

UNIVERSITY OF CAPE COAST

AUDIT PRACTICES AND TECNOLOGY ADOPTION IN THE ERA OF
THE COVID-19 PANDEMIC

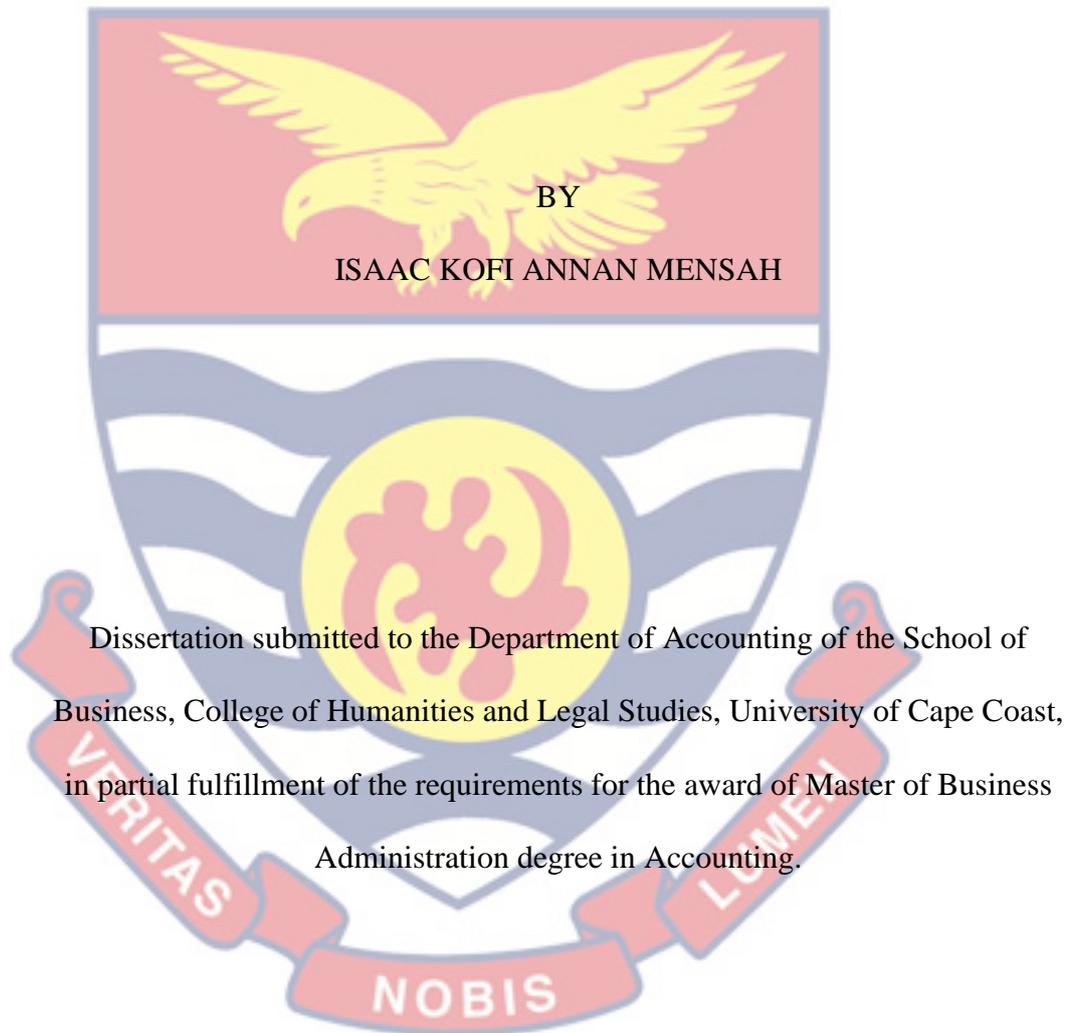
ISAAC KOFI ANNAN MENSAH



2022

UNIVERSITY OF CAPE COAST

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THE COVID-19 PANDEMIC



AUGUST 2022

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature..... Date:.....

Name: Isaac Kofi Annan Mensah

Supervisors' Declaration

I hereby declare that the preparation and presentation of this dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature..... Date:.....

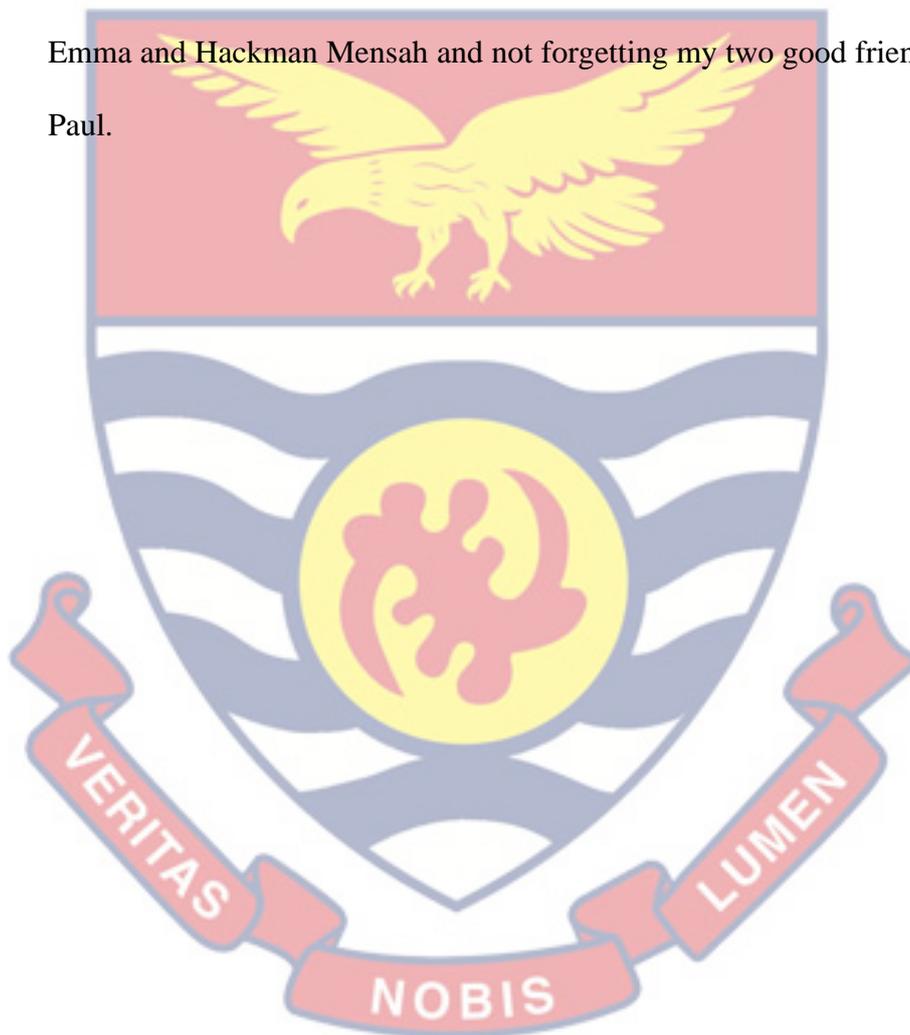
Name: Rev. Dr. George Tackie

ABSTRACT

The goal of the study was to assess audit practices in the era of coronavirus pandemic in the audit service. To guide the analysis, three research objectives were formulated, namely: to examine the audit practices adopted by the staffs of the Ghana Audit Service in the Cape Coast Metropolis prior to the coronavirus pandemic; assess the audit procedures adopted by the staff of the audit service in the Cape Coast Metropolis to obtain audit evidence in the era of the COVID-19 pandemic; and investigate the drivers of technology adoption in the Audit Service during the COVID-19 pandemic. The target population for the study was the staff of Ghana Audit Service in the Cape Coast Metropolis. The researcher used 76 auditors in the auditing department of the Ghana Audit service in the Cape Coast Metropolis. To collect data from the respondents, a closed-ended questionnaire was used. For the analysis of the results, structural equation models were used. The study found observation and analytical procedures to be the most predominant practices used by auditors before the pandemic. The study further found analytical procedures and enquiry directly from third parties to be the most adopted practices during the Covid-19 era. The study confirmed that perceived benefits, social influence and ease of use positively related to technology adoptance whilst perceived risk related negatively. It concluded that audit technology such as computer-aided auditing tools (CAATS) should be easy to use and have the confirmation of well-meaning people, which can greatly influence auditors' acceptance. The study recommended that management of Audit Service in Cape Coast can develop new Audit software which are very easy to use and have the affirmation of well meaningful people in the society thus influencing perceived usefulness.

ACKNOWLEDGEMENTS

It would be tantamount to absolute gross ingratitude if this piece of work is accomplished without registering my sincere and profound gratitude to my supervisors Mr. Isaac Kwadwo Anim and Rev. Dr. George Tackie for their editorial work. I would like to express my thankfulness to my parent Mr. Kow Mensah and Ms. Beatrice Acquah, my wife, Anita Edonua Afful, my siblings, Emma and Hackman Mensah and not forgetting my two good friends Seth and Paul.



DEDICATION

To my Kids: Mensima and Esi Nsarkoa



TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
CHAPTER ONE: INTRODUCTION	
Background to the Study	1
Statement of the Problem	4
Purpose of the Study	6
Research Objectives	6
Research Questions	6
Significance of the Study	7
Delimitations of the Study	8
Organization of the Study	8
Chapter Summary	9
CHAPTER TWO: LITERATURE REVIEW	
Introduction	10
Theoretical Review	10
Contingency theory	10
Unified theories of acceptance and use of technology (UTAUT)	12
Conceptual Review	14

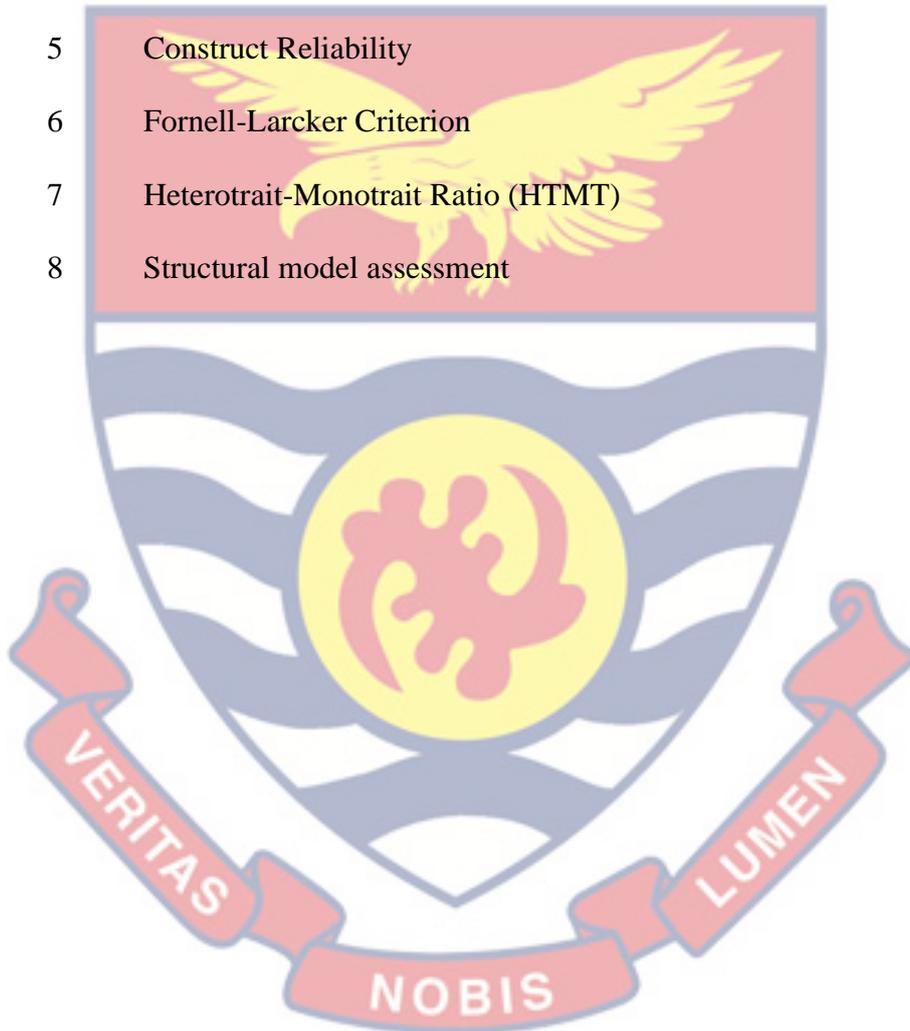
Ghana Audit Service	14
The challenges of auditing in the covid-19 pandemic era	18
Empirical Review	20
Audit procedures prior and during the COVID-19 pandemic era	20
Drivers of Audit Technology Adoption in the COVID-19 Pandemic	24
The Perceived Benefits of Adoptance Technology in the Audit Service during the COVID-19	24
Social Influence and Technology Adoption in the Audit Service	25
Perceived Risk and Technology Adoption in the COVID-19	25
Perceived Ease of Use and Technology Adoptance in the COVID-19	26
Conceptual Framework of the study	27
Chapter Summary	27
CHAPTER THREE: RESEARCH METHODS	
Introduction	29
Research Approach	29
Research Design	29
Study Area	30
Population	31
Sample and Sampling Procedure	31
Source of Data	32
Data Collection Instruments	32
Validity and Reliability of the Instruments	32
Ethical Issues Considered in the Study	33
Data Processing and Analysis	33
Chapter Summary	34

CHAPTER FOUR: RESULTS AND DISCUSSION

Introduction	35
Descriptive Statistics of Auditors' Demographic	35
Descriptive Statistics of Constructs	36
Drivers of technology Adoptance in the audit service during the COVID-19 pandemic.	39
Model Diagnostics	40
Construct Reliability	41
Discriminant Validity	41
Assessment of the Structural Model	44
Discussion of Empirical Findings	47
Drivers of technology Adoptance in the audit service during the COVID-19 pandemic.	47
Chapter Summary	49
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	
Introduction	50
Summary of the Study	50
Summary of key Findings	50
Conclusion	51
Recommendations	52
Suggestion for Future Research	53
REFERENCES	54
APPENDIX	68

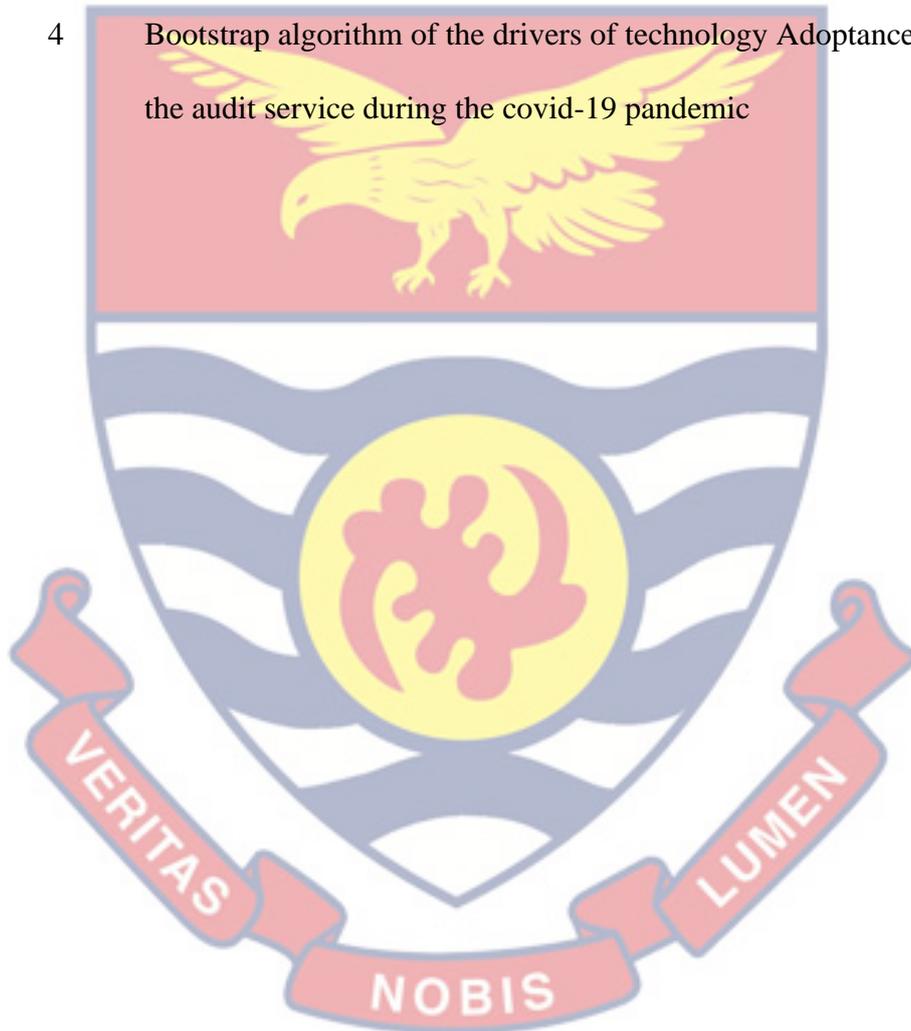
LIST OF TABLES

	Page
1	Definition of Variables 33
2	Respondents' Demographics 35
3	Audit Practices prior to Covid-19 37
4	Audit Practices prior to Covid-19 38
5	Construct Reliability 41
6	Fornell-Larcker Criterion 42
7	Heterotrait-Monotrait Ratio (HTMT) 43
8	Structural model assessment 45



LIST OF FIGURES

	Page
1 Conceptual Framework	27
2 Map of Cape Coast Metropolis	30
3 PLS SEM algorithm for the drivers of technology Adoptance in the audit service during the covid-19 pandemic	40
4 Bootstrap algorithm of the drivers of technology Adoptance in the audit service during the covid-19 pandemic	44



CHAPTER ONE

INTRODUCTION

The emergence of the novel corona virus (COVID-19) has disrupted many activities throughout the world. The restrictions on the movement of goods, capital and people also have implications on the activities of auditors. The partial closure of institutions and other work-from-home arrangements also affect the ability of the auditor to obtain quality audit evidence. While audit reports are needed in a timely manner, audits in the public sector is highly regulated and stipulated deadlines are provided by statute. In consequence, auditors of the Ghana Audit Service may have to improvise to meet the necessary deadlines. In the light of these, this study examines the audit practices employed by the staffs during the COVID-19 pandemic era and makes a comparative analysis with procedures used by the staff prior to the pandemic.

Background to the Study

The outbreak of the coronavirus (COVID-19) was discovered officially in December, 2019 in Wuhan, China (Sun, Lu, Xu, Sun & Pan, 2020). It was also declared a pandemic by the World Health Organisation in January, 2020. The world has been battling socio-economic following this discovery and declaration. It is a common knowledge that the pandemic has already had a grappling effect on the financial and economic lives of people globally (Goodell, 2020). Critically, times of economic and financial turbulence, along with uncertainties in the markets, potentially affect the confidence of investors and further to firm performance, which subsequently may result in financial distresses (KPMG, 2020). Meanwhile, the ability of the auditor to identify

misstatements, whether due to fraud or error, is also influenced by the auditors' audit procedures and processes (Lenz, & Hahn, 2015).

Moreover, failure to ensure quality audit procedures reduces shareholder confidence in the earnings that are reported in the financial statements, thereby increasing investment risk and cost of raising funds (Gerged, Mahamat & Elmghaamez, 2020). For organizations and institutions in the public sector, the quality of audit is increasingly blatant in helping to determine whether resources have been used in accordance with the value for money principles (i.e. efficiency, effectiveness, and economy), which may have implications on public confidence.

Debatably, this uncertainty arising from the coronavirus pandemic has implications on the financial reporting and audit practices. According to Albitar et al., (2020), auditors around the world, including those who audit accounts of the public sector are coupled with unprecedented practical challenges in many areas. Further, they revealed that institutions, organizations, and companies may tend to manipulate their financial reports during this exceptional circumstance. However, social distancing measures, coupled with uncertainties in the external environment has implications on ways in which the auditor gathers audit evidence as well as how auditors assess the going concern status of institutions and companies, given the current global economic uncertainty (Albitar et al., 2020).

Auditing plays an important role in ensuring integrity in the public sector and ensuring the quality of financial reports (Gerged et al., 2020; Tarek, Mohamed, Hussain, & Basuony, 2017). The International Federation of Accountants (IFAC) (2020), a body that oversees global accounting and

auditing of which Ghana is a member, has issued specific guides to auditors on matters relating to the impact of social distancing measures on audit quality that should be considered (IFAC, 2020).

IFAC revealed that, in this period, auditors would have to assess the impact of the coronavirus on the following key areas of the audit. First is the auditor's risk assessment, and whether it needs revision. The second deals with how the auditor gathers sufficient and appropriate audit evidence recognizing that audit procedures may have to be changed because of the social distancing measures; the auditors assessment of going concern and; overall review stage of the audit. Thus, it is increasingly obvious that the outbreak of the COVID-19 has altered ways of conducting audits globally and Ghana is not an exception.

The Ghana Audit Service has the mandate to audit public institutions. The audit service Act, 2000, (Act 584) stipulates that it is the role of the Audit Service to ensure that audit activities are carried out in accordance with international best practices and to monitor the management and usage of public funds and report to the parliament. This includes all bodies established by or under an Act of parliament. More importantly, the activities of the audit service are meant to decrease corruption in the public sector (Awuni, 2016).

Given the role of external auditing in ensuring accountability, transparency, and public confidence in the public sector and the complications in audit practices as a result of the covid-19, it is vital to examine how employees in the Ghana Audit Service are conducting audit practices in times of social distancing to achieve their mandate specified in the (Act 584) and their implications on audit quality.

Statement of the Problem

Prior to Covid 19, the Cape Coast metropolitan assembly (2016) found that there are still reported cases of embezzlement, corruptions, financial maleficence and irregularity still in the auditing businesses in Cape Coast. Similarly, Cofie (2018) and Buaku (2017) adds issues of ethics and fraud to the list. These issues negatively influence the reliability and relevance of accounting and auditing information. This consequently affects the brand of auditing firms, affects performance and negatively impacts the economy.

Some decisions made by institutions in the public and private sector entities in the era of the coronavirus pandemic, such as social distancing, working from home, and closures of offices may restrict the movement of auditors and impede their access to the necessary financial records (Levy, 2020). In several cases, auditors may have to rely on technologies such as teleconferencing, video conferencing, screen sharing etc. to disseminate information without requiring the physical presence of the auditor or the representative(s) of the responsible party (Castka, Searcy & Fischer, 2020).

Nevertheless, the available technology may not be sufficient for the auditor in obtaining sufficient appropriate audit evidence (Levy, 2020). For instance, the auditor or the representative of the auditor may not be available for a particular year-end inventory count which may prevent the auditor from verifying the existence of the inventory and accuracy of the inventory balance. Similarly, the audit service may not be able to obtain external confirmations from banks, suppliers and other external entities due to full or partial closures of those entities. Again, staffs of the audit service may be infected with the virus, thereby reducing the number of personnel available for the statutory audit.

These may result in delays in meeting the statutory date for issuing the final audit report to parliament by the Auditor General.

Moreover, deadlines matter in audit practice and auditing is a real time event which makes it difficult to reconstruct audit evidence if not noticed on timeously (Hay, Shires, & Van Dyk, 2021). This causes disruptions, such as lockdowns, difficult for auditors. Furthermore, the users of the audit reports including the Public Accounts Committee of Parliament and beneficiaries of public service demand that auditors provide timely and relevant information. Specifically, Article 187 (5) of the Constitution requires audit report from the Audit Service to be submitted not later than six-months of the preceding financial year. Hence social distancing restrictions and working from home rules may pose serious constraint on the ability of the Audit Service to meet this Constitutional deadline.

Although a number of recent studies have examined the economic and social effects of the coronavirus pandemic (Goodell, 2020), studies that seek to explore the potential influence of the coronavirus on audit practices are rare (Hay et al., 2021; Albitar et al., 2020). This study addresses this gap in the extant studies by exploring the possible effects of the COVID-19 pandemic on audit practices in the Ghana Audit Service. A comparative analysis of audit practices prior to the COVID-19 pandemic era is also made in the present study. The study situates itself in the Central Region because it is one of the top four highly affected Regions in terms of the number of COVID-19 infections (Agyekum, Kukah & Amudjie, 2021) and also because of the researcher's interest as a stakeholder in the Ghana audit service in Cape Coast.

Purpose of the Study

The purpose of this study was to assess the audit practices of the Ghana Audit Service prior and during the COVID-19 pandemic era in the Cape Coast Metropolis.

Research Objectives

Generally, this study sought to assess the audit practices of the staff of the Audit Service in the Cape Coast Metropolis during this COVID-19 era. Specifically, the objectives include:

1. To examine the audit practices adopted by the staffs of the Ghana Audit Service in Cape Coast Metropolis prior to the coronavirus pandemic.
2. To assess the audit procedures adopted by the staff of the Audit Service in the Cape Coast Metropolis to obtain audit evidence in the era of the coronavirus pandemic.
3. To investigate the drivers of technology adoptance in the audit service during the coronavirus pandemic.

Research Questions

To achieve the objectives of the study, the following research questions were addressed:

1. What audit procedures were used to obtain audit evidence by the staff of the Ghana audit service in the Cape Coast Metropolis prior to the coronavirus pandemic?
2. What audit procedures used to obtain audit evidence by the staff of the Ghana Audit Service in the Cape Coast Metropolis during coronavirus pandemic?

3. What are the drivers of Audit technology adoptance during the coronavirus pandemic?

Hypothesis

1. H₁: Perceived benefits exert a positive influence on auditors of the Ghana audit service's decisions to adopt audit technology in the COVID-19 pandemic.
2. H₁: Social influence to have a significant positive effect on auditors' technology adoptance decisions during the COVID-19 pandemic
3. H₁: The extent of perceived risks exert a significant negative auditors' technology adoptance decisions during the COVID-19 pandemic.
4. H₁: Auditors who find audit technology as easy use are more likely to adopt the technology in the COVID-19 pandemic.

Significance of the Study

This research examined the audit practices of the employees of the Ghana Audit Service in the Cape Coast Metropolis during the COVID-19 pandemic. Theoretically, the empirical significance of this study is that it will contribute to existing knowledge and literature on coronavirus pandemic and audit implications as there are a few studies available (Hay et al., 2021; Albitar et al., 2020). In terms of social relevance, the study provides significant impetus for policymakers and the relevant authorities of the Ghana Audit Service to identify and address challenges facing the staff of the Ghana Audit Service. Policy makers can use this information to develop policies such as making audit technology during future pandemics a mandatory since it has proven to yield significant results in the Cape Coast Audit Service. In the case of stakeholders such as investors, shareholders, employees, pressure groups, consumer

associations, the study provides information that suggests factors or drivers that influence the Ghana audit service auditors' technology adoptance for decision making.

Delimitations of the Study

This study examined audit practices of the Ghana Audit Service prior and during the coronavirus pandemic. The study was situated in the context of staff in the Cape Coast Metropolis. A questionnaire was used to solicit responses from the staff of the Ghana Audit Services for the comparative study. The study does not consider any qualitative aspects which could have improved the understanding in the area. The study did not consider practices adopted after Covid but only before and during. Specific factors that influence auditors' technology adoption decisions such as cost were not also considered. Finally, the study did not address the safeguards that the auditor could adopt to achieve audit quality.

Organization of the Study

The study was organized into five chapters. Chapter one presented the background of the study and the problem statement. Further, the key objectives were drawn and their respective research questions that will aid in finding the objectives are identified. It also highlighted on the purpose and significance of the research. Chapter two presents a detailed literature review, specifically the theoretical underpinnings and the empirical support. Chapter three states the methodology this study employs. Discussion and presentation of key findings are detailed in chapter four and lastly, the conclusions, recommendations from the study and suggestions for future research are presented in Chapter five.

Chapter Summary

The thesis began with an introduction, and the background to the study. Subsequent to this, the problem statement was developed and situated in the context of the Cape Coast Metropolis, which laid the grounds for the purpose, objectives and research questions to be developed. The study further highlighted the significance of the empirical discourse, the delimitations and organization of the chapters.



CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter discusses and draws insight from the existing studies on coronavirus pandemic on auditing practices. It mainly presents the theoretical and empirical justifications for the study. The contingency theory and unified theories of acceptance and use of technology, which are predominantly used in the extant accounting and auditing literature provides the theoretical justification that underpins this study. The chapter also presents a comprehensive review of empirical literature to identify the research gap through the literature review. To begin, the chapter explains the theories utilized for the study.

Theoretical Review

This study draws insights from the contingency theory and the Unified Theories of Acceptance and Use of Technology (UTAUT). These theories provide a theoretical justification of how audit procedures and audit related practices have altered in the phase of the coronavirus pandemic in the Ghana audit service.

Contingency theory

The Contingency theory was developed by Woodward (1958) who posited that there is no single best way to manage an organization. This theory is based on the premise that decisions or actions are dependent on the given circumstances and situations. Although this theory has received attention from several studies over the past decades, the theory is still developing (Badara, 2017). Contingency theory has vast applications in research even though earlier

applications of this theory in research focused on the role of uncertainty in organizational structure (Chenhall, 2003; Reid, & Smith, 2000).

For instance, Fry and Slocum (1984) applied the contingency theory in evaluating the effect of technology and structure on the effectiveness of work group and teams. Furthermore, Ayman, Chemers & Fiedler (1995) and Fiedler and Mahar (1979) applied the contingency theory when they divulged that the effectiveness of a leader is contingent on the leaders' motivational orientation and other situational factors. Also, Kriger and Seng (2005) applied the contingency theory and found that the effectiveness of leaders is often contingent on religion and the inner outworking of the leaders. Thus, the theory has been extensively applied in organizational research. As a corollary to this, the theory has also been applied extensively in recent literature in management accounting and auditing research (Badara, & Saidin, 2013; Badara, 2017; King-Aidoo, 2020).

Generally, organizational decisions and practices is contingent upon different factors including organizational technology, market conditions, and the nature of the tasks of the organization (Nasrallah, & Qawasmeh, 2009). Haldma and Laats (2002) and Reid and Smith (2000) divulged that there is no perfect way to provide a good management accounting practices and audit related practices but rather depend on some contingencies to dictate the best possible practices and procedures.

Extending the premise of the contingency theory in the study, this study argues that due to the coronavirus pandemic, audit practices before the pandemic may achieve optimal results in collecting audit evidence. This is because some decisions made by institutions in the public and private sector

entities in the era of the coronavirus pandemic, such as social distancing, working from home, and closures of offices may restrict the movement of auditors and impede their access to the necessary financial records (Levy, 2020). Thus, auditors in the era of the COVID-19 pandemic need to improvise by utilizing technology and relying on other forms of corroborative audit evidence while meeting deadlines and not compromising audit quality.

Contingency theory can be applied to this study because current audit practices in the COVID-19 pandemic era will have to be adapted to fit the current circumstance, conditions and available technology at the Ghana Audit Service. Thus, audit procedures that were being utilized pre COVID-19 may obtain the sufficient appropriate audit evidence and thus, audit practices may be contingent on circumstances (Nasrallah, & Qawasmeh, 2009).

Unified theories of acceptance and use of technology (UTAUT)

Prior to the development of UTAUT, the empirical discussions on the drivers of technology adoption and usage were held based on the Technology Acceptance Model- TAM (Taylor & Todd, 1995; Davis, Bagozzi, & Warshaw, 1989; Davis, 1989). The TAM advocated the perceived ease of use and usefulness as the key determinants of technology adoption. Further studies extended the model to include other factors such as social norms. However, Venkatesh, Morris, Davis, and Davis (2003) proposed a unified model to integrate eight elements used to explain the phenomenon. These include the motivational model, TAM, theory of reasoned action, the theory of planned behavior (TBP), innovation diffusion theory, an integrated model for the Technology acceptance Model (TAM) and TBP (theory of planned behavior), the model of PC utilization, and the social cognitive theory. In terms of

technology adoption, the UTAUT is grounded on four main constructs, namely, effort expectancy, social influence, facilitating conditions, and performance expectancy (Agyei, Sun, Abrokwah, Penney & Ofori-Boafo, 2020). Further, Venkatesh, Morris, Davis, and Davis (2003) recommended that further studies include additional constructs in their predictive model. In consequence of this, Khalilzadeh, Ozturk, and Bilgihan (2017) extended the UTAUT with security-related factors while Marinković, Đorđević, and Kalinić (2020) also included perceived trust and satisfaction.

Extending on the aforementioned studies into this discussion, this study argues that in the COVID-19 era, the psychological and cognitive processes of auditors of the Ghana Audit would be significantly affected by the present need to maintain social distancing and the contactless nature of mobile technologies, in deciding whether to adopt such a technology or not. These factors may influence the perceived benefits of audit technologies during the pandemic. However, the perceived security due to the need to maintain confidentiality during the audit process can be very important. Moreover, the perceived ease of use of the technology can be an important factor in technology adoption at the audit service in spite of the novel COVID-19 pandemic.

Linkage of contingency theory to literature

The Contingency theory postulates that an effective organization should have a structure which is consistent with its environmental needs (Lawrence and Lorsch, 1967). The effectiveness of an organization is based upon its fitness towards both internal and external factors such as environment, organization size, and organization strategy (Donaldson, 2001). Therefore, decision makers should take in to account environmental, organizational and technological

factors to make a decision. That is, organisations should take into account the environment, organisation and technology to make decisions such that changes in any of these factors would not take the organisation by surprise (Donaldson, 2001). An example is how the COVID-19 pandemic influenced organisations to develop contingent plans for survival such as reduced contact and the use of technology. Auditors in the era of the COVID-19 pandemic improvised by utilizing technology and relying on other forms of corroborative audit evidence while meeting deadlines and not compromising audit quality.

Conceptual Review

Ghana Audit Service

The five hundred and eighty-fourth Act of Parliament regulates the Audit service in the year 2000. The Audit Service was established by Article 188 of the 1992 Constitution of the Republic of Ghana as the Supreme Audit Institution (SAI) of Ghana. Their mandate is to audit and hold public officials accountable for the use and management of public resources through routine audits of all public entities and to ensure that public programmes are conducted in accordance with efficiency, economy, and effectiveness. The audit service is expected to conduct an annual audit on all public institutions to identify operational lapses and make recommendations to remedy those lapses. Part II, section 10 of the Audit Service Act, 2000, (Act 584) and Article 187 (1) of the 1992 Constitution of the Republic of Ghana establish the office of the Auditor General who heads the audit process and is responsible for auditing all public accounts. The Auditor general and also performs special audit engagement of the President of Ghana.

Section 19 of the Audit service Act implies that the Auditor-General embraced and adhered to emerging methodologies and practices in Government auditing adopted by International Organization of Supreme Audit Institutions (INTOSAI) and other internationally recognized organisations. INTOSAI is an international governmental standard setting and advisory body of which Ghana is member by virtue of its membership in the regional group, African Organisation of Supreme Audit Institutions (AFROSAI) (González & General, 2012). Article 187 (5) of the Constitution requires the Auditor General to submit audit report to Parliament not later than six months after the end of the immediately preceding financial year. This presents a major difficulty because public accounts are required by law to be made available to the Auditor General by not more than three months after the end of the financial year. Thus, time is a serious constraint to the activities of the Audit Service which technically has three months to audit and compile the audit report to Parliament, while drawing attention to any irregularities. Although the proposal for amendment of the Constitutional provisions in Article 187 (5) has extended this deadline from six months to nine months after the end of the financial year, the COVID-19 may pose serious challenges to meeting this timeline.

COVID-19 and its implication on the economy

It is now more crucial than ever for investors and other stakeholders to have correct financial information due to the fictional Covid-19 Pandemic and its associated economic ramifications (Asante & Mills, 2020). Government decisions have had to be put on hold in a number of countries due to the Corona virus' significant impact on the world economy (Agormedah, Henaku, Ayite & Ansah,2020). Many companies have been forced to close their doors or switch

to a virtual working environment as a result, which has led to declining revenue and cash flows, the closure of production facilities, the deferral of planned investment decisions, disruptions in the supply chain, staff reductions, difficulty raising capital, volatility in the financial markets, and an increase in the cost of necessities and consumables (Bakare, 2022). After Ghana verified its first case of Covid-19 on February 27, 2020, the World Health Organization (WHO) declared it a worldwide pandemic on March 11, 2020 (Agormedah, et al., 2020). The development of Covid-19 has had a disastrous impact on economic activity. The Ghanaian government had to put travel restrictions on individuals as well as temporary closures of businesses, social events, and religious meetings in order to stop the spread of Covid-19.

Businesses were impacted by this global pandemic in different ways, with some being more vulnerable to Covid-19's negative impacts than others. The hospitality, aviation, oil and gas, and entertainment sectors, for instance, have all suffered as a result of the epidemic, whereas the health care sector and its value chain, technology/telecommunications, and fast-moving consumer goods corporations have all benefited (Bakare, 2022). The Ghanaian government and the Ghana Infectious Disease Center (GIDC) have taken a number of actions in response to the pandemic to halt the spread of Covid-19 throughout the nation. The authorities have also taken steps to lessen some of the demands placed on taxpayers. To further lessen the effects of the epidemic, authorities like the Central Bank of Ghana have adopted regulatory measures that include, among other things, extending the moratorium and cutting interest rates on particular facilities. The Financial Reporting Council (FRC) has provided guidance to those who prepare financial statements on a number of

subjects, including changes in projected credit losses for financial assets, going concern, interim financial reporting, and events that occur beyond the reporting period. Even though Covid-19's effects are gradually fading and the nation is recovering, it is crucial for businesses to pay attention to the disaster's key financial reporting implications because they will be crucial factors to take into account if there are any future business disruptions with a similar economic impact (Bakare, 2022).

As a result, while addressing and disclosing the financial implications of Covid-19, a number of accounting and financial repercussions based on the rules of the International Financial Reporting Standards (IFRS) need to be taken into consideration (Bakare, 2022). Organizations are negatively impacted by the Covid-19 epidemic because of diminished output as a result of a decline in economic demand and consumption. However, Covid-19's effects go beyond only declining demand, consumption, or the state of the economy (Levy, 2020). Additionally, it has important effects on management, accounting, auditing, and financial reporting (Levy, 2020). This calls for the adoption of adjustments and applications to accounting and auditing in line with the IFRS emerging clauses. In order to integrate IFRS concerns in interim and yearly financial statements, the board of directors of enterprises must take this seriously and investigate the effects of the pandemic (Bakare, 2022). The company has to determine the areas where the pandemic will have a big impact because there will be many indirect but major economic effects (Levy, 2020). According to the International Financial Reporting Standards (2020), organizations should consider their particular circumstances and risk exposure when assessing how current events may influence financial reporting and audits. The Financial Council of Nigeria

reiterated the need for its members to have a thorough understanding of how the COVID-19 outbreak will affect the client's reporting framework in its publication through ICAN (2020). Members should also consider the implications for the client's business operations and financial reporting procedures. In order to keep private businesses operating after the pandemic, Aifuwa, Musa and Aifuwa (2020) recommended that the government include private businesses in its stimulus packages or palliatives programs. They also came to the conclusion that the coronavirus (COVID-19) pandemic harmed firm performance in Nigeria.

The challenges of auditing in the covid-19 pandemic era

The skills, personal qualities, and training of audit staff are important for audit quality. Training helps develop the competencies of employees in the audit profession (Albitar et al., 2020) which improves the audit quality. Following the COVID-19 outbreak, audit companies have been forced to cancel out monthly training, workshops and other professional development programmes for staffs (Deloitte, 2020). This is in response of social distancing and cost-cutting measures following the COVID-19 outbreak.

Apart from the cancellation of audit training programmes, auditors in the era of COVID-19 face the challenge of performing audits on sites and are unable to perform walkthrough tests and tests of the internal controls of the companies or institutions (AICPA, 2020). Also, auditors may not be able to participate in physical inventory counts. Auditors may have to leverage on the use of technology via live feeds (AICPA, 2020) to obtain audit evidence.

Another challenge to audit in the COVID-19 era is the inability to access records and key personnel due to lock-down, closure and working-from-home

policies (KPMG, 2020). Auditors are also unable to inspect assets to examine their condition. Auditors may mitigate such challenges by utilizing electronic confirmations rather than paper confirmations (AICPA, 2020). Thus, auditors may resort to video conferencing to interview client staffs. Auditors in obtaining written confirmations from management (PWC, 2020) are also adopting the use of electronic signatures.

Adio-Moses (2021) revealed that the COVID-19 pandemic has disrupted personal interactions, an important aspect of the public audit activities. These interactions were important in forging bonds among audit team members and strengthening auditor-client relationships. Hyde (2020) also revealed that the potential implication of the COVID-19 pandemic on audit report is the limitation in scope due to inability to observe physical counts.

Another challenge is the inability of auditors to attend stock takes. This is an area of most concern to auditors because majority of the organizations were not able to carry out year-end stock counts as at March 31, 2020 (Kaka, 2021). Auditing standards requires auditors to be present during stock counts unless it is not possible to attend due to circumstances beyond control. Failure or inability of the auditors to attend, may lead to “limitation of scope” in the audit reports signifying that the auditor opinion is qualified. Any qualified report, gives a danger signed on the organization, although, it is an unavoidable outcome that led to such qualification and hence, it can be said to be a technical qualification (Kaka, 2021).

Empirical Review

Audit procedures prior and during the COVID-19 pandemic era

The use of substantive testing has remained an integral part of Audit practices. Thus, prior to the coronavirus pandemic, auditors were afforded the time, space and opportunity to examine account balances, transactions and disclosures (PWC, 2020). This also enabled auditors to undertake walk-through tests and physical inspection of premises including inventory and property plant and equipment. Auditors had the liberty to attend physical inventory counts to ascertain the existence, and accuracy of the inventory balance.

In the current COVID-19 pandemic, government business entities (GBEs) have implemented partial closures and reduced the level of economic activity. This has brought about significant doubts on the ability of those entities to continue as a going concern or whether the use of the going concern assumption is still appropriate for the preparation of financial reports (KPMG, 2020). There are questions as to whether companies including GBEs and auditors need time to fully reflect the impact of the pandemic (PWC, 2020). Previous studies on the auditor's response to financial crisis (Xu, Carson, Fargher, & Jiang, 2013) reveal that conservative measures were taken by auditors during the global financial crisis. This was done by increasing the propensity to issue going concern opinions and also increasing the audit efforts.

However, Mareque, López-Corrales & Pedrosa (2017) found that the percentage of audit reports issued with going concern qualifications during the global financial crisis does not statistically differ from the ones issued after the crisis. Thus, it is essential that auditors apply professional skepticism and document evidence of its application when analyzing going concern status of

GBEs and other government projects where funding may be in doubt as a result of the coronavirus pandemic (KPMG, 2020).

Another issue that can be affected by the coronavirus pandemic is the use of analytical procedures in obtaining audit evidence (Albitar et al., 2020). Analytical procedures remain an integral part of the audit process (Messier, Simon & Smith, 2013) which is often used at the planning stage, as substantive procedures if detailed substantive tests cannot be performed, and at the overall review stage of the audit (Noh, Park & Cho, 2017). These procedures are used to evaluate trends and compare both financial and non-financial data. The procedures also allow a diagnostic of causes of unusual fluctuations in financial data. During the COVID-19 pandemic, many public institutions may be inclined to manipulate their financials and thus, auditors may increase the use of analytical procedures due to the fact that they can be performed at the lowest cost and easy to calculate (Rose, Rose, Suh & Thibodeau, 2020). According to Bhattacharjee, Moreno & Riley (2012), analytical procedures are usually fancied by auditors as it provides audit evidence at the lowest cost.

A similar issue that can also be affected by the coronavirus pandemic is the use of detailed substantive testing (Albitar et al., 2020). Substantive tests involve test of transactions, account balances and disclosures (KPMG, 2020). Rose, et al. (2020) show that there is a potential threat to audit quality associated with generating many explanations when considering fraud risks. Also, auditors may be inclined to use analytical procedures to give them a comprehensive view of the financial records of a public institution since detailed substantive tests are expensive and take a longer time given that most communication during the COVID-19 pandemic are by emails (PWC, 2020).

The quality of the sources of audit evidence is very important in audits since it has implications on audit risks (Rose, et al., 2019). On the one hand, due to the COVID-19, auditors are more inclined to obtain external confirmations from bankers, suppliers and customers (PWC, 2020). On the other hand, the COVID-19 has decreased the use of original documents such as receipts and invoices that are used to support payment transactions to copies sent via emails since working-from-home and other restrictions in the movement of people mean that physical contacts are reduced to the minimal (Massar, Ng, Soon, Ong, Chua, Chee, & Chee, 2022).

Mohammed & Toro (2021) also adds that an important factor or issue that has changed is the issue of human capital. Mohammed & Toro (2021) also posit that human capital is very important in auditing as the preparation, interpretation and usage all involve humans. Prior to Covid 19, monthly training courses, seminars and related employee professional development events were organized. Due to the pandemic most companies suspended certain activities (Mohammed & Toro, 2021). These consequently resulted in cost cutting and social engagement. The loss of workers, disease or confinement affected audit results and quality assurance. The cost cutting reduced staff wages which harmed employees' efficiency to conduct duties productively and successfully (Mohammed & Toro, 2021).

Specific drivers or factors that influence technology adoption

A regional and global shift towards digitization, automation and business intelligence

Regional factors such as government influence, competition of audit firms, regulation, advancement of technology and availability of necessary

talent play a significant role in the adoption of technology in audit and accounting (Barr-Pulliam, Brown-Liburd & Munoko, 2022).

Influence of audit client on adoption of emerging technologies

Factors such as the client's expectation of auditor use of emerging technology and client support for data access influences how the auditor can deploy emerging technology and the regularity of use (Krieger, Drews & Velte, 2021). Client expectations regarding additional insights gleaned from using emerging technology could reduce audit fee (Krieger et al., 2021).

Stakeholder/external attitudes

Stakeholder (including peer reviewers and regulators) influence auditors' willingness to adopt technology. Whilst the primary benefit of the use of technology in audit is increased audit quality, some research indicated that peer reviewers, external reviewers and key stakeholders viewed quality as largely unaffected by using technology as an alternative to traditional audit procedures (Manita, Elommal, Baudier & Hikkerova, 2020). It is clear from the research that confidence in using technology by auditors and various stakeholders in audit outcomes is key to enabling increased adoption of technology on engagements.

Task complexity

Research indicates that when technology is appropriately integrated into audit tasks it can improve decision making (Pan & Seow, 2016). However, as the data becomes more voluminous and the analysis becomes more complex, there are challenges for the auditor in understanding and interpreting this data and making appropriate judgements regarding treatment of anomalies (Pan &

Seow, 2016). This necessitates the use of audit technology to make analysis much easier and less daunting.

Drivers of Audit Technology Adoption in the COVID-19 Pandemic

There are few empirical studies that examine technology acceptance in the audit practices during the COVID-19, thus the review is conducted in a form of hypothesis development to achieve the study's objective.

The Perceived Benefits of Adoptance Technology in the Audit Service during the COVID-19

The cognitive aspect of UTAUT posits that consumers tend to examine the perceived usefulness and evaluate the beneficial outcome of a particular behaviour (Prelec & Loewenstein, 1998). Thus, auditors' decision to adopt audit technology will depend on the perceived functional benefits that the user will derive from it. In addition, perceived benefits has featured predominantly in empirical discussions on customer's technology adoption decisions (see Zhao & Bacao, 2021; Forsythe, Liu, Shannon, & Gardner, 2006; Siyal, Donghong, Umrani, Siyal, & Bhand, 2019). In the coronavirus pandemic, auditors will assess the benefits of minimizing transmission and avoiding contacts with potentially infected persons. Thus, the contactless feature audit technologies allow the customer to formulate mental benefits of the physical safety, convenience and utility associated with employing them (Zhao & Bacao, 2021), which ultimately affect their adoption decisions. Based on the above discussions, the study hypothesizes that:

H1: Perceived benefits of audit technology exert a positive influence on auditors of the Ghana Audit Service's decisions to adopt audit technology in the COVID-19 pandemic

Social Influence and Technology Adoption in the Audit Service

Venkatesh et al., (2003) argues that the degree to which one perceives that influential people in their lives adopt a system can influence a user's technology adoption decision. Reasoning on the same line of thought, Slade, Williams, Dwivedi, and Piercy (2016) proffer that users tend to reduce anxiety of adopting new systems by consulting important people in their social networks. Thus, people tend to feel confident in employing a new system when well-meaning persons use similar systems, which can affect the perceived usefulness of mobile payments (Park, Ahn, Thavisay, & Ren, 2019). Especially in the COVID-19 pandemic, recommendations from managers and other colleagues in the Ghana Audit Service are very influential in their decisions to adopt audit technologies. Furthermore, several studies include social influence as a key determinant of technology adoption decisions (Agyei, Sun, Penney, Abrokwah, Boadi, & Fiifi, 2021; Owusu, Bekoe, Addo-Yobo, & Otioku, 2020; Avorny, Fang, Odai, Vondee, & Nartey, 2019; Osei-Assibey, 2015; Perkins, & Annan, 2013). Moreover, given that the Ghanaian society places enormous value on social exchanges, this study hypothesizes:

H2: Social influence to has a significant positive effect on auditors' technology adoptance decisions during the COVID-19 pandemic

Perceived Risk and Technology Adoption in the COVID-19

The COVID-19 pandemic has brought about enormous risk and uncertainty in human life and daily transactions. Hence, the perceived security and trust can add confidence to auditors' personal decisions. The perception that the audit information can be held confidential and secure affects users' expectations on whether a positive outcome will result from the use of the

technology (Kar, 2021) which can ultimately have an impact of their adoption of such systems. Thus, the extent of security can alleviate risk and uncertainties (Khalilzadeh, et al., 2017). Further, highly risky mobile-banking platforms can reduce customer's perceived expected benefits from its adoption. Based on the ongoing discourse, the study hypothesizes that, in the light of the COVID-19 pandemic;

H3: The extent of perceived risks exert a significant negative auditors' technology adoption decisions during the COVID-19 pandemic

Perceived Ease of Use and Technology Adoptance in the COVID-19

The perceived ease of use of technology deals with the belief that the user will not exert enormous effort in technology usage (Koenig-Lewis, Palmer & Moll, 2010). This feature can be important for the adoption of a new technology because complex features in the mobile application can deter customers from its usage (Atieno, 2018). In keeping up with this argument, (Koenig-Lewis et al., 2010) reasoned that there could exist a cognitive trade-off between the efforts that is required to utilize the technology and the benefits that ought to be derived from its application. Thus, it is anticipated that if an auditor finds a technological system simple to use, it can influence his/her decision to continue using the platform. Moreover, this line of argument has also received several empirical support from studies that examine the drivers technology adoptance although not conducted in the Ghana Audit Service (for example, Alalwan, Dwivedi, Rana, & Williams, 2016; Deb, & Lomo-David, 2014; Atieno, 2018; Jahangir, & Begum, 2008). Further, Rodrigues, Oliveira and Costa (2016) show that ease of use contributes to customers' satisfaction of

technology. Thus, in the line with the forgoing arguments, the study hypothesizes that:

H4: Auditors who find audit technology as easy use are more likely to adopt the technology in the COVID-19 pandemic

Conceptual Framework of the study

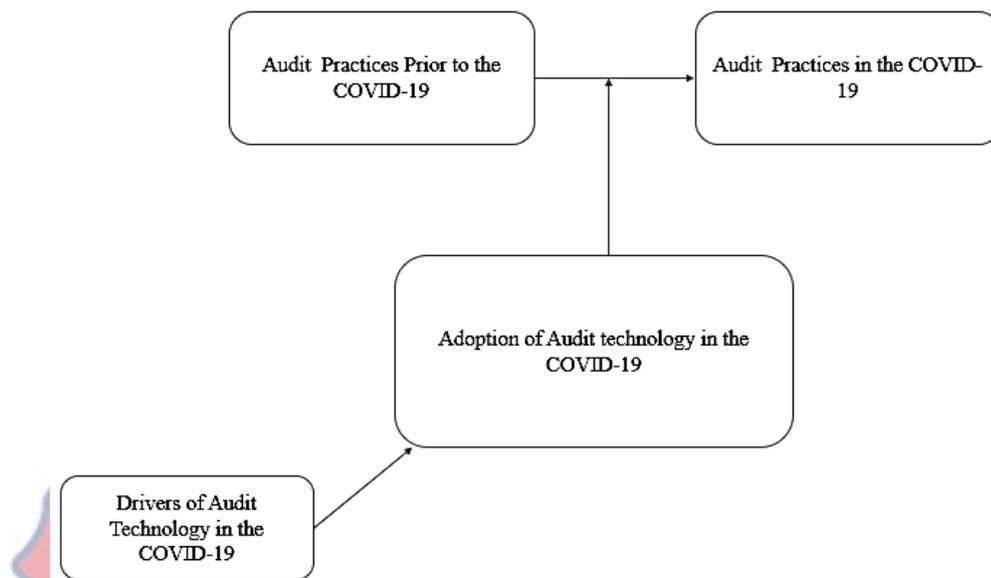


Figure 1: Conceptual Framework

Source: Author's Own Construct

The conceptual framework above summarizes the objectives of the study. First, the study sought to examine audit practices before the COVID-19 pandemic. Second, the study examined the practices employed by the employees in the COVID-19. Finally, the study accesses the drivers of audit technology in the time of the COVID-19.

Chapter Summary

The Chapter two presented the theories and relevant empirical literature on audit practices in the COVID-19 pandemic. Since no such study has been

conducted in the Ghanaian setting, the empirical evidence is very scanty. Thus, gaps remain unexplored in the contemporary literature.



CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter generally focuses on the methodology the study adopted to examine audit practices in the COVID-19 era. Specifically, the chapter addresses firstly the research approach. It then presents the research design. Further information on the study area is also presented together with the population. The sampling procedure along with the sample size is also discussed. Further, the chapter presents the data collection instrument that was used for the study and the procedure used for data collection. Finally, the tool used for data processing and analysis are presented.

Research Approach

The research approach is very important to every study. Saunders, Lewis, Philip & Thornhill (2007) reveal that the research approach deals with the overall configuration of research question and what, where, and how to interpret the types of subject that is gathered so as to provide answer or results to the research questions. Creswell (2014) also reveals three main approaches to research: These are the qualitative approach, the quantitative approach and the mixed approach. Quantitative approach is known for its objectivity, accuracy, this study employed the quantitative approach because of its objectivity, accuracy and its suitability in helping to meet the objectives of the study (Creswell, 2014).

Research Design

Depending on the way in which researchers ask their questions or formulate their hypothesis and present their purpose, the research design can be

descriptive, exploratory, and explanatory (Saunders et al., 2007). This study adopted the descriptive design. Cooper and Schindler (2006) reveals that the tenet of descriptive studies is to find out of who, what, where, why, and how of a phenomenon occurs. The descriptive research design is more appropriate for this study because a descriptive survey instrument was used to gather the data. This is due to ease of distribution and completion (Malhotra & Birks, 2006). Again, several social scientists regard descriptive research design as the best, especially in studies involving scattered and large populations (Saunders et al., 2007). Furthermore, Saunders et al. (2007) proffer that descriptive research allows the researcher to accurately describe activities and not just to find facts. Thus, descriptive research was adopted taking into consideration to examine objectives 1 and 2. This will require the use of frequencies. In examining objective 3 however, the use of explanatory design was adopted as the study sought to examine cause and effect, that is, the drivers of technology adoptance in the COVID-19 by the employees of the Audit service.

Study Area

The study area is a geographical location for which data is collected for a report. The study area for this work is the Cape Coast Metropolis. This is because Cape Coast remains the commercial hub of Central Region as the capital town. In addition, the regional offices of government and private institutions are established in the Cape Coast Metropolis.

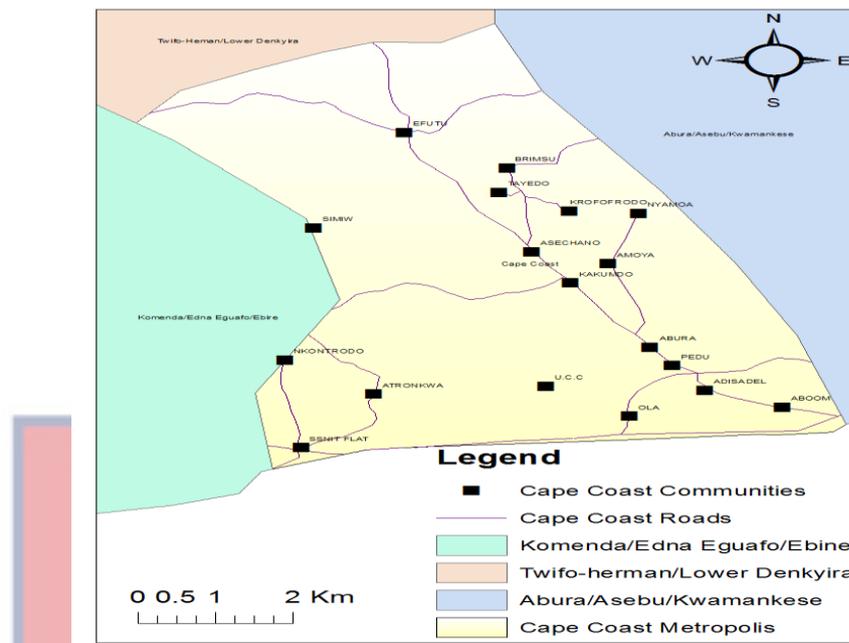


Figure 2: Map of Cape Coast Metropolis

Source: GIS and Cartography Unit (2018), Department of Geography and Regional Planning, University of Cape Coast.

Population

Population refers to individuals with similar characteristics in which the researcher has interest in studying (Hancock, Ockleford & Windridge, 2001).

The target population for the study was all staff of the Ghana Audit Service in the Cape Coast Metropolis in the Central Region. The total population were 76.

Sample and Sampling Procedure

Saunders et al. (2007) defines sample as part of the population that is selected and investigated. The researcher used all the auditors (76) in the auditing department of the Ghana Audit Service in the Cape Coast Metropolis.

Sampling method

This study used census as a sampling method. Kothari (2004) defined census as the usage of all items in a population. The advantages of census is its

suitability for small areas, ability to consider entire population and its homogeneous measuring ability (Kothari, 2004).

Source of Data

The researcher obtained primary data for this study. Primary data was used because of its accuracy, privacy and control of the data. The researcher designed and administered structured questionnaires identified in Appendix A to collect primary data from the staff of the Audit Service in the Cape Coast Metropolis.

Data Collection Instruments

Questionnaire was the data collection instrument employed for this study. Questionnaires facilitate quicker and economical means of obtaining data from a sufficiently vast population. Questionnaire also guarantees anonymity of respondents and thus they feel confident to provide the relevant information needed for the work (Gravetter & Forzano, 2006). Nevertheless, White (2005) argues that the usage of questionnaires are limited to only the literate population and does not allow the respondents to add further information. Fortunately, the argument for using questionnaire lies on the fact that all the respondents are literates and the items will be measured with clarity. Again, the researcher was available to guide the respondents in filling out the questionnaire. To prevent biasness an expert researcher's consent was sought on major decisions of the research such as the hypothesis, design and methodology in general.

Validity and Reliability of the Instruments

Validity measures the extent to which an indicator accurately measures a concept it intends to measure (Ary, Jacobs, Sorensen & Razavieh, 2010). Simply, validity can be defined as the ability of an instrument to measure what

it purports to measure. To ensure validity and reliability, an experienced researcher's views were solicited to peruse the questionnaire. The researcher corrected those issues raised and sent it for further review. Additionally, Cronbach's (1951) Alpha for the instrument was used to assess instrument validity. Adam (2015) reveals a minimum acceptable Alpha of 0.6.

Ethical Issues Considered in the Study

The researcher sought permission from heads of the Audit Service in the Cape Coast Metropolis. Again, the consent of the employees was sought through their respective Heads of departments. For confidentiality, the respondents were explicitly made aware that the information they provided were confidential and would be used only for the purpose of research. For anonymity, personal information such as names and contact numbers were not collected and they were also informed that the information provided cannot be traced back to them. The questionnaire again contained statements of confidentiality and anonymity.

Data Processing and Analysis

Apart from it being descriptive in nature, the study adopted quantitative approach. The quantitative data were sorted, coded and processed with Smart PLS SEM software. The quantitative data that were collected from the respondents were first grouped for editing after which were coded using numerical values and further transferred to Smart Pls. SEM was used to establish the relations between the variables and used to analyse the findings of the study.

Table 1: Definition of Variables

Constructs	Item	Dependent/Independent
Audit Practices Prior/During	Analytical Procedures	Independent
	Enquiry and confirmation directly from third parties	Independent
	Inspection of records and assets	Independent
	Observation	Independent
Drivers of Audit Technology Adoption	Recalculation and re-performance	Independent
	Perceived Benefits	Independent
	Social Influence	Independent
	Perceived Risk	Independent
Audit Technology Adoption	Perceived Ease of Use	Independent
		Dependent

Source: Field Data (2022)

Chapter Summary

This Chapter presented the methodology adopted for the study. The descriptive design was adopted for the quantitative study. The study solicited responses from staffs of the Audit Service. These responses were coded with SPSS.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents the results and the discussion of the results of the study. The chapter begins with a presentation of the descriptive statistics on the variables employed in the study. Next, the chapter reports the correlation matrix to explain the degree and direction of the association between the variables. Finally, the chapter presents the results and the discussion of the results estimated from the Structural Equation Modelling (SEM).

Descriptive Statistics of Auditors' Demographic

The study reports the descriptive statistics on auditors' demographics in Table 2. The gender, marital status and number of years in the Audit Service are presented and discussed.

Table 2: Respondents' Demographics

Variable		Frequency	Percent
Gender	Female	26	34.2
	Male	50	65.8
Marital status	Single	26	34.2
	Married	39	51.3
	Divorced	11	14.5
Length of service	0-5	16	21.0
	6-10	29	38.2
	Above	31	40.8
Total		76	100

Source: Statistical Package for Social Sciences (2022)

From Table 2, it can be observed that majority (about 65.8%) of the respondents were males while the remaining were females. From the Table, it can also be observed that most of the respondents were married (51.3%) whilst 34.2% and 14.5% were single and divorced respectively. Further, 21% of the respondents had worked for about 5 years whilst 38.2% and 40.8% had worked for 6-10 years and above respectively.

Descriptive Statistics of Constructs

The variables were made up of 10 items, 5 for prior and 5 for during covid. The main variables were evaluated in terms of descriptive statistics such as mean and standard deviation. That is any mean score value of 1.0 to 2.9 denotes the least agreement while a mean score value of 3.0 to 5.0 strong agreement respectively.

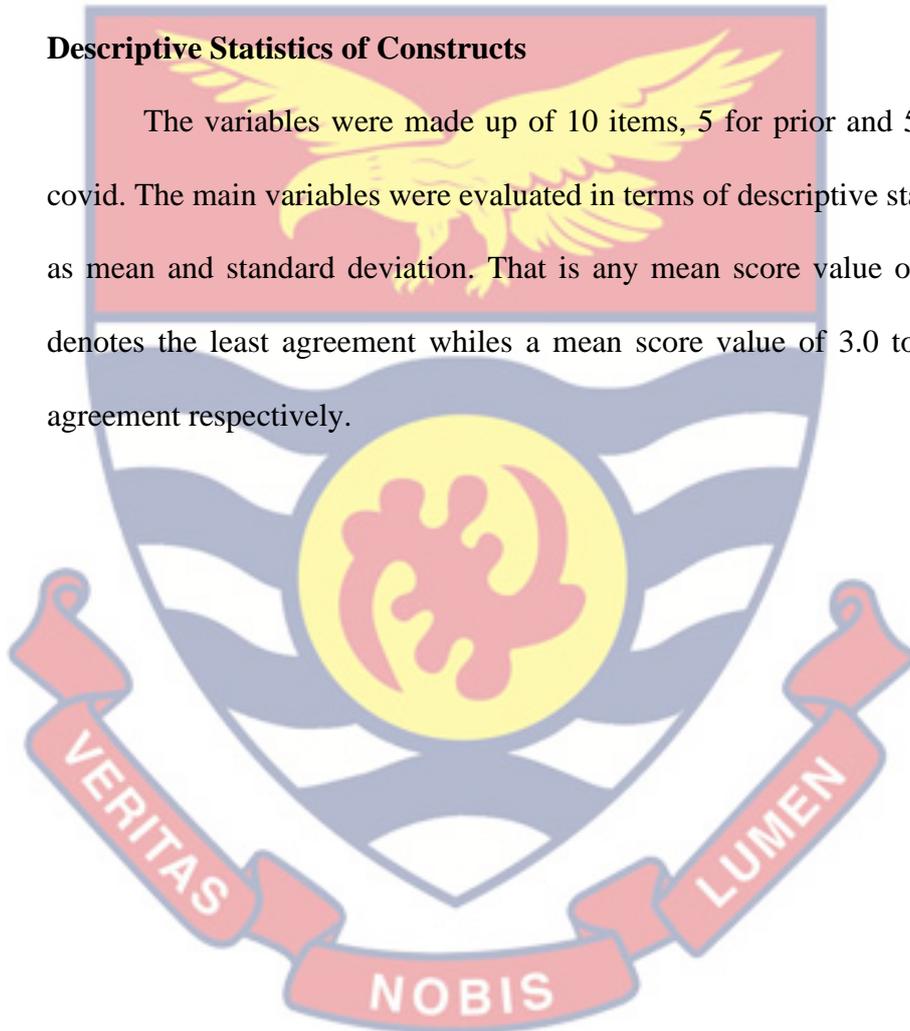


Table 3: Audit Practices prior to Covid-19

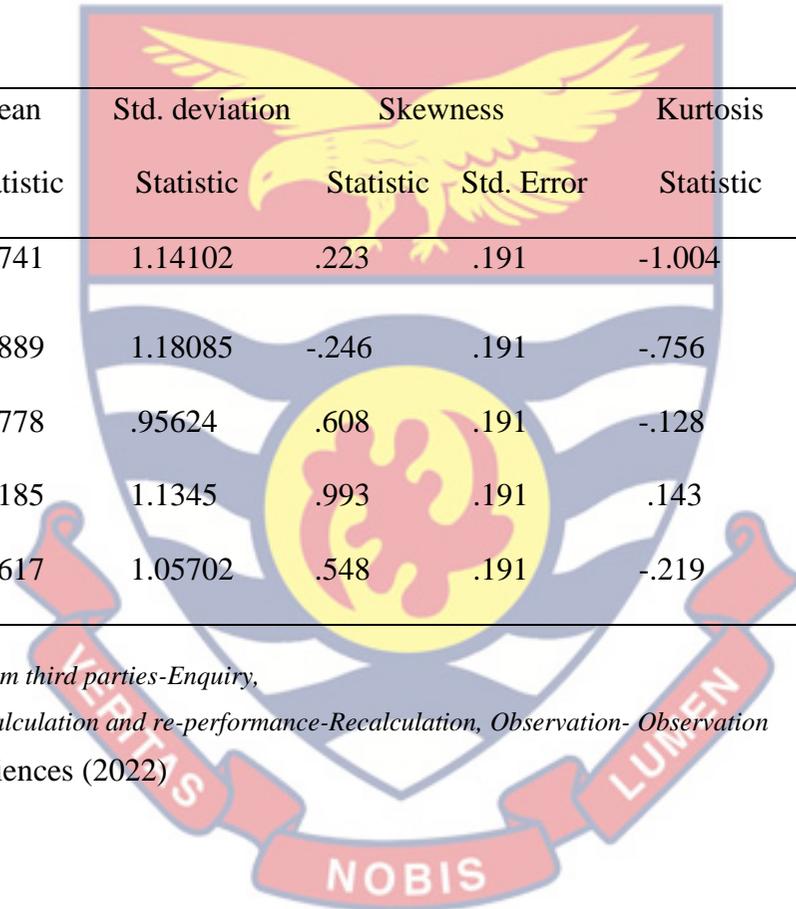
	Mean	Std. deviation	Skewness	Kurtosis		
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. error
Analytical	3.5741	1.14102	.223	.191	-1.004	.379
Enquiry	3.3889	1.18085	-.246	.191	-.756	.379
Inspection	3.7778	.95624	.608	.191	-.128	.379
Observation	4.0185	1.1345	.993	.191	.143	.379
Recalculation	3.5617	1.05702	.548	.191	-.219	.379

Analytical Procedures-

Analytical, Enquiry and confirmation directly from third parties-Enquiry,

Inspection of records and assets-Inspection, Recalculation and re-performance-Recalculation, Observation- Observation

Source: Statistical Package for Social Sciences (2022)



From the study it can be inferred that, the respondents agreed highly to the audit practices. Thus, it can be concluded that, observation had the highest mean followed by Inspection of records and assets, analytical procedures, recalculation and re-performance and enquiry and confirmation directly from third parties respectively. This is because prior to the coronavirus pandemic, auditors had afforded time, space and opportunity to examine account balances, transactions and disclosures (PWC, 2020). This also enabled auditors to undertake walk-through tests and physical inspection of premises including inventory and property plant and equipment. Auditors had the liberty to attend physical inventory counts to ascertain the existence, and accuracy of the inventory balance (PWC, 2020).

Table 4: Audit Practices during Covid-19

	Mean	Std. deviation	Skewness	Kurtosis
Error	Statistic	Statisti	Statistic	Std. Error
		Statistic	Statistic	Statistic
Analytical	3.9000	1.0290	.502	.191
Enquiry	3.7222	1.0762	-.697	.191
Inspection	2.7346	.95744	.906	.191
Observation	2.9018	1.1345	-.993	.191
Recalculation	4.7778	.95624	-.608	.191

Analytical Procedures-Analytical, Enquiry and confirmation directly from third parties-Enquiry, Inspection of records and assets-Inspection, Recalculation and re-performance-Recalculation, Observation- Observation

Source: Statistical Package for Social Sciences (2022)

During covid-19, the respondents strongly agreed to the use of recalculation and re-performance (Mean=4.77, SD=-.9562), enquiry and confirmation directly from third parties (Mean=3.72, SD=1.07) and analytical procedures (Mean=3.9, SD=-1.029). They showed low agreement to inspection of records (Mean=2.734, SD=-.9574) and assets and observation (Mean=2.901, SD=-1.134). Recalculation and re-performance had the highest mean followed

by analytical procedures, Enquiry and confirmation directly from third parties, observation and lastly inspection of records and assets. Due to COVID-19, auditors were more inclined to obtain external confirmations from bankers, suppliers and customers (PWC, 2020). COVID-19 has decreased the use of original documents such as receipts and invoices that are used to support payment transactions to copies sent via emails since working-from-home and other restrictions in the movement of people mean that physical contacts are reduced to the minimal. Many public institutions are inclined to manipulate their financials and thus, auditors have increased the use of analytical procedures due to the fact that they can be performed at the lowest cost and easy to calculate (Rose, et al., 2019). According to Wang (2010), analytical procedures are usually fancied by auditors as it provides audit evidence at the lowest cost.

Drivers of technology Adoptance in the audit service during the COVID-19 pandemic.

Having established through descriptive the practices adopted prior and during the Covid-19 pandemic, the study further reports on the Structural Equation Model results. The analysis begins with the assessment of the measurement models.

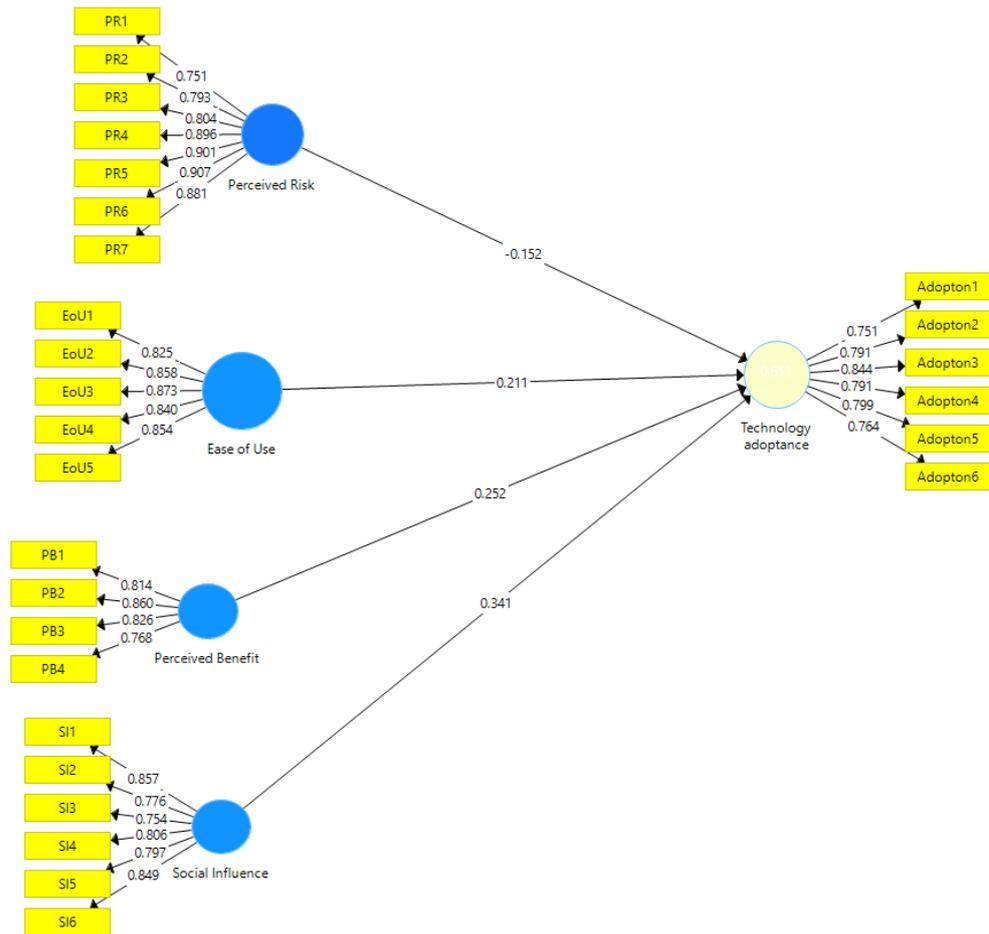


Figure 3: PLS SEM algorithm for the drivers of technology Adoption in the audit service during the covid-19 pandemic

Source: PLS SEM (2022)

Figure 3 is presented for the purpose of assessing the validity of the measured constructs. The outer loadings suggest that the measures or items for the reflectively measured constructs are reliable and valid since all the loadings exceed the threshold value of 0.708 (Shmueli, Sarstedt, Hair, Cheah, Ting, Vaithilingam, & Ringle, 2019).

Model Diagnostics

The study begins the analysis with an assessment of the measurement model for the construct reliability and discriminant validity.

Construct Reliability

The study assesses construct reliability using Cronbach’s Alpha, Dijkstra-Henseler rho_A, composite reliability and the Average Variance Extracted (AVE). The results of these tests are reported in Table 5. For construct reliability to exist, Cronbach’s Alpha, Dijkstra-Henseler rho_A, and composite reliability must be at least 0.7 with a minimum AVE of 0.5 (Albort-Morant, Leal-Rodríguez, & De Marchi, 2018; Adam, Frimpong, & Boadu, 2017; Straub, 1989; Henseler, Ringle, & Sinkovics, 2009; Fornell, & Larcker, 1981). The results shown in Table 4 indicate that a high level of construct reliability as the minimum AVE is 0.625 all the Cronbach’s Alpha, Dijkstra-Henseler rho_A, and Composite reliability values exceeds 0.7.

Table 5: Construct Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	AVE
Ease of Use	0.834	0.834	0.890	0.668
Perceived Benefit	0.889	0.897	0.915	0.642
Perceived Risk	0.907	0.911	0.930	0.728
Social Influence	0.893	0.900	0.918	0.651
Tech Adoptance	0.880	0.885	0.909	0.625

Source: PLS SEM (2022)

Discriminant Validity

Having confirmed high levels of construct reliability, the study further examines the model for discriminant validity using the Fornell and Larcker (1981) criterion and the Heterotrait-Monotrait ratio of correlations (HTMT) proposed by Henseler, Ringle, and Sarstedt (2015). Fornell and Larcker (1981)

opines that the square root of each constructs AVE must exceed the correlations of that construct with all the other constructs. For the HTMT ratio, a value not greater than 0.85 is preferred (Kline, 2011) but a value less 0.90 is also acceptable (Gold, Malhotra, & Segars, 2001; Teo, Srivastava, & Jiang, 2008). Based on the results shown in Table 6, all the non-single item constructs satisfy the Fornell and Larcker (1981). In addition, the highest value for the HTMT ratio is 0.806, which is well below 0.85 and also acceptable (Gold, et al., Teo, et al., 2008).

Table 6: Fornell-Larcker Criterion

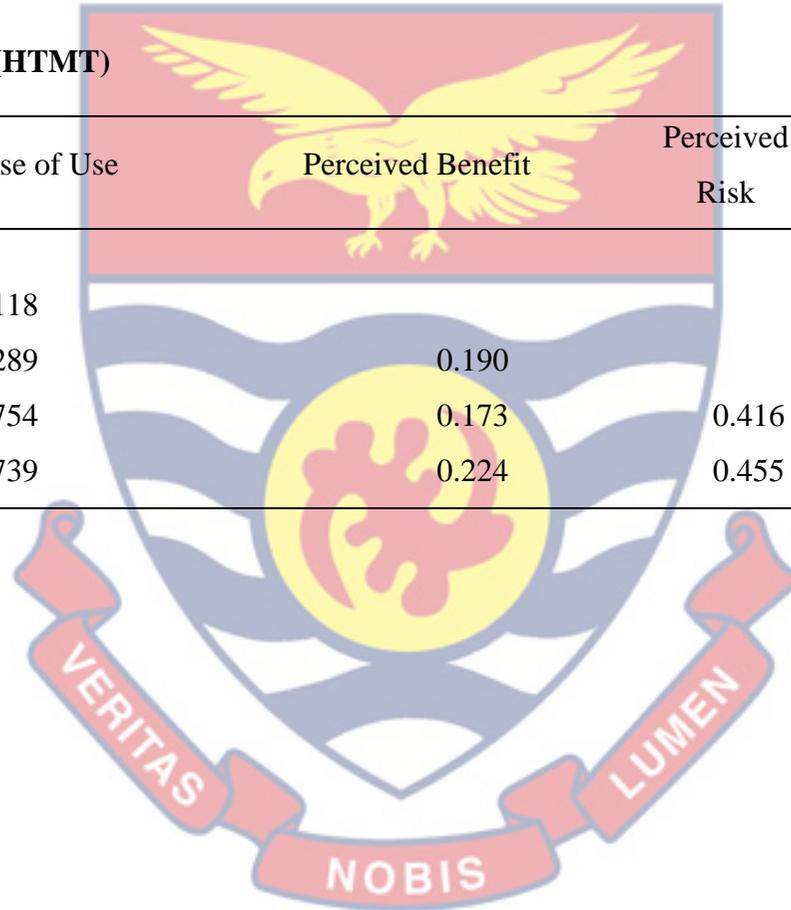
	Ease of Use	Perceived Benefit	Perceived Risk	Social Influence	Usage
Ease of Use	0.818				
Perceived Benefit	0.103	0.801			
Perceived Risk	-0.255	-0.180	0.853		
Social Influence	0.650	0.161	-0.378	0.807	
Usage	0.632	0.209	-0.413	0.728	0.791

Source: PLS SEM (2022)

Table 7: Heterotrait-Monotrait Ratio (HTMT)

	Ease of Use	Perceived Benefit	Perceived Risk	Social Influence	Technology Adoptance
Ease of Use					
Perceived Benefit	0.118				
Perceived Risk	0.289	0.190			
Social Influence	0.754	0.173	0.416		
Technology Adoptance	0.739	0.224	0.455	0.806	

Source: PLS SEM (2022)



Assessment of the Structural Model

Hair Jr, Hult, Ringle and Sarstedt (2021) proposed a five-step procedure to assess structural models' assessment for issues of collinearity. Firstly, assessment of the path coefficients are determined followed by an assessment of the R-Square, effect size (f-Square) and lastly, predictive relevance (Q-Square).

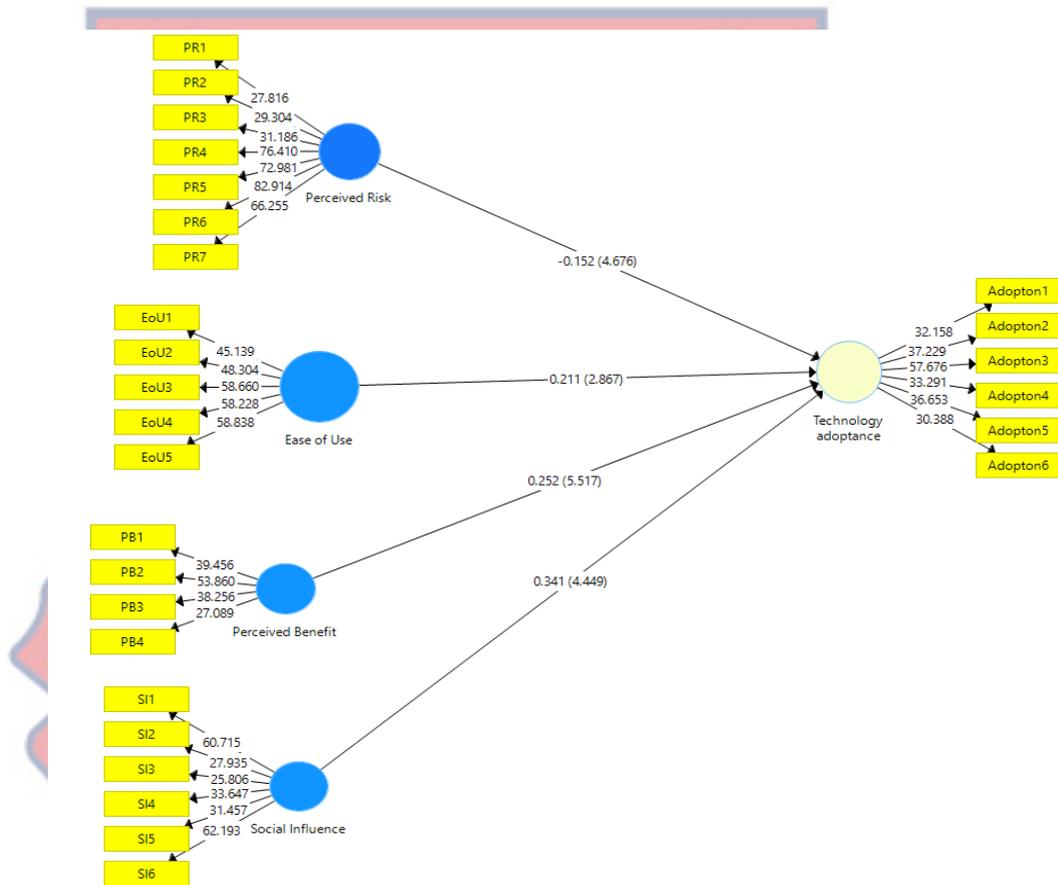


Figure 4: Bootstrap algorithm of the drivers of technology Adoption in the audit service during the covid-19 pandemic

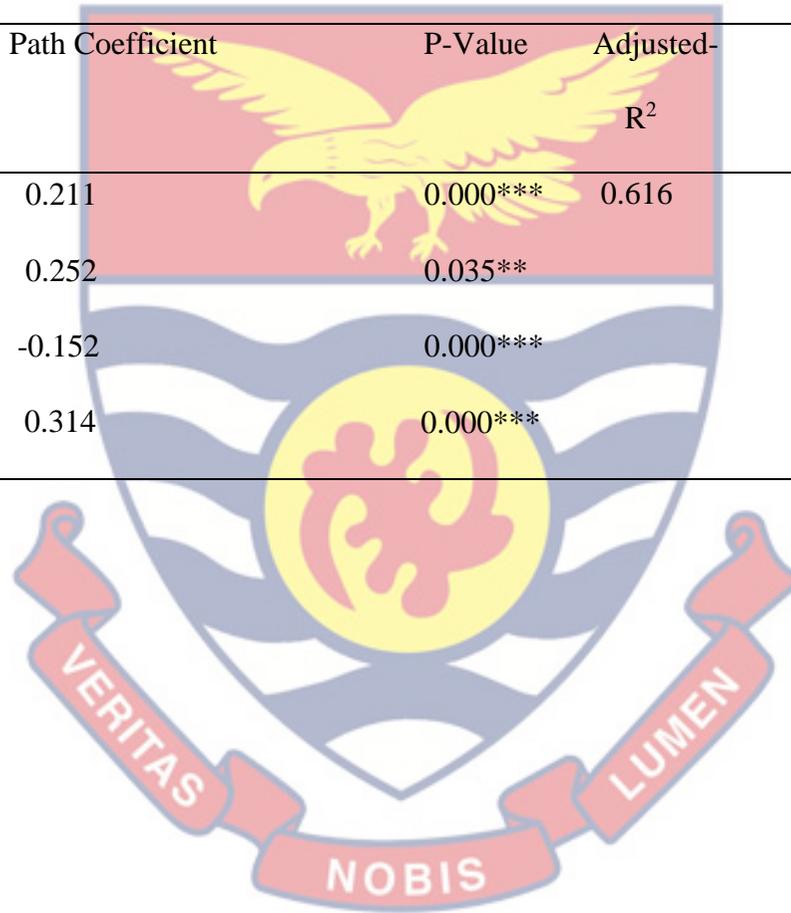
Source: PLS SEM (2022)

Table 8: Structural model assessment

Independent Variable	Dependent Variable	Path Coefficient	P-Value	Adjusted-R ²	f ²	VIF	Q ² _{Predict}
Ease of Use	Adoptance	0.211	0.000***	0.616	0.091	1.769	0.627
Perceived Benefit	Adoptance	0.252	0.035**		0.013	1.053	0.627
Perceived Risk	Adoptance	-0.152	0.000***		0.042	1.197	0.627
Social Influence	Adoptance	0.314	0.000***		0.077	3.380	0.627

Source: Field Data (2022)

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$



The study first discusses the VIF to assess issues of collinearity in line with Hair Jr et al., (2021) assessment procedure. It can be observed that all the VIF are below the values of 5 and 10 which are argued to be the values that can possibly raise concerns for multicollinearity in the extant literature (O'brien, 2007).

Further, the significance of the path coefficients are also assessed. The results shown in Table 7 and Figure 3 indicate that Ease of Use, and Social Influence exhibit a significant positive impact on audit service during the covid-19 pandemic at a 1% significance level while Perceived Benefit also has a significant positive effect on audit service during the covid-19 pandemic (at a 5% significance level). Predictably, Perceived Risk also plays a significant negative role in audit service during the covid-19 pandemic (at a 1% significance level).

Furthermore, the study considers the model sample fit by first assessing the adjusted R-Square for the model. The value is quite high and appropriate for the study since 61.6% of the variations in audit service decision to adopt technology during the covid-19 pandemic can be explained by the independent variables.

In addition, the effect size (f^2) and predictive relevance (Q^2) shown in Table 7 indicate that ease of use exhibit the largest effect on technology Adoptance. This is followed by social influence, ease of use, perceived risk and perceived benefit. However, these effect sizes are low. Further, the overall predictive relevance is assessed using PLS Predict developed by Shmueli, Ray, Estrada, and Chatla (2016). The values for the Q^2 are well above 0, indicating that the model has predictive relevance.

Discussion of Empirical Findings

Having established the drivers of technology Adoption in the audit service during the COVID-19 pandemic, the study further discusses the empirical findings in line with the study objectives.

Drivers of technology Adoption in the audit service during the COVID-19 pandemic.

First, the study documents a significant positive effect of Ease of Use on technology adoption ($\beta = 0.211, P < 0.01$). The results mean that auditors who find their platforms easy to navigate in terms of technology during the COVID-19 will use these services. This, is because the perceived ease of use deals with the belief that the user will not exert enormous effort (Davis, 1989) when employing the services. This feature can be important for the adoption of a new technology because complex features in the application can deter users from its usage (Atieno, 2018). In line with this, Rodrigues, Oliveira, and Costa (2016) argue that ease of use contributes to customers' or users' enjoyment of services. Moreover, Davis, Bagozzi, and Warshaw (1989) reasoned that there could exist a cognitive trade-off between the efforts that is required to technology and the benefits that ought to be derived from its application. The findings are in line with the results of Alalwan, Dwivedi, Rana, and Williams (2016), Deb and Lomo-David (2014), Atieno (2018) and Jahangir and Begum (2008).

Second, the study illuminates a significant positive role of Perceived Benefits in influencing the usage of audit technology services during the coronavirus pandemic ($\beta = 0.252, P < 0.05$). The results suggest that users who see audit services as beneficial in the COVID-19 are likely to use them. The results are line with the arguments of the Mental Accounting Theory (MAT).

The MAT posits that consumers tend to examine the perceived usefulness and evaluate the beneficial outcome of a particular behavior (Prelec & Loewenstein, 1998). Thus, users' decisions to adopt technological services will depend on the perceived functional benefits that the user will derive from the services. In the coronavirus pandemic, auditors will likely access the benefits of minimizing transmission and avoiding contacts with potentially infected persons or infected documents in their dealings. Thus, the contactless feature of the e-service allows the user or auditor to formulate mental benefits of the physical safety, convenience and utility associated with employing e-based services (Zhao & Bacao, 2021). These finding has also received empirical support (Zhao & Bacao, 2021; Forsythe, Liu, Shannon, & Gardner, 2006; Siyal, Donghong, Umrani, Siyal, & Bhand, 2019).

In addition, the study finds that Perceived Risk negatively influences users' decisions to adopt technology services during the coronavirus pandemic ($\beta = 0.152, P < 0.01$). This is particularly not surprising because the COVID-19 pandemic has brought about enormous risk and uncertainty in life and daily transactions. Hence, the perceived risk can drive out confidence of users decisions. Also, the perception that e-services platforms as secure affects users' expectations on whether a positive outcome will result from the use of the system and whether the obligations of the service provider will be fulfilled (Gefen, 2000; Shin, 2009), which can ultimately have an impact of their adoption of such systems. Moreover, the security of the services are very important as they collect sensitive information of clients. Thus, the extent of security can alleviate transaction risk and uncertainties (Khalilzadeh, Ozturk, & Bilgihan, 2017). This corroborates with the studies of Zhao and Bacao (2021),

Forsythe, Liu, Shannon, & Gardner (2006) and Siyal, Donghong, Umrani, Siyal, and Bhand (2019).

Furthermore, the study found evidence to support the positive impact of Social Influence on technology adoptance ($\beta = 0.314, P < 0.01$). The finding is not startling as users tend to reduce anxiety of adopting new systems by consulting important people in their social networks (Slade, Dwivedi and Piercy, 2016). Thus, people tend to feel confident in employing a new system when well-meaning persons are also using the system, which can affect the perceived usefulness of the service (Park, Ahn, Thavisay, & Ren, 2019). This is very important particularly in the COVID-19 pandemic as recommendations from experts and doctors can be very influential in auditors' technology adoption decisions. Furthermore, several studies conclude social influence to be a key determinant of technology adoptance decisions (Agyei, Sun, Penney, Abrokwah, Boadi, & Fiifi, 2021; Owusu, Bekoe, Addo-Yobo, & Otioku, 2020; Avorny, Fang, Odai, Vondee, & Nartey, 2019; Osei-Assibey, 2015; Appiah, Ozuem, Howell, & Lancaster, 2019; Perkins, & Annan, 2013).

Chapter Summary

This chapter mainly presented the empirical results. Firstly, the descriptive statistics of the respondents' demographic background revealed that a majority of the respondents were males, married and had worked for more than 10 years. The analysis subsequently confirmed by the SEM also revealed that perceived risk has a significant negative impact on auditors' decision to adapt audit technology during COVID-19 while ease of use, perceived benefits and social influence exhibit a significant positive influence on auditors' decision to adapt audit technology. The results were further discussed.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction

This chapter begins with the presentation of the summary of findings and further concludes on the objectives of the study and research. Lastly, the study ends by offering recommendations for the study.

Summary of the Study

The study sought to assess the audit practices in the coronavirus pandemic era by employees of Ghana Audit Service and how COVID-19 has influenced the use of technology in audit. The study was underpinned by the contingency theory and UTAUT theory. Specifically, the study sought to examine the audit practices adopted by the staffs of the Ghana audit service in the Cape Coast Metropolis in the Central Region prior to the coronavirus pandemic. Secondly, the study sought to assess the audit procedures adopted by the staff of the audit service in the Cape Coast Metropolis to obtain audit evidence in the era of the COVID-19 pandemic. Finally, the study investigated the drivers of technology adoption in the audit service during the COVID-19 pandemic.

Summary of key Findings

From the first objective, the study identified the audit practices adopted by the audit staff prior to how COVID- 19 influenced auditing. The most predominant practices adopted by the auditors include Observation, analytical procedures and inspection of records and assets were found to be the most predominant. The results mean that, auditors before covid engaged in more activities that required their physical presence. From the second objective, the

study also found analytical procedures, enquiry and confirmation directly from third parties and observation to be the most adopted practices during the Covid-19 era. This implies auditors here had less contact with auditing data and auditees.

Lastly, the study identified the drivers of technology adoptance during the Covid-19 pandemic. The study confirms the first hypothesis that perceived benefits exerts a positive influence on auditors' decisions to adopt audit technology. The study again confirms the second hypothesis that social influence significantly and positively effects auditors' technology adoptance. Auditors tend to feel confident in employing a new system when well respected persons are also using the system, which can affect the perceived usefulness of the services (Park, Ahn, Thavisay, & Ren, 2019). Also, the study confirms the third hypothesis that perceived risks negatively and significantly influences auditors' decision to adopt audit technology. Perceived security and trust can add confidence to auditors' personal decisions. The perception that the audit information can be held confidential and secure affects users' expectations on whether a positive outcome will result from the use of the technology which can ultimately have an impact on their adoption of such systems. Finally, the fourth hypothesis that auditors who find audit technology easy to use are more likely to adopt audit technology was confirmed. Thus, it is anticipated that if an auditor finds a technological system simple to use, it can influence his/her decision to continue using the platform.

Conclusion

Based on the findings of the study, the following conclusions were drawn:

1. Prior to covid-19, auditors preferred to be present to analyze and make decisions regarding financial statements but the COVID-19 pandemic has rapidly forced the widespread adoption of remote auditing practices and audit technology.

2. The COVID-19 pandemic has also led to the emergence of some difficulties and challenges for the audit profession such as real-time access to auditing data and dealing with clients in person. This has influenced auditors to keep pace with the development of the surrounding environment to face the continuous changes and developments in the business environment requiring focus on the use of audit software in data analysis and activating modern audit methods.

3. Drivers of technology (Perceived benefits, perceived risk, social benefit and ease of use) significantly influence the audit technology adoptance of auditors in Cape Coast.

4. The study identified the most predominant practice during the Covid-19 pandemic to be Observation which intuitively makes sense since the pandemic prevented people and workers from having close contact.

Recommendations

Based on the findings of the study, the following recommendations are provided:

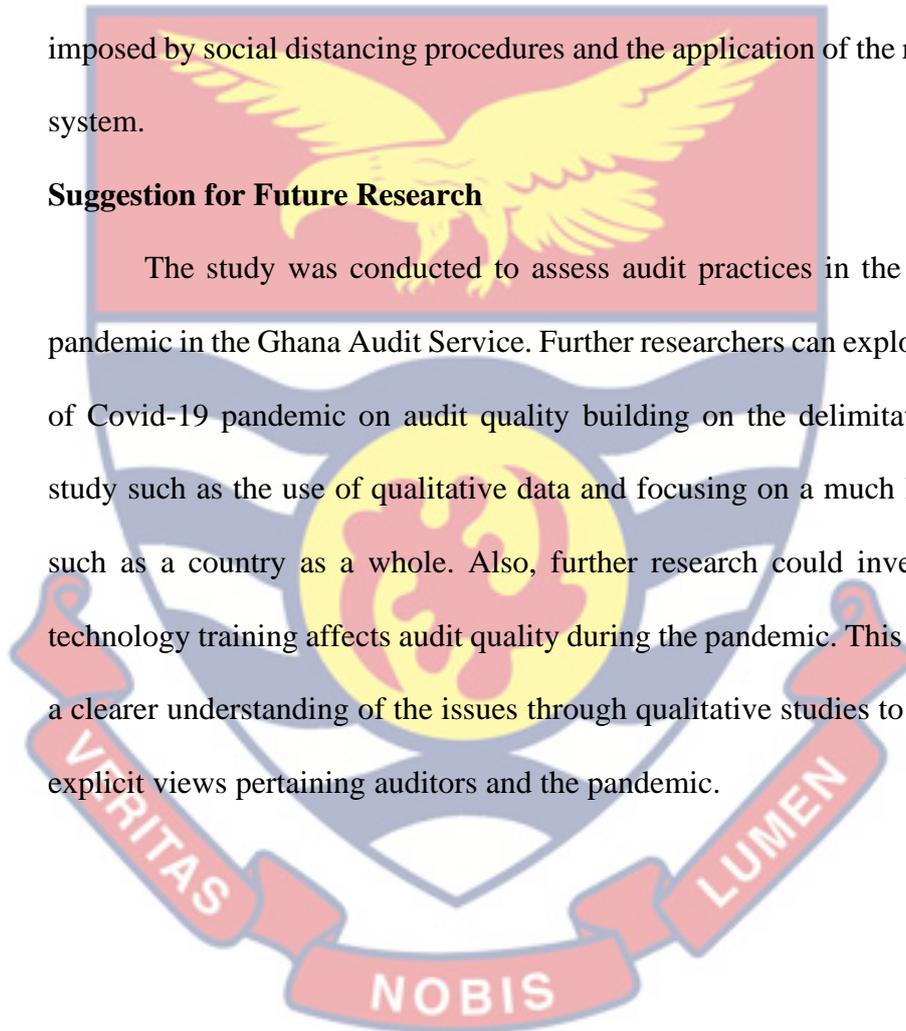
Managements of Audit Service in Cape Coast can develop new audit technology, which is very easy to use and has the affirmation of well meaningful people in the society thereby influencing perceived usefulness. This implies that when auditors notice that a particularly audit technology is been used by people they hold in esteem, they are likely to also use that audit technology.

Managements of Audit Services can implement the identified adopted practices such as Observation, Analytical procedures and Inspection during the Covid-19 era to develop and collect auditing data.

Audit services in Cape Coast can increase reliance on the use of modern audit technology in data analysis and activating modern audit methods such as continuous auditing and remote auditing to overcome future restrictions imposed by social distancing procedures and the application of the remote work system.

Suggestion for Future Research

The study was conducted to assess audit practices in the coronavirus pandemic in the Ghana Audit Service. Further researchers can explore the effect of Covid-19 pandemic on audit quality building on the delimitations of this study such as the use of qualitative data and focusing on a much larger group such as a country as a whole. Also, further research could investigate how technology training affects audit quality during the pandemic. This will provide a clearer understanding of the issues through qualitative studies to uncover the explicit views pertaining auditors and the pandemic.



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APPENDIX
UNIVERSITY OF CAPE COAST
SCHOOL OF BUSINESS
DEPARTMENT OF ACCOUNTING
MBA PROGRAMME

QUESTIONNAIRE FOR MASTERS dissertation on “assessment of
Audit practices in the coronavirus pandemic in the Ghana Audit Service”

INTRODUCTION

The purpose of this study is to assess the audit practices in the coronavirus pandemic by staffs of Ghana Audit Service and how the COVID-19 has influenced the use of audit technology. Participants are assured of utmost **confidentiality** regarding information provided by them.

SECTION A

DEMOGRAPHICS

Sex: Male Female

Marital status: Single Married

Widowed Divorced

How long have you been serving with the Audit Service (in years)?

i. 0 – 5 ii. 6 – 10 iii. Above

SECTION B

Audit Practices Prior to the Pandemic

For each of the following statements, indicate the extent to which staffs at the Audit Service used the following audit procedures in gathering audit evidence

prior to the pandemic. 1 representing not very often and 5 representing very often.

Audit Practices Prior to the Pandemic	1	2	3	4	5
How often do you use?					
1. Analytical procedures					
2. Enquiry and confirmation directly from third parties					
3. Inspection of records and assets					
4. Observation					
5. Recalculation and re-performance					

C. Audit Practices During the Pandemic

For each of the following statements, indicate the extent to which staffs at the Audit Service use the following audit procedures in gathering audit evidence during the pandemic. 1 representing not very often and 5 representing very often.

Audit Practices Prior to the Pandemic	1	2	3	4	5
How often do you use?					
6. Analytical procedures					
7. Enquiry and confirmation directly from third parties					
8. Inspection of records and assets					
9. Observation					
10. Recalculation and re-performance					

D. Drivers of Audit Technology Adoption

This part collects responses on the drivers of Audit Technology adoption during the pandemic. Kindly indicate the extent to which you disagree or agree with the following. 1 representing strongly disagree and 5 representing strongly agree.

The Perceived Benefits	1	2	3	4	5
11. I perceive convenience when using audit technology during the COVID-19 pandemic					
12. I feel using audit technologies as a contactless means of obtaining audit evidence is safer than the traditional modes of obtaining audit evidence					
13. I feel using audit technologies is easier for gathering audit evidence in the pandemic					
14. Audit software appear to be more practical way of collecting audit evidence during the pandemic					
15. I feel using audit technologies is more beneficial in the COVID-19					
16. Using audit technologies enables me to obtain sufficient and appropriate audit evidence more quickly in the COVID-19					
17. Using audit technologies improves the efficiency of my audits in the COVID-19					

Social Influence	1	2	3	4	5

18. People who are important to me recommend me to use audit technology in the COVID-19 pandemic					
19. Colleague auditors who influence my behaviour consider the use of audit technologies a more convenient in the COVID-19 pandemic					
20. People who are important to me view audit technologies as beneficial in the COVID-19 pandemic					
21. High profile people in Ghana audit service use audit technologies in the COVID-19 pandemic					
22. People who are important to me use audit technologies in the COVID-19 pandemic					
23. Using technology during audits in the pandemic makes me look trendy among my peers					

Perceived Risk	1	2	3	4	5
24. I do not feel that the evidence I obtain with audit technologies are secure					
25. The internet is not a secure means I can send sensitive information in the pandemic					
26. The threat of hacking is high in the pandemic					
27. There is high technological failure to deliver its anticipated outcome in the pandemic					

28. I do not feel secure providing personal information when using mobile payments in the COVID-19 pandemic					
30. The fear of losing sensitive information is severe in the pandemic					
31. Overall, collecting evidence and storing online is not the safest means of gathering audit evidence					

The Perceived Ease of Use	1	2	3	4	5
32. Audit technologies are compatible with other technologies I use in the COVID-19 pandemic					
33. The interaction with audit technologies is clear and understandable in the COVID-19 pandemic					
34. The interaction with audit technologies does not require much efforts in the COVID-19 pandemic					
35. I find the audit procedure with audit technologies to be flexible to work with in the time of the pandemic					
36. I find it easier obtaining audit evidence with audit technologies in the pandemic					

Audit Technology Adoption	1	2	3	4	5
37. I am willing to continuously use audit technologies during this COVID- 19 pandemic					
38. I intend to continuously use audit technology in the future					
39. I am open to using audit technologies as my main methods of soliciting audit evidence in the pandemic					
40. Whenever possible, I intend to use mobile audit technologies in the pandemic					
41. Given any opportunity in the pandemic, I plan to use audit technologies					

