Methods and Current Challenges. London: Sage 37-55.

- Saunders, M., Lewis, P. and Thornhill, A. (2000). Research Methods for Business Students (6th edition). Harlow: Pearson.
- Saunders, M., Lewis, P. and Thornhill, A. (2016). *Research Methods for Business Students* (7th edition). Harlow: Pearson.
- Slavković, M., & Babić, V. (2013) Knowledge management, innovativeness, & organizational performance: *Evidence from Serbia. Economic Annals*, 58(199), 85-107.
- Sori, Z. M. (2009) Accounting information systems (AIS) and knowledge management: a case study. *American Journal of scientific research*, 4(4), 36-44.
- Soudani, S. N. (2012). The usefulness of an accounting information system for effective organizational performance. *International Journal of Economics and Finance*, 4(5), 136-145.
- Sprinkle, G.B. (2003), Perspectives on experimental research in managerial accounting.

  \*\*Accounting, Organizations and Society, 28(2), 287-318.
- Susanto, A. (2008). Sistem Informasi Akuntansi, Struktur-Pengendalian-Resiko-Pengembangan. Bandung: Lingga Jaya.
- Urquía Gr&e, E., & Pérez Estébanez, R. (2011) The impact of Accounting Information

  Systems (AIS) on performance measures: empirical evidence in Spanish SMEs.

# International Journal of Digital Accounting Research, 11, 25-43

- Väyrynen, H., Helander, N., & Kukko, M. (2014) Knowledge management practices in large companies. *The Macrotheme Review: a Multidisciplinary Journal of Global Macro Trends*, 3(9), 56-72.
- Wang, D. H. M., & Huynh, Q. L. (2013) Mediating role of knowledge management in effect of management accounting practices on firm performance. *Journal of Knowledge Management, Economics and Information Technology*, 3(3), 1-25.
- Yin, M. (2003) The state of the art of teaching research methods in the social sciences: towards a pedagogical culture. *Studies in Higher Education*. Vol. 36, No 1, pp. 75-88.
- Zack, M., McKeen, J., & Singh, S. (2009). Knowledge management and organizational performance: an exploratory analysis. *Journal of knowledge management*, 13(6), 392-409.
- Zaied, A. N. H., Hussein, G. S., & Hassan, M. M. (2012) The role of knowledge management in enhancing organizational performance. *International Journal of Information Engineering and Electronic Business*, 4(5), 27-35.

WUSANE

# KNUST

# **QUESTIONNAIRE**

This research assesses the impact of AIS on organizational performance; the mediating role of information technology at Ghana Water Company Limited (GWCL). Your co-operation is highly solicited in completing this questionnaire. The researcher is counting on your candid opinion and comments. Please be assured that any information given would be treated with the highest degree of confidentiality it deserves.

# SECTION A- BIO-DATA OF RESPONDENTS

Please put a tick ( $\sqrt{\ }$ ) in the appropriate box.

- 1. Gender: Male [ ] Female[ ]
- 2. Age: 20 29 [ ] 30 39 [ ] 40 49 [ ] 50 Above [ ]
- 3. How long have you been working in this organization?

Below 1 year [ ] 1 year – 4 years [ ] 5 years – 9 years [ ] above 10 years [ ]

4. What is your highest educational level?

Certificate/Diploma [ ] Bachelors [ ] Masters [ ] Doctorate/PHD [ ]
Other, please specify
SECTION B: ROLE OF AIS IN ORGANIZATIONAL PERFORMANCE
5. Accounting information system (AIS) plays a major role in organizational performance.
a) Yes ( ) b) No ( )
6. What do you think is the main role of AIS in the performance of Ghana Water Company
Limited?
a) Effective automation of organizational operations
b) Enhancement of human competencies
c) Guarantees service quality to customers
d) Increases organizational resilience
e) Other, please specify
SECTION C: IMPACT OF AIS ON ORGANIZATIONAL PERFORMANCE
This section intends to solicit your opinion regarding the impact of AIS on organizational
performance. In a scale of 1-5, indicate if you strongly Disagree (SD), Disagree (D),
Undecided (UD), Agree (A) or strongly agree (SA). Please Tick as appropriate
Scale items SD D UD A SA
Souries Quality (SQ)

Service	Quality (SQ)
SQ1	Our AIS is reliable
SQ2	Our AIS is flexible

SQ3	Our AIS is easy to use
SQ4	Our AIS is easy to learn
SQ5	The response time of our AIS is acceptable.
Infor	mation Quality (IQ)
IQ1	Information provided by our AIS is up to date.
IQ2	Information provided by our AIS is accurate.
IQ3	Information provided by our AIS is easy to read and
	understand.
IQ4	Information provided by our AIS is sufficient for the
	task at hand.
IQ5	Information content provided by our AIS meets and fits
	our needs
Servic	e Quality (SV)
SV1	The staff of technical support for the AIS is available
	when we need it
SV2	The staff of technical support for the AIS provides
	assistance with fast service.

SV3	The staff of technical support for the AIS is empowered				
	to resolve user problems.	-	-		
SV4	The staff of technical support for the AIS understands	)			
	the specific needs of users.				
SV5	When a user has a problem, the staff of technical				
	support for the AIS show sincere interest in solving it.				
	Organizational Performance (OP)	)			
OP1	Our AIS reduces organizational costs.	1	2	5	
OP2	Our AIS improves overall productivity	Ž,	5	Barre Contraction of the Contrac	
OP3	Our AIS supports decision making.				
OP4	Our AIS provides us with competitive advantage.		3		
OP5	Our AIS increases customer service and satisfaction.				
OP6	Our AIS allows for better organizational data exchange.			W.	

# SECTION D: DETERMINE WHETHER INFORMATIONAL TECHNOLOGY HELPS AIS TO ENSURE HIGH ORGANIZATIONAL PERFORMANCE

Information Technology plays a major role in organizational performance

a)	Yes	(	)	b) No	(	)

- 6. How does information technology help AIS to ensure performance of Ghana Water Company Limited?
- a) Information technology enhances
- b) There is maximum quality assurance
- c) High Profitability
- d) Other, please specify-----

# SECTION E: CHALLENGES OF AIS IN ACHIEVING ORGANIZATIONAL PERFORMANCE

The table below will help ascertain challenges of AIS in achieving organizational performance. Please answer the following questions by selecting from the numbers 1-5 to indicate your level of agreement or disagreement. Strongly Disagree (SD), Disagree (D), Undecided (UD), Agree (A) or Strongly agree (SA)

Statements	SD	D	UD	A	SA
Political interference in at GWCL	Br				
Lack of financial resources					

Efficiency in billing system			
Lack of top management support	7		
Lack of qualified personnel	<b>&gt;</b> [		

Kindly share any other comments
1111
[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
No. No.
THE WO SANE NO BROWNERS

# KNUST

