

**THE EFFECT OF COVID-19 ON THE ACCOUNTING PRACTICE IN ZAMBIA.**

**BY**

**TEMWANI ZULU**

**A Dissertation submitted to the University of Zambia in partial fulfilment  
of the requirements for the award of the Degree of Master of Science in  
Accounting and Finance.**

**THE UNIVERSITY OF ZAMBIA**

**LUSAKA**

**2024**

## DECLARATION

I, **Temwani Zulu**, do hereby declare that this work is my original work achieved through personal reading and research. This work has never been submitted to the University of Zambia or any other universities. All sources of data used and literature on related works previously done by others, used in the production of this dissertation have been dully acknowledged. If any omission has been made, it is not by choice but by error.

Signature: .....

Date: .....

## **COPYRIGHT**

All rights reserved. No part of this dissertation may be reproduced, stored in any retrieval system, or transmitted in any form or by any means: electronic, mechanical, photocopy, recording or otherwise without the consent of either the author or the University of Zambia.

**© Temwani Zulu, 2024.**

## APPROVAL

This Dissertation by **Temwani Zulu** has been approved as a fulfilment of the requirements for the award of the Master of Science Degree in Accounting and Finance.

|                                   |           |       |
|-----------------------------------|-----------|-------|
| Examiner 1                        | Signature | Date  |
| .....                             | .....     | ..... |
| Examiner 2                        | Signature | Date  |
| .....                             | .....     | ..... |
| Examiner 3                        | Signature | Date  |
| .....                             | .....     | ..... |
| Chairperson<br>Board of Examiners | Signature | Date  |
| .....                             | .....     | ..... |
| Supervisor                        | Signature | Date  |
| .....                             | .....     | ..... |

## ABSTRACT

The COVID-19 pandemic has been one of the most brutal pandemic in human kind history. Its impact has been immense, affecting numerous sectors across the global economy including the Accounting Practice (AP). Consequently, the purpose of the study was to determine the effect of COVID-19 on the AP in Zambia. The collection of data was done through quantitative methods. Questionnaires in 5 point Likert scale were sent electronically to the ZiCA subscribed members through the ZiCA database, using purposive sampling. The collection of data comprised of 152 Accountants across the country. Data was analyzed through SPSS 26, Pairwise and Spearman's RHO tests were used. The results indicate a significant relationship on remote inventory valuation both during and before COVID-19, indicating discrepancies on how inventory valuation was conducted, before and during the COVID-19 pandemic. Significant relationships between sector and challenges with inventory valuation during COVID-19; sector and evaluation of going concern in relation to COVID 19; sector and disclosure of accounting estimates and liabilities in relation to COVID-19; sector and adoption of cloud accounting, artificial intelligence, data analytics & forecasting and block chain during COVID-19; Job level and conducting of meeting using video conference, zoom, google meet during COVID-19; age and challenges faced for remote working during COVID-19 were tested. Insignificant relationships were tested between sector and inclusion of income tax cuts and subsidies in financial statements, education level and assessment of the Effect of COVID-19 related instability on revenue recognition and allowance for bad debts; sector and enhancement of accounting technology following COVID-19; job level and increase of cyber security levels following COVID-19. The results concluded that COVID-19 has drastically affected inventory valuation, during the pandemic and how companies disclose and report all financial elements impacted by COVID-19. The study also concludes that COVID-19 has enabled the advancement of accounting technology, in the AP resulting in increase in cyber security levels. Companies and regulatory bodies should not ignore the impact of COVID-19 to the AP as the effects are long lasting and will continue in the long run post COVID-19.

**Key Words:** COVID-19 Pandemic, Accounting Practice, Inventory valuation, Financial Reporting and Disclosure, Technology.

## **ACKNOWLEDGEMENTS**

Firstly, I thank God almighty, it is nothing but his grace that has seen me through my education journey all the strength and wisdom endured in this academic journey, is a miracle.

Secondly, I would like to express my earnest appreciation to my supervisor, Dr Martin Kabwe, for the overwhelming support, immense knowledge, and contribution towards this study. His true guidance, support, encouragement and dedication has been of high value to this paper, am highly indebted to him, his passion for research has given me more enthusiasm for further research.

Thirdly, this thesis would have been impossible without the support of my family: My wife Parents, Children and siblings, have pushed me an extra mile, not forgetting all my friends and course mates who have offered me support and guidance.

My sincere appreciation also goes to ZiCA management who timely responded to my request of using their database for data collection.

Finally, I would like to thank the entire Graduate School of Business (GSB) management for the knowledge and skills during my research study.

## **DEDICATION**

I dedicate this thesis to my entire family and all those who come from a deprived background. my family has always reminded me that nothing is impossible if you put your mind on it, through all the struggles and pains the best has been achieved.

## TABLE CONTENTS

|   |      |
|---|------|
| <b>DECLARATION</b> .....                | i    |
| <b>COPYRIGHT</b> .....                  | ii   |
| <b>APPROVAL</b> .....                   | iii  |
| <b>ABSTRACT</b> .....                   | iv   |
| <b>ACKNOWLEDGEMENTS</b> .....           | v    |
| <b>DEDICATION</b> .....                 | vi   |
| <b>TABLE CONTENTS</b> .....             | vii  |
| <b>LIST OF TABLES</b> .....             | xi   |
| <b>LIST OF FIGURE</b> .....             | xii  |
| <b>LIST OF ACRONYMS</b> .....           | xiii |
| <b>CHAPTER 1</b> .....                  | 1    |
| <b>RESEARCH BACKGROUND</b> .....        | 1    |
| 1.0 Introduction .....                  | 1    |
| 1.1 Background. ....                    | 2    |
| 1.2 Statement of the Problem .....      | 3    |
| 1.5 Aim of the Study .....              | 4    |
| 1.6 Objectives of the Study .....       | 4    |
| 1.7 Research Questions .....            | 4    |
| 1.8 Scope of the Study.....             | 4    |
| 1.9 Limitations of the Study.....       | 5    |
| 1.10 Justification of the Study.....    | 5    |
| 1.11 Significance of the Study .....    | 5    |
| 1.12 Delimitation.....                  | 5    |
| 1.13 Operational Definitions .....      | 6    |
| 1.14 Structure of the Dissertation..... | 6    |
| <b>CHAPTER 2</b> .....                  | 7    |
| <b>LITERATURE REVIEW</b> .....          | 7    |
| 2.0 Overview .....                      | 7    |
| 2.1 The Concept OF COVID-19 .....       | 7    |

|   |           |
|---|-----------|
| 2.2 The Accounting Practice and COVID-19 .....                                | 8         |
| 2.2.1 Evolution and thought of the Accounting Practice.....                   | 8         |
| 2.2.2 The Accounting Practice in the 21 <sup>st</sup> Century.....            | 9         |
| 2.2.3 The Accounting Practice in Zambia during the pandemic .....             | 10        |
| 2.2.4 The Impact of COVID-19 - Inventory Valuation.....                       | 12        |
| 2.2.5 Impact of COVID-19 on Financial Reporting and Disclosures (FRD).....    | 15        |
| 2.2.6 Accounting for Government COVID-19 funds and Reliefs.....               | 15        |
| 2.2.7 Changes in Accounting that Accountants need to be aware of in FRD ..... | 16        |
| 2.2.8 Accounting technological trends resulting from covid-19 pandemic.....   | 18        |
| 2.3 Empirical studies.....  | 29        |
| 2.3.1 Effect of COVID-19 on Inventory Valuation.....                          | 29        |
| 2.3.2 Effect of COVID-19 on Financial Reporting and Disclosure .....          | 30        |
| 2.3.3 Accounting Technology Trends following COVID-19.....                    | 32        |
| 2.4 Literature review matrix.....   | 35        |
| <b>CHAPTER 3 .....</b>  | <b>40</b> |
| <b>CONCEPTUAL AND THEORETICAL FRAMEWORK .....</b>                             | <b>40</b> |
| 3.1 Theoretical Framework.....  | 40        |
| 3.1.1 Introduction .....  | 40        |
| 3.1.2 Overview .....  | 40        |
| 3.1.3 Theoretical Framework .....   | 40        |
| 3.1.3.1 Health Belief Model .....   | 40        |
| 3.1.3.2 Agency Theory in Management Accounting.....                           | 41        |
| 3.1.3.3 Accounting Structure Theory.....                                      | 42        |
| 3.1.3.4 Interpretational Theory .....   | 42        |
| 3.1.3.5 Decision-Usefulness Theory.....                                       | 43        |
| 3.1.3.6 Going Concern Postulate (Theory).....                                 | 43        |
| 3.1.3.7 COVID-19 Pandemic, Financial Disclosure and Legitimacy theory.....    | 44        |
| 3.1.3.8 Technology Acceptance Model (TAM) .....                               | 44        |
| 3.2 Conceptual Framework .....  | 45        |
| 3.3 Conclusion.....   | 45        |
| <b>CHAPTER 4 .....</b>  | <b>46</b> |
| <b>RESEARCH METHODOLOGY .....</b>   | <b>46</b> |

|   |           |
|---|-----------|
| 4.0 Overview .....  | 46        |
| 4.1 Research Type. ....   | 46        |
| 4.2 Study Area.....   | 46        |
| 4.3 Target Population .....   | 46        |
| 4.4 Research Design.....  | 47        |
| 4.5 Sampling Technique.....   | 47        |
| 4.6 Sample Selection and Procedure. ....                                | 47        |
| 4.7 Sample Size.....  | 47        |
| 4.8 Data Collection Instruments.....                                    | 48        |
| 4.9 Data Collection Procedures.....                                     | 48        |
| 4.10 Validity and Reliability Test .....                                | 49        |
| 4.11 Ethical Consideration .....  | 49        |
| 4.12 Pilot Study.....   | 50        |
| 4.13 Main Study .....   | 50        |
| 4.14 Time Scale.....  | 50        |
| 4.15 Data Analysis .....  | 50        |
| <b>CHAPTER 5</b> .....  | <b>51</b> |
| <b>PRESENTATION OF RESULTS</b> .....                                    | <b>51</b> |
| 5.0 Overview .....  | 51        |
| 5.1 Demographics of Participants. ....                                  | 51        |
| 5.2 The Effect of COVID-19 on inventory valuation. ....                 | 53        |
| 5.3 The Effect of COVID-19- on Financial Reporting and Disclosure. .... | 55        |
| 5.4 Technological Trends resulting from COVID-19 Pandemic .....         | 57        |
| 5.5 Kruskal Wallis non Parametric Test.....                             | 59        |
| 5.6 Spearman’s RHO Correlation Coefficient Non- Parametric Test.....    | 61        |
| 5.8 DISCUSSION OF FINDINGS. ....  | 65        |
| 5.8.1 Overview .....  | 65        |
| 5.8.2 Objectives of the Study .....                                     | 65        |
| 5.8.3 Research Questions .....  | 65        |
| 5.8.4 Descriptive Statistics .....                                      | 65        |
| 5.8.4.1 Bio Data.....   | 65        |
| 5.8.4.2 Sex of the participants .....                                   | 65        |

|  |           |
|--|-----------|
| 5.8.4.2 Age of the Participants. ....  | 65        |
| 5.8.4.3 Sector .....   | 66        |
| 5.8.4.4 Job level of participants.....                                       | 66        |
| 5.8.4.5 Duration of Practice.....  | 66        |
| 5.8.4.6 Education Level of Participants .....                                | 66        |
| 5.8.5 The effect of COVID-19 on Inventory Valuation.....                     | 66        |
| 5.8.6 Effects of COVID-19 on Financial Reporting and Disclosure. ....        | 69        |
| 5.8.7 Accounting Technological Trends Resulting from COVID-19 Pandemic ..... | 72        |
| 5.8.8 Inferential Statistics.....  | 75        |
| 5.8.8.1 Pairwise Tests .....   | 75        |
| 5.8.8.2 Spearman’s RHO Correlation.....                                      | 77        |
| 5.9 Chapter Summary.....   | 82        |
| <b>CHAPTER 6</b> .....   | <b>83</b> |
| <b>SUMMARY, CONCLUSION AND RECOMMENDATIONS</b> .....                         | <b>83</b> |
| 6.1 Conclusion.....  | 83        |
| 6.2 Recommendations .....  | 84        |
| 6.3 Recommendations For Other Studies.....                                   | 85        |
| <b>REFERENCES</b> .....  | <b>86</b> |
| <b>APPENDICES</b> .....  | <b>a</b>  |
| QUESTIONNAIRE.....   | a         |
| BUDGET.....  | f         |
| ETHICAL CLEARANCE FORMS .....  | g         |
| UNZA GSB INTRODUCTORY LETTER.....  | k         |
| ZiCA APROVAL LETTER .....  | n         |

## LIST OF TABLES

|   |    |
|---|----|
| Table 2.1 Literature review matrix .....                                      | 39 |
| Table 4. 2 Reliability Test.....  | 49 |
| Table 4.3 Five Point Scale .....  | 49 |
| Table 4: Time scale .....   | 50 |
| Table 5.5 Discriptive Statistics.....   | 53 |
| Table5. 6 Effect of COVID-19 on inventory Valaution .....                     | 54 |
| Table 5.7 Effect of COVID-19 on fianancial Reporting and Disclosure FRD ..... | 56 |
| Table 5.8 Accounting Trends following COVID-19 .....                          | 58 |
| Table 5.9 Pairwise comparison .....   | 59 |
| Table 5.10 Spearman RHO's Collerations.....                                   | 64 |

## LIST OF FIGURE

|  |    |
|--|----|
| Figure 3. 1 Conceptual Framework.....            | 45 |
| Figure 4. 2 Data collection procedure.....       | 48 |
| Figure 5.3: Pairwise comparisons .....           | 60 |
| Figure 5.4 RHO correlation table of values ..... | 61 |

## LIST OF ACRONYMS

|          |   |
|----------|---|
| AI       | Artificial Intelligence                     |
| AS       | Accounting Software                         |
| AP       | Accounting Practice                         |
| COVID-19 | Coronavirus of 2019                         |
| FR       | Financial Reporting                         |
| FRD      | Financial Reporting and Disclosure          |
| FRS      | Financial Reporting Standards               |
| FS       | Financial Statements                        |
| GDP      | Gross Domestic Product                      |
| HBM      | Health Belief Model                         |
| IT       | Information Technology                      |
| IFRS     | International financial reporting standards |
| NGO      | Non-Governmental organization               |
| SPSS     | Statistical Package for Social Sciences.    |
| TAM      | Technology Acceptance Model                 |
| ZiCA     | Zambia institute of Chartered Accountants   |
| ZRA      | Zambia Revenue Authority                    |

## CHAPTER 1

### RESEARCH BACKGROUND

#### 1.0 Introduction

The Accounting Practice is a core aspect for economic development of a country as it enhances the well-being of the economy and the business environment through establishing a framework of consistent transactions, (Comulese, et al., 2019). The AP is entwined with roles which contribute to economic development, thus rapidly gaining dominance in the 21<sup>st</sup> century because it provides much needed aid for the development of companies (both Public and Private), and it helps the government attain important goals of meeting economic and social objectives, assists nonprofit making organizations to attain financial and non-financial objectives, it plays a massive role in the money markets through financial investments (CMA, 2021), enables the provision of comprehensive financial reports which have the capability of providing information for international investors in line with appropriate resource allocation, helps in enhancing sustainability through adhering to the triple Bottom line of People, Plant and Profit , (Savage, et al., 2001). Accounting also enables financial reporting and analysis, management accounting, investment appraisal and consultancy (International Federation of Accountants, 2020).

Because of the complexity of the AP, its roles and job nature are attached to physical movement which exposes accountants to health hazard such as COVID-19. To avoid such health hazards the AP has responded through remote working, IT knowledge, Cyber security, Job security, inventory valuation, shift in work culture, risk tolerance, crisis management, and sustainability reporting (Beaver, 2021).

The pandemic has affected many Practices for example in chain supply it has slowed down the flow of raw materials and finished goods, disrupting manufacturing as a result, disrupting commodity chain consequently affecting production and operations of companies (Herrmann, et al., 2021). Human Resource has also been greatly affected, with high infection rates, furloughs layoffs , and inefficiencies of the workforce (Hamouche, 2021). The two examples show critical evidence of the pandemic affecting many work places and practices. Thus the

study aims to investigate the effect of COVID-19 on the Accounting Practice (AP) in Zambia with specific effects on inventory valuation, financial reporting and accounting technological trends. Nothing much has been written about the effects of COVID-19 on the Accounting Practice in Zambia besides for brief papers by: EY Global, (2022); Zambanker, (2020); and Zambia Institute of Chartered Accountants, (2022).

### 1.1 Background.

COVID-19 is a severe acute respiratory syndrome caused by the new coronavirus, SARS-Cove-it has emerged to be one of the most rampant threats to the world it has affected a total of 212 countries including 54 countries in Africa, Zambia inclusive (World Health Organisation, 2022).

The major transmitter of COVID-19 is human to human transmission, which has posed a lot of challenges which include travel restrictions, global commodity disruption, quarantine control measures, reduced business efficiency, reduction in profitability, company shut downs, and massive unemployment, all contributing to major world economic challenges and a broken chain in financial markets (Ilesanmi, et al., 2020).

When the virus was first reported in Zambia the government of the day realized that the virus posed a great challenge to both the economy and the people, as such steps were taken to protect both the (economy and people) without burdening the other (Zambanker, 2020). Despite the strategies put up COVID-19 impacted the Zambian economy in a number of ways as revealed by ((ZBSR), 2020), who reveals that most sectors lost customers due to the pandemic, businesses lost substantial percentage of revenues, causing most businesses across the country to partially shut down their operations. Most of the organizations were unable to continue their contacts with customers during the restrictions put in place as such most sectors lost customers due to the pandemic.

The virus has not spared the AP since most of the accounting work requires human-to-human contact, consequently, forcing the AP to make drastic shifts on how best their work can be completed without posing a threat to the lives of everyone. However, concerns came to rise on how the AP may be affected in cases where the state has to address emergency situations, when the daily-life routine is disrupted, and immediate action, adaptability and responsibility are called for, or in other words, when the AP has to deal with emergency changes arising due to crisis and global changes (Papadopoulou & Papadopolou, 2020). The phenomenon of

emergency changes can be attributed to changes that are appropriate to contain an urgent, unexpected and immediate need, if not contained can lead to massive business interruption and huge company losses (ZiCA, 2022).

Many studies on the impacts of COVID-19 have been conducted mainly in developed countries, some of the notable ones include: Papadopoulou,(2020) in Greece; Hong,(2021) Japan; Spratt School of Business, (2022) United Kingdom; Yuanyan & Pipin, (2022) India; and Helzer and Mindak, (2021) Luxenberg. Additionally, these studies focused on Job security, shift in work culture, risk tolerance, emotional intelligence, profitability, accounting environment, management of accountants and accounting process during the pandemic. Moreover, very few studies have been conducted in developing countries besides Jabin, (2021) in Pakistan who looked at the impact of COVID-19 on the Accounting Practice in Bangladesh. In Africa only one study by Rinaldi, (2021) in South Africa investigated on the impact of COVID-19 on the Accounting Process. In Zambia the business survey report ((ZBSR), 2020) studied the impact of COVID-19 on the Zambian Enterprises, which is not specific to the accounting practice, However, none of the studies have addressed the impacts on inventory verification. Hence the present day study will attempt to seal the gap that has not been studied.

### 1.2 Statement of the Problem

From the start of the COVID-19, the world has been tremendously affected in all aspects, there are also signs of the pandemic affecting the global economy and various professional practices such as the accounting practice (AP). The AP is important to the functioning of an economy of a country because it provides stakeholders with financial information, which is key to economic growth. From the start of the COVID-19 pandemic many companies in Zambia, lost substantial percentage of revenues, which led to losses in inventory, company slowdown and closure of business because of mandatory work-from-home arrangements which were meant to reduce physical contact. Statistics by ((ZBSR), 2020) indicate that 71% of businesses were partially closed while 14% of businesses totally closed and 15% maintained normal operations across sectors, in Zambia during COVID-19. Additionally, most businesses lost significant percentage of revenues, 38% more than 50%, while 4% of the businesses stopped operating completely, with only 1% of businesses across the estimated increased in revenue per month, whereas 5% of businesses received similar revenues as before, the statistics also show that 77% of the businesses faced challenges and lost customers during the Covid-19 pandemic, where as 37%

of businesses faced supply chain cuts, 39% of the businesses negotiated the delay of payments, and 33% of the businesses across the sectors recorded reduction in purchases and inventory. It is however unknown how these impacts of the COVID-19 pandemic affected the accounting practice in three main areas of Inventory valuation, Financial Reporting and Disclosure, and accounting technological trends that arose during the pandemic.

### 1.5 Aim of the Study

The aim of the study is to assess the effects of COVID-19 on the Accounting Practice (AP) in Zambia, primarily in three distinct areas; effects of COVID-19 on inventory valuation, financial reporting and disclosures, and the technological trends that have arisen following COVID-19. With the aim of giving accountants in Zambia knowledge to the extent the AP has been impacted by COVID-19. Additionally, accountants in Zambia will reflect on various aspects of financial reporting during COVID-19 and the future impact to profitability and going concern of their organizations, and how different electronic inventory valuation can be adopted to enhance quality inventory valuation and reporting in emergency periods. Also how technology can be used to improve financial reporting, and inventory valuation in emergency periods such as COVID-19. The issue of the pandemic can be solved through, consistent purchasing of health equipment at work places and immense health awareness, that is aimed not only on COVID-19 but also other emerging pandemics such as cholera.

### 1.6 Objectives of the Study

- i. To assess the effect of COVID-19 on inventory valuation.
- ii. To investigate the effect of COVID-19 on financial reporting and disclosures FRD.
- iii. To examine the Accounting Technological trends resulting from COVID-19 pandemic.

### 1.7 Research Questions

- i. What is the Effect of COVID-19 on inventory valuation?
- ii. What is the effect of COVID-19 on financial reporting and disclosures?
- iii. What are the Accounting and Technological trend that have resulted following COVID-19?

### 1.8 Scope of the Study

The study was conducted in Zambia. Practicing accountants were drawn from the ZiCA database, and randomly sampled to accountants drawn from different localities of Zambia. All

questionnaires were sent using, google doc, sent through email and WhatsApp. Responses were received in real time.

#### 1.9 Limitations of the Study

This study was limited by, poor response rate. Out of the 500 questionnaires sent randomly to 100 Fellows, 100 Associates, 100 Graduates, 100 licentiates and 100 students but only 153 responded.

#### 1.10 Justification of the Study

The present study will analyze how the COVID-19 pandemic has impacted the AP in Zambia a developing country. Hence once the study is conducted, it will help determine how the COVID-19 pandemic has impacted inventory valuation, financial reporting and disclosure, as well as reporting technological trends arising from COVID-19. The study will be much appreciated by accountants in Zambia who do not have direct knowledge on how the AP Practice has been impacted by COVID-19. Moreover, most of the studies on the impact of COVID-19 on the AP in Zambia are brief reviews, this study will seek to gather further information directly from practicing accountants to determine how the AP has been impacted practically. The study will also benefit accounting regulators in Zambia by enlightening them the importance of formulating contingency accounting procedures in emergency situations.

#### 1.11 Significance of the Study

The study will be of huge importance to the Accounting Practice in Zambia as it will provide a structural framework on the adoption of mitigations methods to help the Accounting Practice customize their activities in line with the new normal, and how best accountants can continue operating amidst COVID-19. The study will also provide information to scholars on how the pandemic has impacted inventory valuation, financial reporting and use of accounting technology, the study will be used as a source of future reference to scholars.

The information from the study once published will benefit the respondents (accountants), through giving feedback on the impact of the COVID-19 pandemic on inventory valuation, financial reporting and accounting technology, accountants will also be provided with the role that accounting technology has played to lessen the impact of the pandemic on all accounting activities.

#### 1.12 Delimitation

The study will be conducted electronically using the ZiCA database, were questionnaires will be randomly selected and distributed to accountants in different parts of Zambia, therefore the findings of the study will represent the entire nation.

### 1.13 Operational Definitions

COVID-19- Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 virus

Practice- a paid occupation, especially one that involves prolonged training and a formal qualification.

Practice: - The actual application or use of an idea belief, or method as opposed to theories

Pandemic: The term is said to be a health hazard prevalent or covering large space like the whole country or world

Practical Accountant- Practical accountant is a term that describes a person who has expertise in the field of accountancy and finance, attained by formal education and practical experience

Technology- Application of scientific knowledge for practical purposes especially in industry.

Sustainability reporting. Is reporting on both social and economic aspect of the organization.

Trends- General direction in which something is developing or changing.

Liquidity: Refers to the ease with which an asset, or security can be converted into ready cash without affecting its market price.

Tax Relief: Any government program or policy initiative that is designed to reduce the amount of taxes paid by individuals or businesses.

### 1.14 Structure of the Dissertation

The study was conducted in a systematic manner presented using six main chapters which include:

1. Chapter one: Research Background.
2. Chapter two: Literature Review.
3. Chapter Three: Theoretical and conceptual framework.
4. Chapter Four: Research methodology.
5. Chapter Five: Data presentation and Analysis
6. Chapter Six: Conclusion and Recommendation

## CHAPTER 2

### LITERATURE REVIEW

#### 2.0 Overview

The previous chapter has given an overview of the study beginning with introduction, background, and statement of the problem, objectives, research questions the scope, justification, significance, delamination and operation definition and terms. This section of the study, however covers the various studies that have been conducted before by other scholars within the region, continent, or outside continent. With the view of ascertaining if the current study has never been explored by other scholars. The section ensures that the researcher appreciates what others have done beside the current study so as to consider the existing gaps.

#### 2.1 The Concept OF COVID-19

COVID-19 emanated from Wuhan, China in late 2019 which has since spread throughout the world. The major transmitter of the virus is human to human contact with symptoms of fever and respirational illness (World Health Organisation WHO, 2021). The pandemic has since destabilized major world economies leading to industrial, economical and business slowdowns, causing defenselessness in production, revenues, earnings, unemployment, loss of business revenue and massive business interruptions which has been accelerated by travel restrictions and differing climatic conditions (Abbas, et al., 2021).

During COVID-19 Policy makers in government were faced with two main decisions: to save the people before saving the economy; or save the economy before saving the people; (Klein & Smith, 2021). Leaders had to make a choice to balance the two, to save lives, lock down was introduced to reduce the spread of the virus, this caused a drop in economic activities of nations as economies had to stop or reduce significantly, causing an economic slowdown, as many governments prioritized saving the people before the economy, as such economies suffered (Abbas, et al., 2021).

African political measures to control COVID-19 included: border closures implemented to regulate cross country transmissions, since global trade was an accelerator to the pandemic's transmission, there was a decrease in global trade, leading to decrease in trade affecting production and export performance and GDP. (Gondwe, 2020), this caused related falls in

global GDP and fuel prices, with a deterioration of -1.4% in Africa's income recording the poorest in countries with smaller economies (Common Market for Eastern and Southern Africa, 2020). In Zambia COVID-19 adversely affected the economic development with a reduction of GDP by 9% increasing the country's inflation rate (Bank of Zambia, 2021). The impact of COVID-19 is immense affecting almost all sectors of the economy, and various Practices the accounting Practice inclusive. Many accountants had to rethink of more innovative ways of executing their duties without risk of infection. This called the AP's ability to adapt to changes in meeting the challenges of the pandemic and to enhance efficiency of accountants in carrying out their task within this critical period of the economy, while adapting to the new enhanced changes that have come to stay (Comulese, et al., 2019).

Undoubtedly, COVID-19 has emotionally, physically, socially and economically affected human life both locally and globally. Despite rules and restrictions been relaxed, in different jurisdictions and the acceptance of new normal regulations, the trail of destructions is still visible, according to (Rinaldi, 2021) COVID-19 has affected developing countries, with high rate of infection implying that most Practices in developing countries have highly been affected, owing to lack of stimulus social support packages from the government, poverty, poor economic growth and poor economic policies.

## 2.2 The Accounting Practice and COVID-19

### 2.2.1 Evolution and thought of the Accounting Practice

Accounting has been practiced as far as the Mesopotamia era, which occurred in the times of Babylon Sumerian and Assyria (Baecht, 2012). The history of accounting emanated from the Mesopotamian region in the 3500 B.C. It is also on record that five thousand years before the appearance of double-entry, the Assyrian, Chaldaean-Babylonian, and Sumerian civilizations were flourishing in the Mesopotamian valley, producing some of the oldest known records of commerce. Nevertheless, the dominance of history in accounting is attributed to the Italian monk, Luca Pacioli, who first published his *Summa de Arithmetica*, which brought about the system of bookkeeping known as the double entry system (Smith, 2011), later elucidating the consistent system of capital, liability, expenses income and ethics of accounting (Baecht, 2012). When companies became so rampant in the 17<sup>th</sup> century the expansion of bookkeeping was inevitable, as it facilitated the recording of all classes of transactions, becoming a more appropriate way of keeping track of the assets and profits, of many distinct trading ventures at different stages of completion. The industrial Revolution of the 19<sup>th</sup> century introduced the

establishment of cost and management accounting, during this period there was great progression from not only recording business financial transactions but also enhancing companies have significant control and management towards their own financial affairs, The first professional body of accounting was first established in 1854 in Scotland, with the Edinburg Society of Accountants and the Glasgow institute of Accountants and Actuaries been the first. However, it was only in the 1970s when the creation of the first international accounting standard-setting body was introduced, this brought a rise of voluntary cooperation such as FASB, The ISAC and the national standard settlers (UNISA, 2013).

By the 20<sup>th</sup> century, a new model for the business organization emerged, known as the diversified corporation, this brought about a new shift of accounting and finance focusing on the preparation of cost information and financial statements that meet the requirement of the generally accepted accounting principles (GAAP). The 21<sup>st</sup> century has seen growth in financial information, which has facilitated the increase of an economy driven by knowledge as a source of competitive advantage, enabling an economy that is service as opposed to manufacturing oriented. These consistent transactions have been facilitated by International Financial Reporting Standards (IFRS), which are a set of accounting standards that govern how particular types of transactions and events should be reported in the financial statements (FASB, 2021). Despite its increase the accounting Practice has experienced massive pressure due to global economic crunches such as the Qwest, WorldCom and Enron Scandals (Merchant, 2013).

### 2.2.2 The Accounting Practice in the 21<sup>st</sup> Century

A Practice can be defined as a remunerated occupation, particularly one that encompasses prolonged training which produces a formal qualification, The Accounting Practice, in the new era involves training, by obtaining degrees and certifications. (Comulese, et al., 2019) However, it is imperative that new skills are acquired continually, taking into account that accounting standards are always updated. In Zambia standards are set by the governing body, Zambia institute of Chartered Accountants ZiCA, who also set regulations for the Practice.

An accountant is someone trained or has experience in performing financial functions which involve recording, collection, analysis, accuracy, and presentation of a companies' financial operations (Davis, 2015). Accountants' duties vary according to specialization, however the general responsibilities of an accountant are to: create and analyze financial reports including designs and management of financial systems used to record transactions. The Accounting Standards Council (ASC), defines an accountant as a provider of quantitative information,

primarily financial in nature, about economic entities, that is intended to be useful in making economic decisions (Brunelli, 2015).

The functions and roles of accountants have now advanced to include, more extensive scope of vertical and horizontal prospects which redefine the essence of the accounting in the 21st century, in the quest to guide public awareness and enhance a better understanding of accountants' identity, a practicing professional accountant is a term that describes a person who has expertise in the field of accountancy and finance, attained by formal education and practical experience, and who complies: with a code of ethics; demonstrates and maintains competence; is held to a high professional standard; and is subject to enforcement by a professional accountancy organization or other regulatory mechanisms.

The Accounting Practice has become significant in the 21<sup>st</sup> century since it acts both as in-house financial counsel, cost management and the provision of advisory expertise. Accounting thus streamlines operations, while unlocking company potential, and capitalizing on opportunities and enabling choice.

Accounting in the 21<sup>st</sup> century is about a well-functioning, fields/departments that provide clients with the right tools to achieve desired results, provision of accessible real-time information, and also integrating and supporting technology with human expertise. Modern Accountants, interpret the, balance sheets, analyses financial information, interpret rulings, write strategy and build networks, with all these roles technology plays a huge role, because of this technology is important for modern accountants in 21<sup>st</sup> century, technology has given accountants the ability to extrapolate trends, anticipate future developments and balance risk and reward opportunity pay-offs (Nexia, 2020).

### 2.2.3 The Accounting Practice in Zambia during the pandemic

Like most countries the Accounting Practice in Zambia is significant, its roles have contributed to economic development. The accounting Practice in Zambia is governed by Zambia Institute of Chartered Accountants (ZiCA), a mandatory membership body for the accountancy Practice in Zambia. It was set up under the accountants Act 1982 but was repealed and replaced by the accountants Act of 2008, using the act ZiCA upholds integrity of the AP in Zambia through: Setting corporate accounting standards for application in Zambia; Setting corporate auditing standards; establishing initial and continuing professional development requirements accrediting tertiary education providers; setting ethical requirements; carrying out quality

assurance reviews for its practicing members; maintaining a registry of its registered and practicing members; and establishing an investigative and disciplinary system for its members as part of public interest considerations (ZiCA, 2022).

The Accounting Practice in Zambia has developed because of services that are provided by public and private bodies, such as, auditing; financial reporting, investment analysis, consultancy, and taxation, making accountants take up more of management position. All these roles must be executed with extreme accuracy; if not executed conveniently can led to company insolvency, hence all accounting activities are to be performed in a consistent well regulated manner. The Accounting Practice in Zambia is ever evolving thus accountants have to deal with a rapidly changing business environment, with changes which include regular amendments in legislation coupled with the ever changing taxation policies (Alexander, et al., 2020).

The roles of Accountants globally is demanding due to increased demand of preparation of company statements, pressure of tight deadlines, and various analysis of financial information (Brunelli, 2015), which requires continuous and high level training. The roles of accountants in Zambia is significant as they are linked to a functioning unit of economic development linking investors and Agents ( Agency Theory) , business proprietors with their private equity, nations with investors, funders and citizens (tax payers) with the government, making the accounting Practice in Zambia is of supreme importance both to the economy and the society itself (ZiCA, 2022).

The emergence of the pandemic in Zambia caused the Ministry of Health in Zambia to announce the infection and death rate daily (MOH, 2022), the Zambian government also came up with financial aid to stimulate the economy (Bank of Zambia, 2021), thus accountants were required to keep up to date with the new stimulus package measures, and have an in-depth understanding of the financial implication and procedures to be adhered in the disbursement of the stimulus package. The role of the accountants in Zambia during the pandemic is cardinal, as they have ensured that companies keep track of their performances during the pandemic and enhance proper quality control.

Because of the COVID-19 pandemic, many accountants in Zambia have faced various changes and challenges, the major challenges that has been faced are emergency changes, which include: shift work culture; inventory valuation, remote working; IT knowledge; Cyber security; Job security; inventory valuation; shift in work culture and risk tolerance; crisis management,

sustainability reporting, ban on movement of goods, potential health hazard ensuing from accountants being in daily contact with a number of clients, unrealistic target to complete, ever changing financial regulation to customize the stimulus package, and also the implementation of emergency measures to the Accounting Practice (Zambanker, 2020), calling upon accountants in Zambia to adapt to changes caused by the pandemic and also meet the challenges, however adapting to the pandemic is reliant on how long the adjustment period will take, it is uncertain how long the adjustment period will take, considering the fact that COVID-19 does not have a known cure yet (Amzat, et al., 2020). It is important that during such a crisis stable emergence step by step changes are well vested to meet, immediate and unexpected needs, failure to meet these needs would result in significant losses. One strategy that has eased the impact of COVID-19 on the AP are the trends in accounting, (Technology and Automation, Artificial Intelligence (AI), accounting Software, use of data Analytics and forecasting, use of technology, workplace wellness, online collaboration, automated accounting, proactive accounting machine learning, continuous accounting, and the outsourcing of account function.

#### 2.2.4 The Impact of COVID-19 - Inventory Valuation.

Inventories are assets that are normally held for sale in the usual course of a business, which is in the course of production, in form of materials or supplies, whose purposes are to be consumed in the production process or in the rendering of services (Berkmana & Malloch, 2021). Inventory valuation is defined as the accounting process of evaluating a company's inventory and assigning values to them. It represents a large percentage of assets of a company. Mostly, manufacturing companies have a high proposition of inventory while other sectors have relatively high inventory. Because of its nature, inventory should consistently be measured to avoid disparities. Inventory valuation is key in profit determination for both manufacturing and service Industries. Inventory valuation also helps a company to accurately represent the value of inventory on its financial statements (Blokdyk, 2021).

The emergence of the pandemic has impacted company inventories resulting into discrepancy of inventory management, a key aspect in audit assurance. Undoubtedly, the Pandemic has impacted vital triggers which has resulted in significant disruptions in supply chains leading to the net realizable value of inventory been lower of the cost due to quarantine, spillage, damage or obsolesce (Treasury, 2021). To avoid such discrepancies during the pandemic, different strategies were adopted which include:

Keeping of excess inventory and electronically valuating inventory before they are received, thus adopting a lean management approach as opposed to the use of just in time (JIT) receiving goods in time they are needed for manufacturing or service delivery which is best used in cost reduction and space utilization. With the coming of the pandemic, lean management has been abandoned owing to inventory shortages and disruption caused by COVID-19 many companies have opted to buy in excess and record electronically as inventory is coming in. However, electronic inventory has received overwhelming opposition because of inventory safety (Alvarez-Placencia, et al., 2020). The downfall of buying in excess is that it has capacity and spaces issues, adding that, many warehouses struggled to make space for social distancing, which has now created need for space to manage additional inventory with special additional needs for increased inventory on-hand, more space for social distancing, increased inventory physical inspections and target for meeting increased demand (Alvarez-Placencia, et al., 2020). Because of the pandemic most companies have shifted to E-Commerce, which has altered inventory valuation, reducing manpower and making inventory valuation easy, a survey conducted by (Alvarez-Placencia, et al., 2020), indicate that “60% of shoppers reported buying product online instead of in-store due to COVID-19, and 32% expect to continue to shop online”. This has altered the systems and procedure of inventory management and evaluation, (Alvarez-Placencia, et al., 2020). Therefore, increasing the need for constant inventory valuation.

Since inventory is held in excess, there are concerns of impairment of inventory. Standards have been issued by different bodies, the most common is where the recoverability of the carrying value of inventories at every reporting period, and where the expected recoverable amount is lower than the carrying value, a provision is recorded, inventory provisions are recorded against aged inventory or other specific products deemed to have a low expectation of future sale. Because of the pandemic and its impacts, many companies have redressed plans for the usage of inventory within period of twelve months, mostly taking into account how slow inventory movement is, products ordered for future seasons as well as projected future sales. As for this many inventory managers have identified additional inventory which is no longer expected to realize its carrying value (Treasury, 2021). Taking into consideration that the pandemic has caused significant impact on inventory based on issues of shutdowns, also the decline in net

realizable value, demands non-fulfilling of sale and purchase contracts (Alvarez-Placencia, et al., 2020).

One of the other challenges faced in inventory valuation is facilitating of auditors to conduct their audits owing to the challenges in establishments such as failure of observing managers' inventory counts or physical verification of fixed assets after year end, this has brought up many challenges in inventory valuation of many companies (Alvarez-Placencia, et al., 2020). Additional challenges in inventory valuation is the assessment whether the companies' existing inventory has deteriorated as this may trigger to impairment thus making remote inventory a challenge due to obsolesce especially with perishables or where a company's production demand for their product is less demanded or seasonal have more risk of impairment, posing challenges in valuation of inventory since the value of the inventory may have a sharp decrease leading to misleading valuation of inventory, giving untrue inventory figures in the financial statements.

A study by (Sultana, et al., 2021) on inventory reveals that COVID-19 has reduced inventory movement, production capacity and many other key resources of organizations. This is because COVID-19 causes a decrease of movement in inventory during stringent lockdown period. It was also revealed that as for lockdown, closure of borders, reduced and restricted movement, it became so tough for most companies to mobilize inventory needed for production and selling purposes. Causing an increase in inventory demand. Additionally, the perishable nature of the goods coupled with the growing pressure of sustainability rules and standards made inventory management more challenging. This concern puts a question about the reporting and disclosure of inventory management in this pandemic period. (Sultana, et al., 2021).

(El-Mousawi & Kanso, 2020) in their study also confirm that COVID 19 has caused a decrease of movement in inventory. The researchers believe that the high endorsement level comes because some organizations have a severe decrease of movement in inventory as for customers purchasing only the main necessities in the current circumstances.

### 2.2.5 Impact of COVID-19 on Financial Reporting and Disclosures (FRD).

Financial reporting and disclosures (FRD) is the recording of different business transactions of a company's financial statement through adhering to approved set of accounting assumptions and reporting standards (IESBA, 2010). FRD is significant as it ensures proper and consistent disclosures of vital information, appropriate for key decision making process. FRD provides real and accurate financial scenario of an entity's financial transactions. FRD is vital as it also focuses on revealing current business situations, contingent risks that can affect the business, inclusive of macroeconomic scenario and all information that are appropriate for the preparation of financial statements. Disclosures are so important especially in decision making and dealing with adverse economic events; adverse economic event signifies occurrence or rise in any incident that has the capability of lowering economic growth, disrupt business operations, creating a surge in employment, affecting operational and business events, for example; natural disasters and outbreaks of any global pandemic (Sultana, et al., 2021).

COVID-19 has impacted FRD through: altering of reporting and disclosure dimension, since closure of business have raised issues with going concern; lessening of income tax and other subsidies introduced by government need to be reported; instability on the revenue recognition and allowance for bad debts; critical accounting estimates of assets and liabilities in relation to COVID-19, all which need to be reported and disclosed in financial statements. Considering these facts, there have been a lot of discussion in line with possible reporting guidelines for the COVID-19 pandemic arising from doubts about the complete economic performance, business operation, future earnings and many more things directly related with financial statements (Muqattash, et al., 2022).

Nevertheless, some accounting standard setters and practicing firms have put up some guidelines for FRD (KPMG, 2021). The guidelines comprise of instructions for financial statements preparer, auditor and regulators. Similarly, (ZiCA) also stresses on the various FRD aspect to be considered during COVID-19 pandemic and issuance of few specific guidelines to follow for preparation of financial statements so as to enhance consistency in FRD amidst the pandemic and other disruptive events (ZiCA, 2022).

### 2.2.6 Accounting for Government COVID-19 funds and Reliefs

Government grants are assistance by government in the form of a transfer of resources to an entity in return for past or future compliance with specified conditions relating to the operating activities of the entity (ACCA, 2020). It is recommended that, an entity must not recognize

government grants in the financial statements until there is reasonable assurance that: The entity will comply with the conditions attaching to them; and the grants will be received once the recognition criteria has been met, the entity must then apply its chosen accounting policy to the grant (ACCA, 2020).

Depending on the FRS, companies will report differently. However, under FRS 102, entities will choose to either use performance model or the accrual model. For micro-entities choosing to report under FRS 105, only the accrual model can be used. Performance model FRS 102 paragraph 24.5B states that an entity applying the performance model must recognize grants as follows: (a) a grant that does not impose specified future performance-related conditions on the recipient is recognized as income when the grant proceeds are received or receivable. (b) a grant that imposes specified future performance-related conditions on the recipient is recognized in income only when the performance-related conditions are met. (c) grants received before the revenue recognition criteria are satisfied are recognized as a liability (ACCA, 2020).

The accrual model requires the grant to be classified as either a ‘revenue-based’ grant or a ‘capital-based’ grant. Most, if not all of the COVID-19 grants provided by the government will be revenue-based grants. FRS 102 paragraph 24.5D states that grants relating to revenue must be recognized in income on a systematic basis over the periods in which the entity recognizes the related costs for which the grant is intended to compensate. FRS 102 paragraph 24.5E then goes on to say that a grant which becomes receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the entity with no future related costs shall be recognized as income in the period in which it becomes receivable. However according to ACCA’s view, most grants provided by the government in respect of COVID-19 will be treated in the same way regardless of whether the performance model or the accrual model, i.e. the grants are recognized immediately in profit or loss (ACCA, 2020).

#### 2.2.7 Changes in Accounting that Accountants need to be aware of in FRD

Accountants need to be aware of different changes that can affect the preparation of financial statements. The following are the major changes that have arisen because of COVID-19:

Going Concern, because of uncertainties due to world calamities. Evaluating the going concern must be performed, and were all uncertainties which are material should be made clear, (Alao & Lukman, 2021). Issues Regarding Financial Instruments when reporting, accountants have to recognize the clusters of areas or sectors that have been hit by the COVID-19 pandemic not

previously reported. Accountants should ensure that any substantial fluid changes resulting from the coronavirus epidemic are noted, which should be followed by their assessment of the present concern (Masoodi, et al., 2021).

Accountants should also ensure that their FR should also include the increase in the credit quality for the loan portfolios and how the exchange of claims due to COVID-19 would significantly impact ECL calculations (Alao & Lukman, 2021). Income taxes, during the pandemic the Zambian government reacted to the outbreak through introducing income tax cuts and other subsidies (Zambanker, 2020). The effects of these regulatory amendments on their income tax statements are taken into consideration by accountants and should be effectively represented in the financial reports;

Assessment of Impairment: The anticipated cash flows may indicate the best economic management estimate, depending on the evaluation of the investment in the operation, that prevails on the remaining productive life of the asset. In these conditions, many of these findings are subject to substantial ambiguity, accountants should thus consider through the use of theory and sensitivity disclosures to make appropriate assessment of impairment (Alao & Lukman, 2021).

Government Grants; most businesses in Zambia collapsed as a result of operational difficulties, (Zambanker, 2020), as a consequence of COVID-19. Because of this, relevant initiatives were put in place one of which is government grants, implying that accountants are to be so much aware of how to report government grants that are disbursed to companies (Jabin, 2021).

Leases: The spread of coronavirus has exacerbated financial uncertainty, and central banks have lowered interest rates in many countries, Zambia Inclusive (Bank of Zambia, 2021). Therefore, it is so much appropriate that accountants have an updated, incremental borrowing rate to better account for leases (International Federation of Accountants, 2020).

Revenue Recognition to better assess the impact of COVID-19 related instability on their revenue account, accountants need to use important key decision, which include elements consideration and constraints which need to be estimated. Accountants should also not limit the review of Variables, (e.g., discounts, refunds, price concessions, performance bonuses, COVID-19 contingent fund and penalties). Decisions are taken as a reaction to the epidemic (e.g., contracts amended, collectability transactions with consumers, price reviews) will also have a bearing on the accounting of current and future contract disclosures (Masoodi, et al., 2021).

Other Disclosures and Estimates: Accountants must also ensure the size of the epidemic disorders caused for their companies must be examined by accountants, as such the information on assets and liabilities that are subject to significant estimate uncertainty must be appropriately disclosed to users to comprehend the financial impact better (Masoodi, et al., 2021). In This respect accountants need to use critical accounting estimates which include management's assumptions about the future recoverability of an asset.

The net realizable value of inventories Impairment charge of investments in associates and joint ventures accounted for following the equity method remaining useful life and a residual value of the property, plant, equipment, intangible assets, and right-of use assets (Masoodi, et al., 2021).

Cryptocurrencies; with the passage of time, there has been huge progressions in financial sectors in line with currencies there has been a huge transformation by both the corporate world and individuals, the use of virtual currency is increasing, with crypto currencies been the most common currency adopted across the world for both legal and illegal transactions (Guesmi, et al., 2019). The main advantage aligned to crypto currencies is of its huge returns as such companies have opted to formulate their own cryptocurrencies for future investments, The growth of the cryptocurrencies cannot be under estimated a research by (Jabotinsky & Sarel, 2021) reveals that cryptocurrency will be suitable for the future investment. In their study they analyzed the trends of these cryptocurrencies and compared them with respect to their volatility and stability in recent times to predict the five-year projected value of these cryptocurrencies., (Khan, et al., 2021). Therefore, accountants should be in a better position to fully adjust how crypto currencies are to be reported and disclosed in the financial statements.

## 2.2.8 Accounting technological trends resulting from covid-19 pandemic

### 2.2.8.1 Influences of accounting trends pre and during COVID-19.

Pre Technology advancements the roles of accounting and finance were manually done which involved bookkeeper's predominance in collection of financial information and manual entry of financial data in ledgers, it involved massive paper work, continuous commuting of accounting staff from one branch/subsidiary to the other, physical preparations of financial statements, high overhead administrative accounting expenses. The emergence of technology means that companies, organization, and government institutes have incorporated its use so as

to improve their accounting and finance operations into modern and improved structures (Hawison, 2003).

Trends in accounting can be traced from the early 2000s, ever since there has been high acceleration due to evolution and flexibility of communications and business technology resulting to a more globalized business environment (CMA, 2021). The major trends in accounting which include technology and automation, accounting technology, artificial Intelligence (AI), Accounting Software, Data Analytics and forecasting, Workplace wellness, Online Collaboration and Remote working, Data Security, social and environmental accounting, have moved in accordance with global needs especially in the wake of global pandemics, they have since been used as shields of upholstering the accounting roles especially during the COVID-19 pandemic in the following ways:

Technology and Automation; most businesses have moved towards technology based operations, with a shift in business transactions to technology and automation, this has reduced the lead time in performing accounting activities and reducing repetitive accounting process, thereby simplifying the accounting process through approval of workflows, bank reconciliation, journal entries, inter-company consolidation, revenue recognition, lease accounting and depreciation, virtual meeting and cloud networking (Beaver, 2021). The automation of these transaction has helped blend accounting activities to limit the impact of COVID-19 on the AP, through the extreme use of technology and automation, leading to high level of efficiency and effectiveness in the AP.

Accounting technology is the conversion of manual and paper controlled processes to modernized accounting workflow accessible without interruptions through cloud computing (Reuters, 2022). Previously accountants used most of their work time entering accounting transactions manually (Jeremiah, et al., 2019). Presently the emergence of technology has enhanced companies and accountants in various ways through the use of cloud accounting and accounting technology platforms to execute, automation, predictive analysis and sophisticated diagnostics, to better serve clients and put their accomplish accounting tasks more swiftly (Sprott School of Business, 2022).

Following COVID-19, accounting technology has enabled accountants to automate manual activities more efficiently and effectively saving time, allowing collaboration, improvement in accuracy and improving a work/life through remote work, dismissal of manual data entry,

automation of tax work flow, collaboration in real time, shifting to value added work, and proper forecast and analysis of financial information. Examples of accounting technology include cloud based accounting technology which enables, data storage, applications, security and development tools to be enabled as opposed to manual database, physical hardware and software. Cloud Accounting technology enables accountants to work securely with clients in real time and empowering staff to work and interact from anywhere at any time, while working conveniently, thus increasing productivity and enabling of customer satisfaction (Reuters, 2022).

Artificial Intelligence (AI) is the ability of a robot controlled by a computer to do tasks that are done by humans because they require intelligence and discernment (French, 2005). Undoubtedly in the coming future artificial intelligence will continue to change the face of accounting and finance, which threatens to replace accountants. Currently many companies are switching to the use of artificial intelligence and robotic process automation (RPA) to automate highly repeatable tasks, allowing accountants to focus their time on higher impact and value activities such as decision making, investment analysis and financial reporting , AI has also reduced the time accountants take to execute their roles (CMA, 2021).

Accounting Software (AS); is an application software that records and processes accounting transactions within the functional modules such as accounts receivables, journal general, ledger payroll and trial balance. AS is a system that functions as accounting information system, which merges transactional data via standardizing and merging data from multiple sources, it also involves harmonization of accounting Information which brings together structured, semi-structured and unstructured data within a single system. It has emerged as a trend in accounting and finance that has progressed the standards of accounting information systems with an elaborated database for effective accounting information and execution of routine Accounting roles (Beaver, 2021).

Data Analytics and forecasting tools is an emergent trend in accounting and finance which has enabled small, medium and large companies, to increase the use of forecasting, planning, budgeting, data analytics and visualization tools. It is one of the most impactful technologies as it has enabled the finance functions become significantly more analytical as data analytics and forecasting enables the accounting and finance section shift from reactionary and transactional to proactive and analytical system of data analysis and transactions (Hawison, 2003).

Technology has gained predominate in the 21<sup>st</sup> century particularly in the field of Accounting and Finance where every process is now digitalized, thus business is slowly moving to digital transformation elaborating how businesses can be conducted using technological models. Accounting and finance has in the past years been at the helm of digital transformation with software's such as cloud accounting, digital technology facilitating the accounting and finance sections to leverage technology so as to support business strategy and adapt to changing conditions of the AP (CMA, 2021).

Workplace wellness: employees of an organization are key to enhanced productivity and must be treated with caution as they are core to the going concern of organizations. It is thus an emergent trend in accounting and finance which establishes that all employees are to be treated fairly and accordingly. The role of accountants is to ensure that workplace wellness is accounted for and reported in accordance with social and environmental accounting (SEA). Accountants also ensure that the discounts employees earn on health insurance through wellness programs that are calculated correctly and fairly, accountants are to also fully allocate costs for employees to engage in social activities with a view of ensuring reduced stress and emotional levels at their work places (Brunelli, 2015).

Online Collaboration and Remote Workforce is a trend in accounting and finance that enhances the use of remote working, cloud-based software and allows workers who are in geographically dispersed location to collaborate and accomplish critical financial processes, such as month-end close from anywhere with a computer and an internet connection, it reduces the coherent need of physical contact as meetings and other interactive activities are held remotely through technological software such as zoom, fort, google meet, considering the fact that the roles of Accountants have been automated, this means there is need for massive training to equip accountants with technology data analysis and financial engineering (Hawison, 2003).

Data Security has emerged as a prominent tool in the 21<sup>st</sup> century because of the increase in data flow, and security management. Data flow includes date from receivables, payables, employees' payroll records, financial statements and other confidential information which susceptible to attack such as cyber theft, theft of personal data, credit card information, and spoofing. Training is required to enhance protection of unauthorized access against sensitive financial information, which demands accountants to be trained in crucial data security (Percy, 2018).

Statutory and Regulatory concentrates on the changes of statutory and regulatory clauses such as stimulus package and other health guideline statutes that have been pronounced by the ministry of finance, it is apparent that accountants ought to be equipped with information of any changes in statutory and regulatory in accordance with government regulations, so that accurate records can be kept in the books of accounts (IESBA, 2010).

Social and environmental accounting enables the realization by the organization that it's not only an economic function of profitability that it holds but also the obligation that the organization has to people and the planet triple bottom (James, 2003). SEA requires reporting on social, environmental and sustainability to discharge the rest of an organization's accountability in key areas of sustainability, (Gray, 2005) which is particularly in agreement with (Ilemona, et al., 2020) who asserts the need for environmental reporting as an integral part of an entity's corporate responsibility. SEA has increased because of COVID-19.

Proactive Accounting Machine learning and RPA these are trends in accounting that are been used as models to reframe the approach to accounting. RPA known also as continuous accounting is an approach that uses the aid of automation and other technology to enable tasks that are typically done daily to be automated. Enabling automation of repetitive tasks, which once applied improves a company's efficiency (Percy, 2018).

Outsourcing of Accounting function has become common as some organizations perceive outsourcing more cost effective as opposed to having an internal accounting function. Currently, some organizations find some benefits in outsourcing some or all of their finance and accounting functions. Emerging companies opt to outsource accounting activities to avoid increasing the wage sheet of its company where as full grown companies outsource some or all of their accounting and finance section, generally to save money. A number of companies prefer outsourcing as it gives direct access to skills such as technology and expertise that the company does not have, this enables the company save costs and take advantage of skills and outsourced technology (Hawison, 2003).

Cloud Computing has intensified as a trend in modern business application and management, the concept of cloud computing is not new. Different interpretations and definitions of Cloud computing has been written based on its structure, type, form and use (Mwiiya, 2020). Cloud computing is a model of computing that enables convenient, ubiquitous, on-demand network access to a shared pool of configurable computing resources ( this includes servers, storage,

networks, applications and services) that can be provided and released with little effort from or interaction with the service provider (Mano, et al., 2016). Cloud Computing consists of collection of inter-connected and virtualized computers that are dynamically provisioned and presented as one or more unified computing resource(s) based on service-level agreements established through negotiation between the service provider and consumers. (Ali & Soar, 2016). Cloud computing is merely technology which provides hardware and software services remotely from data center over the internet, thus enabling the transmission of data from one server to the other remotely (Olaru, 2014).

Cloud accounting provides access to services irrespective of time and location according to the end-user perspective and business perspective. Companies are advancing in adopting cloud computing because cloud computing technology lowers cost of providing computer resources as clients who opt for this technology don't need to run applications on their local computer systems but only need an internet connection (Buyya, et al., 2009).

The most common characteristics of cloud computing include, Resource Pooling; this is where customers can either be external if they use a public cloud provider serving multiple organizations or internal if they use a private data center serving multiple departments. On-Demand Self-Service Computing resources includes servers and network storage which can be requested and provided to users automatically with no need of human interaction with the service provider (Mwiiya, 2020). Rapid elasticity are computing resources provisioned in an elastic manner and released, making it possible for applications to scale rapidly in line with demand (Ali & Soar, 2016). Cloud computing uses broad network access and availability of computing resources is done over a network and through the use of standard devices like computers and mobile phones (Olaru, 2014).

#### 2.2.8.2 Accounting Trends and Their Purpose in Mitigating COVID-19

The emergence of COVID-19 has called for a shift on business operations to reduce business interruptions, taking into consideration that productivity totally depends on a healthy workforce. Trends in accounting and finance have enhanced the accounting and finance sections to survive pre and post COVID-19 Pandemic in the following ways:

The major transmitter of COVID-19 is Human to Human contact (WHO, 2021). The AP involves accountant's agility and consistent contact with customers; stakeholders; workmates investors, exposing them to high risk of exposure, one solution to reducing exposure is limiting

human to human contact, which has been enhanced by technology through virtual working. Accountants can now work away from the physical work place in isolation through the use of technology applications which enables accountants, to work remotely using cloud computing, with this technology accountant do all their activities from home and no physical presence of theirs is necessary.

Many organizations are adapting more rapidly to a remote working environment, this move has been well appreciated by accounting practitioners worldwide who have embraced modern concepts of technology (Hawison, 2003). Remote working has also called on accountants, to have enhanced knowledge on technology, as it has lessened the burden of executing accounting duties, making technology skills a must for accountants as noted by (Mattern, 2020) technology is core in the COVID-19 era as it requires training and knowledge, thus there is apparent need for accountants to have extreme knowledge and skill in technology. The COVID-19 pandemic has shown a lot of Practices the need for communication through technology since in remote working communication is of vital essence as it is the ultimate ingredient that gives definite need for exchange of, workflow, data exchange tools, cloud accounting, increased video messaging platforms which demands for increased need of technology in the AP (Jabin, 2021). Some companies have sustainably realized that its expensive having an internal accounting department basically because of the pandemic most companies have opted to outsourcing their accounting function to reduced exposure to the virus which is rampant during COVID-19, many businesses are now looking at the need for external accredited accountants to prepare and help them deal with damage testing and reduce on cost on COVID-19 mitigation. Outsourcing has proved to be a remedy in cutting costs and COVID-19 mitigation (Mattern, 2020).

#### 2.2.8.3 Importance of Accounting Trends to the Accounting Practice

The Importance of accounting trends to the AP cannot be underestimated, various scholars have argued differently, (Diaconu, 2020) in his study contends that accounting trends have led to globalization which affects both the development and harmonization of international accounting standards. Emerging factors of globalization include unified global economy; increased multinational corporation, integration of international monetary system, and foreign direct investment. These factors have created conditions were business transactions, regulate conduct, measurement and disclosure. It has also taken up the sub-discipline of accounting practices harmonization, with economic globalization been at the helm of it, the assertion is supported by

(Wei, 2008), who alludes that globalization has affected the AP through application of technology; change in accounting standards, increase in competition, rise of multinationals, growing importance of professional accounting qualifications, necessity to keep abreast of global financial issues, the need to move up the value-chain, scrutinizing the expansion of the AP, cloud computing, big data, set ups, and artificial intelligence. Similarly (Ozdogan, 2017) in this write up elaborates the importance of accounting trends to the AP who concludes that technology has taken up relevant predication future investments, it has also become an essential business function and management tool, which has restructured itself in all important enterprise and societal transformations with the conversions transforming the purpose and ways in which accounting is used in practice. Therefore, the corporate world and the society has prioritized the need for infused technology in the AP so that it can meet the expectations of investors, stakeholders, and other users of financial statements. Without the trends in accounting, the AP may no longer have incentives to promote the public interest or make any innovations in response to changing conditions (Melnik, et al., 2020).

A global survey carried out by (International Federation of Accountants, 2021), reveals that entrepreneurs operating in small and medium-sized businesses (SMEs) have shifted to the immense use of technology, with the objectives of serving customers better, improving accounting efficiency retaining the best practice ,and reducing human to human contact to lessen the impacts of the COVID-19 virus, this has helped to better the AP.

The disadvantage of the immense use of technology is that future financial robots (robotics) will replace accountants in performing basic accounting tasks, as already seen in the COVID-19 Era. With fear of robotics takeover, accountants have been prompted to improve their Practical knowledge and skills, including computer expertise, so as to remain relevant in the competitive world (Zhang, et al., 2020).

Artificial intelligence, Internet-related changes and digitization of accounting; implies that traditional accounting skills such as bookkeeping, information processing, data grouping, reporting, routine operations will in future be less demanded, all what will be left is for accountants to focus on leading and managing accounting team, producing numbers, negotiating adjustments based on judgment, presenting to and influencing users of management and financial reporting, resolving strategic and operational conflicts arising making soft and social skills more emergent trend for accountants in the 21<sup>st</sup> century, (Nixon, 2020), these trends

have also enabled accountants to develop flexible skills in their conduct as practicing accountants, which include communication; problem solving ,thinking; leadership and teamwork skills, also enhancing ethical; self-management and moral values (Villers, 2010). Taking into consideration that flexible skills are of great importance to the AP as they enhance productivity and accuracy in decision making (Baecht, 2012).

The Importance of Trends in Accounting are clearly elaborated by (ACCA, 2016) which detects cardinal factors that will in future have the highest impacts and attributes to the AP these include technical, ethical interpersonal skills and competencies, the (ACCA, 2016) report presents the concept of Practical quotients (PQ), which shows the major skills and vital competences of an accountant, the linking factor is that in years to come, hard technical competence (TEQ) and experience (XQ) will be combined with an intelligence quotient (IQ) and digital DQ; interpersonal behavior, skills and qualities will be reflected in quotients for creativity (CQ), emotional intelligence (EQ) and vision (VQ). The combination of each Practicing accountant's PQ will also be different, and the optimal mixture should reflect the specialized areas, roles, organizations, industries and geographical regions. The experts from Association of Chartered Certified Accountants predict that by 2025, some practical knowledge and skills will increase in value, others will decrease, new knowledge and skills will be needed, which will depend on the further development of technology and various trends in accounting, coupled with the introduction of Practical ratios in accounting and finance plus the use of individual components which have a capability of creating a standardized and structured approach to the career development of Practicing accountants, which will further the AP into a more global shift of Professionalism (Melnyk, et al., 2020).

Accounting trends have benefited the AP especially in the time of a deadly pandemic COVID-19, trends in accounting and finance have stepped in to mitigate the effects that come along with the pandemic. This can be seen by rampant remote working and the increase in the use of technology, robotics, work wellness, social and environmental accounting, these have kept business and the accounting adrift despite the disruption of COVID-19, operations have not been crippled in any way this has enabled AP thrive in the hostile COVID-19 (Thornton, 2021). Sharing of data and information more rapid and appropriately has been enabled by technology, cloud computing and data security, this shows that accountants and managers can access

accounting information from anywhere, at any time this has improved the quality of decision making while enabling companies to invest heavily in data management, thus enabling a shift from paper work to digital, digital migration has enabled efficiency in decision making and lessening of work for accountants who can now work virtually anywhere in the world, this has improved qualitative information, which is appropriate for key decision making, and appropriate financial reporting (International Federation of Accountants, 2021).

Outsourcing has enabled a shift to subcontracting accounting functions to third parties which enables organizations to shift their attention to other departments such as production, marketing and debt collection etc.

Social and Environmental Accounting enables the integration of Financial reporting as it enables the provision of accountability, SEA provides accountability to investors and shareholders for their investments, clearly bringing out quality reports that relate to the companies' performance, social and environment and financial position (Merick & Steven, 2021). SEA makes companies accountable for the impacts that the business has on society, environment, employees, government and consumers (Rob Gray, 2009). It reports on key issues including pandemics such as COVID-19 and the steps the company is taking to protect its employees from the pandemic, it also reports on key information on social and environmental impacts that facilitates management to monitor key social and environmental prospects and threats such as pandemic the organization is facing. (GGKP Research Committee on Trade and Competitiveness, 2015), as such SEA reports on material issues, issues that have an impact to Reporting (Global Reporting Initiative, 2017).

SEA as a trend in Accounting is important as it is reported in relation to reporting standards such as Global Reporting Standards GRI a report on sustainability, (Gray, 2005) clearly states and outlines that SEA gives a report of the entire business which is qualitative in nature, and cannot be numerically denoted reporting clearly on the efforts that the company is applying to enable a sustainable environment, contrary to FR which entirely reports on quantitatively aspect of the business. Clearly justifying and denoting different SEA costs that the business has incurred in respect to creating a sustainable environment, in other words SEA justifies why the environmental costs of pandemics such as COVID-19 have been allocated (Global Reporting Initiative, 2017).

SEA enables the enhancement and accountability of social environment where workers and employees operate from. It ensures that the stipulated costs are used appropriately, it is part of an integrated financial report, the integrated financial report as explored by (Bray & Chapman, 2020) is a report of financial statement that clarify to the shareholders how the company maximizes value creation and also benefits all stakeholders interested in a company's ability to create value, including the environment, employees, customers, suppliers, business partners, local communities, legislators, regulators and policymakers the integrated report is a combination of both SEA and the FR (Rob Gray, 2009). Depending on the complexity of the organization both SEA and FR can be reported as a sustainability report, as noted by (Correa & Larrinaga, 2011) (Ministry of the Environment Japan Government, 2003) and (Gray, 2005), sustainability reporting includes a report of both social and economic aspect of the organization, the sustainability report is influenced by the GRI Global Reporting initiative which emphasizes the need for organizations to become more sustainable and contribute to global change.

Because of the emerging trends in accounting modern accounting practice are now moving away from technical functions to supporting functions of company management, which has enabled them play an important strategic role for effective management at the microeconomic level and a prominent social role, working to improve the development of society at the macroeconomic level (International Federation of Accountants, 2020). The AP has been enhanced to adjust from the static functions in view of the development of the world economy, globalization, technological developments, innovations and trends in the business environment, changing environment and evolving health threats of pandemics such as COVID-19, crisis that are inevitable, the AP is particularly sensitive to the above changes. The up-and-coming trend in accounting and finance currently focus on the development of new technologies, soft skills, Practical flexibility and the integration of these in adapting to major crisis when ever called upon, a shift in these priorities will turn the challenges in AP into advantages, as the development of modern trends combined with soft skills can significantly improve the value and career prospects of accountants and help in eliminating threats from major world pandemics such as COVID-19 (Melnyk, et al., 2020).

## 2.3 Empirical studies.

### 2.3.1 Effect of COVID-19 on Inventory Valuation.

(Alvarez-Placencia, et al., 2020) in their studies found that one of the challenges faced in inventory valuation is facilitating of auditors to conduct their audits owing to the challenges in establishments such as failure of observing managers' inventory counts or physical verification of fixed assets after year end. It was also difficult during the COVID-19 pandemic to assess whether companies' current inventory has deteriorated, which has triggered issues of impairment since stockpiling has become a solution to the COVID-19 pandemic. The study also reveals that remote inventory has become a challenge due to obsolescence were 83% of the participants acknowledge that they faced high inventory losses due to deterioration and obsolescence, particularly with perishables or where a company's production demand for their product was less demanded or seasonal many faced huge risks of impairment. The study also found a significant hypothesis of misleading valuation of inventory because of risks of impairment, arising from the sharp decrease in inventory.

A study by (Sultana, et al., 2021) reveals that COVID-19 has reduced inventory movement, production capacity and many other key resources of the organizations. This is because COVID-19 caused a decrease in movement of inventory during stringent lockdown period. It was also revealed that because of lockdown, closure of borders, reduced and restricted movement, it became so tough for most companies to mobilize inventory needed for production and selling purposes, this has caused an increase in inventory demand. The study also reveals that the perishable nature of the goods coupled with the growing pressure of sustainability rules and standards has made inventory management more challenge, alluding that the concerns have put questions about the reporting and disclosure of inventory management during COVID-19. (El-Mousawi & Kanso, 2020) in their study also confirm that COVID-19 has caused a decrease in movement of inventory. The researchers believe that the high endorsement level comes as a result of decrease in movement in inventory which has caused inventory shortages.

### 2.3.2 Effect of COVID-19 on Financial Reporting and Disclosure

(Sultana, et al., 2021) in their study indicate that financial factors, business contracts and stakeholders have significant impact on financial reporting and disclosure practices in this COVID-19 period. The result reveals that most of the business organizations will disclose financial factors only when they face huge losses which came from strict lockdown, regulated movement of goods and people. Shutting down of companies has low sales volume, less collection of cash and more exposure to the credit risk. The study also reveals that it is important that companies disclose business contracts related information timely, as such disclosure can inform investors more about the changes to terms and conditions attached to a business contract. The study also emphasizes disclosure of information to enhance legitimacy in the society. The results however reveal that business operation and business value have insignificant relationship with financial reporting and disclosure, meaning that tax deferral, and distribution of stimulus packages were not presented FRD by most companies. The study also emphasizes that there should be consistent disclosures of vital information, which is appropriate for key decision making process.

(Kabwe, et al., 2021) in their studies indicate there was a positive association between firm size and compliance with IFRS. The study also reveals a negative association between firm profitability and compliance with IFRS. However, the study revealed an insignificant positive association between foreign investors, institutional investors, audit quality and IFRS compliance. The study suggests that large companies are expected to comply more with IFRSs and profitable firms withhold financial information.

(Muqattash, et al., 2022), in their study reveal that COVID-19 caused a decreased future cash inflow, it also increased the degree of approximation of uncertainty, the pandemic also affected the content of the interim financial statements also impacting the expected credit loss thereby affecting the determination of risk factors related to discount rate and cash flows.

The authors also found that the COVID-19 pandemic caused a decline in an organization's revenue, which affected significantly the measurement of financial instrument at fair value. Additionally, the researchers found that the COVID-19 pandemic has affected the recognition of liability of the employee benefits, impacting financial statement in a subsequent period. According to the study the pandemic has also affected the disclosure of the significant accounting policies, which has affected changes in terms of any borrowings or loan agreements,

triggering also the fair values of investments in subsidiaries, associates, and joint ventures. The COVID-19 pandemic has also decreased organization's share price, which has caused further impairment in associates or joint ventures, in that way affecting impairment of an organization's goodwill.

Lastly the study also revealed an increase in the cost of depreciation of PPE at a time the capital projects are suspended, thereby causing extreme increase of operation costs. All the findings of the study point to the pandemic posing huge financial implications during the COVID-19.

A write up by (ACCA, 2020) Concluded that: following the COVID-19 pandemic on FR has impacted the operating environment of entities, which has enhanced auditors to consider their risk, assessments and whether any revision is needed, as such the impact of COVID-19 will require auditors to revisit their risk assessment and the proposed response to identified risks. The paper concludes that the pandemic has enhanced auditors to take into consideration any changes to the entity's internal control system due to COVID-19, which has enhanced to ascertain whether any planned reliance on controls in determining responses to identified risks of material misstatement should be to be reassessed. It has also impacted the AP by causing challenges for management, of the entire accounts department which needs to be restructured to a more suitable new normal environment, leaving auditors with gaps of consistently reminding them that they should remain skeptical when assessing management's judgements. (Jabin, 2021) Conducted a study in Pakistan to investigate the impacts of COVID-19 on the AP which revealed that many changes have been faced due the pandemic among the many impacts include, remote working which has more often been used more during the pandemic than ever before, the use of new technology, Virtual holding of meetings and trainings, cybersecurity concerns data security, increase of Job insecurity, (Jabin, 2021) also reveals that the AP has faced long run challenges to COVID- 19 through ten technical developments, two of which are precisely associated to the accounting Practice, these include remote working ,and learning an inclusion of digital transitions, going concern, credit quality, income taxes, assessment of impairment, leases, revenue recognition, disclosures and estimates, regulatory amendments, and net credit realizable value. The pandemic has increased the speed of change which has accelerated, job options and prospects to develop, with talent attraction constantly becoming challenging the conclusion of the study is that the pandemic has drastically impacted the AP, with the impacts been double edge either advancing the AP or diminishing the AP, depending

on the response by the organization affected, the onus is on accountants who have to adapt, and move in line with the pandemic as we are in the new normal.

A similar study carried out by (Hossain, 2021), indicated that the COVID-19 outbreak, created a major health crisis as it modified the work environment (virtual) and shifted the focus of accountants in crises management, it was found that organizations during the pandemic faced difficulties such as the threat of bankruptcy and insolvency, this coerced many accountants to take window dressing methods such as manipulation of earnings. Accountants also face higher workload, more stress, increased emails and meetings, blind spot communication with clients, isolated from team members.

A study by (Helzer & Mindak, 2021) Revealed that COVID-19 reduced the effectiveness of clients' internal controls which made it more difficult for auditors to determine the effectiveness of internal controls, it was also revealed that with the pandemic accountants found it difficult to in determining the going concern status of their clients and companies, with increased attempts of tax evasion.

### 2.3.3 Accounting Technology Trends following COVID-19

(Yuanyan & Pipin, February 2022), in their study found that the early stages of the pandemic were characterized, by extreme stress as a result of the busy schedules in the AP, the never-ending busy season stressed accountants as there were a lot of urgency of fulfilling different deadlines both to customers and the government, the stress also arose from the stay-at-home orders and travel bans, these and many more put the AP to a test. work stress also resulted from, the isolation from clients and colleagues. The study also revealed that the pandemic worsened, work-life balance as most accountants suffered from fatigue due to consistent use of technology. The pandemic also reveals that the hiring of workers became more difficult because there were some limitations of in-person meetings. The pandemic revoked the need for accountants, which brought an increased need for recruiting accounting staff. The study also shows that some firms offered early retirement packages and temporary salary cuts in order to reduce payroll costs. Lastly the study reveals that the entire work layout process of the AP was altered, because of the virus there was need to shift to individual officials to encourage social distancing.

(Spratt School of Business, 2022) carried out a similar study which revealed that the pandemic affected the AP, through rampant shifting of deadlines for submission of returns to relevant tax authorities, increased need of financial information by stakeholders who are so much interested

in ascertaining the financial position of their investments during the pandemic, increased demand for specialized accountants such as auditor's financial analysts, and investment analysts. The study also reveals that the pandemic has made more companies to shifted more to the use of technology through adopting of virtual working, conversion to digital data, data sharing through cloud computing, use of artificial intelligence and robotics by manufacturing companies, digitalization of accounting education through e-learning, the pandemic presented the Practice with opportunity to think about the skillsets that they need to survive global emergencies and also what competencies future accountants are to be trained in to adapt to such changes. The COVID-19 pandemic has shifted to ensuring that all technological necessities for employees to work with are put in place so employees are able to shift effortlessly to working from home thus avoiding interruptions in the provision of services to clients.

Additional, studies carried out by (Hong, 2021), Raveled that, the COVID-19 pandemic put the safety of the AP at risk, to reduce the risk of the pandemic many companies were obligated ,to improve workers wellbeing, and also make any necessary operational changes and carefully managing finances to ensure stability to the AP and the business. Companies were compelled to take up long term measures with the objective of ensuring organizational sustainability and relevance to markets, which required consideration of the future roles and responsibilities of accountants. The study further revealed that the COVID-19 pandemic has revoked the use of Artificial Intelligence (AI), which has more greatly changed the nature of reporting. The researchers found that the pandemic made most accountants focus mainly on longer term objectives such as organizational sustainability, increased use of artificial intelligence, has greatly influenced the accounting Practice.

(International Federation of Accountants, 2021) established that the pandemic has shifted management abilities and competences calling for accountants to have inclusion of management skills amidst pandemic crisis, companies and organizations have to rethink their management ability and skills through the agility of business, and the resilience on the AP to manage through unanticipated change. The pandemic has evoked the importance of future-proofed skills that can anticipate and are agile in a new world, a world where practicing accountants are established as strategic leaders.

(Hossain, 2021) in his write up also alluded that COVID-19 has impacted the AP through alternative performance measures, technological evolution, and modifying skills, the COVID-19 pandemic has put pressure the ethical behavior of the AP. In line with tax practices accountants were faced with challenges of typically changing deadlines of tax returns, incomplete information due to remote working, clients lost respect of time due to continuous communication with accountants

(Melnik, et al., 2020) in their study recommends that during and after the pandemic the AP should move to modern accounting of performing technical accounting functions (soft skills) to support the companies' management and play a significant role in improving the development of society's latest technologies.

Another academic study by (Helzer & Mindak, 2021) evaluates the impact of covid-19 on the AP in which the study established that physical restrictions and economic hardships resulting from COVID-19 impeded accountants' productivity, ability to perform their work ability to maintain relationships with clients and co-workers, and also the ability to sell future services to prospective clients.

## 2.4 Literature review matrix

| <b>Author</b>   | <b>Topic</b>   | <b>Research Finding</b>  | <b>Knowledge Gap</b>  |
|---|--|--|---|
| <b>(Yuanyan &amp; Pipin, USA February 2022)</b>               | Impact of COVID-19 on Accounting   | The study studied used descriptive analysis which samples 208 Practicing Accountants in American, the study revealed that during the pandemic most of the accountants experienced stress, delayed tax returns and difficulties in accounting processes.  | Explores on emotional intelligence, does not explore the impacts of COVID-19 on financial reporting and inventory valuation, additionally the study used descriptive analysis which is unquantified. The study is also conducted in a highly developed country whose finding can differ from that of a developing country.      |
| <b>(Sprott School of Business, United Kingdom March 2022)</b> | COVID-19 and the accounting Practice: The impact, the challenges, the future | Conference of different accounting Practice across U.K who found that the impact of COVID-19 to the AP includes shifts of ensuring that all technological necessities for employees to work with are put in place so employees are able to shift effortlessly to working from home.  | Explores trends to AP and does not fully explain the impacts of the pandemic to financial reporting and other accounting aspects. The study also uses qualitative analysis, where data is not quantified. The study is also conducted in a highly developed country whose finding can differ from that of a developing country. |
| <b>(Helzer &amp; Mindak, 2021). United states of America</b>  | COVID-19 and the accounting Practice.  | The Study evaluates the impact of covid-19 on financial reporting were 149 CPS working in American firms responded to the questionnaires. The results revealed that physical restrictions and economic hardships resulting from COVID-19 impeded accountants' productivity, ability to perform their work, ability to maintain relationships with clients and co-workers,  | The study does not study the impact of the pandemic in three main areas: Inventory valuation, Financial reporting and Disclosure (FRD). Further the study only concentrates on accounting firms and ignores other pertinent industries.   |
| <b>(ACCA, 2020) United Kingdom</b>                            | The impact of COVID-19 on audit quality                                      | The COVID-19 Pandemic has presented various impacts to the AP which include: An Impact to the operating environment of entities; the pandemic has also increased the expenses of many organizations thus causing many companies to renegotiate rent payments, for auditors and accountants preparation of F.S has become challenging because of uncertainty due to unexpected events this going concern has become of a major concern. | The paper only concentrates on one are of accounting (Auditing), It does not take into consideration other areas of the AP that have been impacted by the pandemic, the paper also does not reconcile the impacts of the pandemic on profitability and other key sectors of companies.  |

|   |  |  |  |
|---|--|--|--|
| (Jabin, 2021)<br>(Bangladesh)                 | Impact of COVID-19 on the accounting Practice in Bangladesh                        | The study investigates the impact of COVID-on the Accounting Practice in Bangladesh, from 190 accountants. The study found a great impact of COVID-19 on the accounting Practice in Bangladesh. Most accountants were working remotely during pandemic rather than before pandemic. Massive adoption to new technology. Meetings and trainings were held virtually. There was an Increase in cybersecurity problems because of less data security. Job insecurity increased.   | The study does not investigate the impact of COVID-19 on inventory valuation, and financial reporting and disclosures (FRD).   |
| (Hong, February 2021) Japan                   | Financial Reporting in the COVID-19 Era: Technology Can Help practicing Accounting | The study investigates the impact of financial reporting, in the COVID-19 Era: the study found that reporting of going concern is must during, the pandemic. Events regarding impairment were rarely reported, and there were a lot of modification of contracts during the Pandemic.  | The study doesn't collect enough primary data to quantify and give evidence of the impacts of COVID-19. The study is also not detailed but rather gives a brief account of the impact of the pandemic to FR. |
| (Hossain, January 2021) (Dhaka)               | Impact of COVID-19 on Accounting Practice.   | The study focused on the impact of COVID-19 on the AP. The study employed an empirical method, in form of a short communication. The findings found that the pandemic impacted the AP alternative performance measures, technological evolution impacts of audit and tax practice, employee engagement, client service   | The study was an empirical study which does account for changes overs time. Data is not collected from the Practiceals who are direct in the practice.   |
| International Federation of Accountants, 2021 | The impact of COVID-19 on Accounting.  | Impact of COVID-19 on Accounting, conference paper<br>The study reveals that the pandemic has shifted management abilities and capabilities, demanding for soft skills and shifting away from traditional methods of accounting  | The study is not quantitative in nature. The study is a short conference writing that is not detailed.   |
| (Papadopoulou & Papadopoulou, 2020) Greece.   | The Accounting Practice Amidst the COVID-19 Pandemic                               | The study is to investigated how the accounting Practice in Greece was influenced by the COVID-19. The study used a structured questionnaire which consisted 171 selected accountants based in Greece. Data analysis was done using descriptive and inferential statistics analysis methods. The study found that COVID-19 pandemic considerably affected the activity of accounting Practicing, who were coerced to changes their work routine, who, experienced difficulties in adapting to the newly emerging work demands. The study also found that | The study does not access the impact of COVID-19 on inventory valuation and financial reporting and disclosures (FRD).   |

|                                    |  |   |  |
|------------------------------------|--|---|--|
|                                    |  | the accounting Practice in Greece was even more distinct during periods of emergency,   |  |
| (Sultana & Sen, 2021) Bangladesh   | Impact of COVID-19 pandemic on financial reporting and disclosure practices: empirical evidence from Bangladesh                                | The study investigates the consequence of COVID-19 pandemic on the financial reporting and disclosure (FRD) Used purposive sampling. Involving 156 participants. The study found that that financial factors, business contracts and stakeholders have significant relationship with the financial reporting and disclosure practices during the COVID-19 pandemic period. However, business operation and business value have no significant relationship with financial reporting and disclosure practices.   | The study is only streamlined on financial reporting and does not investigate the impact of the Pandemic of inventory valuation and technological trends resulting from COVID-19 |
| (El-Mousawi & Kanso, 2020) Lebanon | Impact of COVID-19 Outbreak on Financial Reporting in the Light of the International Financial Reporting Standards (IFRS) (An Empirical Study) | The study examined the impact of the novel Coronavirus outbreak on financial reporting of organizations from the viewpoint of Certified Public Accountants in Lebanon. The study used descriptive-analytical approach where a and have constructed a well-structured five-point Likert style questionnaire was responded by 211 certified accountants. distributed to a sample The study found that COVID-19 outbreak has had a significant impact on the financial reporting of businesses   | The study concentrates only on the impact of the pandemic on financial reporting. It does not study the impact of COVID-19 on, Inventory valuation and technological trends.     |
| (Muqattash, et al., 2022) Dubai    | Financial reporting considerations in response to the COVID-19 pandemic: empirical evidence from the UAE accounting Professions                | The study investigates the impact of COVID-19 on firm value and financial reporting in relation to the International Financial Reporting Standards (IFRS) from the viewpoint of accounting Practice in UAE. The study used survey-based questionnaire. Where a qualitative approach based on the principal component analysis (PCA) was used. The Results indicate that the COVID-19 pandemic significantly delayed financial reporting and releases (both annual and interim reports), which adversely impact revenues recognition, net profit, borrowing terms including credit rates, going concern. The study also reveals a negative impact on most of the income statement and financial position rubrics. The study did not however find any significant impact is observed on | The study uses a qualitative approach based on the principal component analysis (PCA). Making it different to test some statistics.  |

|   |  |  |  |
|---|--|--|--|
|   |  | off-balance sheet assets and liabilities due to their uncertainties and contingencies.   |  |
| (Jeremiah, et al., 2020) Nigeria                  | The accounting Practice in the 21 <sup>st</sup> Century                | The study employs content analysis, the findings of the study reveals that the 21st-century twists, tend to pose an identity threat to the Practice., the much-celebrated software substitution of the traditional roles of the accountant coupled with the apparent Practice cross carpeting of non-accountants aided by these emerging digital initiatives appears to 'take-over' the seat of the accountant the author reveals that Nigeria was so much ready for the pandemic due to advanced technology.  | Does not use quantitative method in this study. The findings are not quantified. The study does not study any impact of the pandemic to the accounting Practice.   |
| (Rinaldi, 2021) South Africa                      | Impact of COVID-19 on the Accounting Process.                          | The study uses content analysis, and observation the research reveals that COVID-19 has affected the accounting process through, increased remote working, increased demand for outsourced Accounting, and technology use, also altering of reporting on financial statements  | The study does not use either descriptive or inferential statistics. The study does not also account for impact of COVID-19 to inventory valuation and financial reporting and disclosure (FRD).   |
| (Kabwe, et al., 2021) Zambia                      | Antecedents of IFRS Compliance: The Moderating Effect of Audit Quality | The study was to examined the antecedents of compliance with IFRS by focusing on the moderating effect of audit quality on the association of firm. Where data was collected using quantitative content analysis of annual reports of 20 Zambian listed companies and Zambia Institute of chartered Accountants covering the years 2012 to 2018. The study found that there was a positive association between firm size and compliance with IFRS. The study also found that large companies are expected to comply more with IFRSs and profitable firms withhold financial information. | The study does not use either descriptive or inferential statistics. It does not equally account for the impact of COVID -19 on the accounting Practice.   |
| The Global Advisory and Accounting Network (2020) | Zambia   | COVID-19 may have significant effects on how IFRS 9 is applied especially for the financial sector, specifically the impact of IFRS 9 on provisioning in view of COVID-19. Guidance has been issued by the Zambia Institute of Chartered Accountant (ZICA) on a number of aspects on how the IFRS 9 framework works, with the aim to   | The study is more inclined to the financial sector, it only focus on how COVID-19 has financially impacted the AP, the study id single sided as it only explains the loan system of the banking sector. The study used descriptive research. |

|                       |  |   |  |
|-----------------------|--|---|--|
|                       |  | provide clarity to the Zambian banking and non-banking financial services sector on how to handle in a consistent manner, aspects related to: The classification of loans in default; The identification of forborne exposures and the accounting treatment the study also reveals that the banking sector has been the most hit by the pandemic.   |  |
| (Geda, Zambia 2021)   | The Economic and Social Impact of COVID-19 in Zambia   | The study shows the macroeconomic effect of the COVID-19 pandemic on a developing country which is mainly dependent on mineral. The study uses empirical method with a total of 3213 people across Zambia. The study found that the Zambian economy has suffered from the effect of the pandemic as well as the dwindling of the external flows due to the burden of serving borrowing that led to deceleration of its growth in 2020 by about 2.5 per cent. The findings also show that for small countries that are dependent on a single (or a few) primary commodities, the recovery of the global economy is very crucial for their growth and development.. | The study does not study any impact of the COVID-19 to the accounting Practice.  |
| (Mwiiya, 2020) Zambia | A secure cloud computing adoption framework for small and medium size enterprises in Zambia. | The study investigated a secure cloud computing adoption framework, for small and medium sized enterprises in Zambia. The study used purposive sampling where 152 SMEs were drawn from Lusaka Zambia. The study used descriptive research design and included both primary data obtained from questionnaires and interviews and secondary data from journal articles. The study found that a lot of companies have adopted cloud computing according to their size and capability. Meaning SMEs which are small in size have challenges in adoption. There have also been increased levels of cyber security that have arisen due to adoption of cloud computing. | The study mainly concentrates on the adoption of cloud computing in the COVID-19 era. It does not study distinct impact of COVID-19 to the Accounting Practice. The study concentrated only on SMEs in Lusaka and does not account for other locations thus making the study biased. |

Table 2.1 Literature review matrix

## CHAPTER 3

### CONCEPTUAL AND THEORETICAL FRAMEWORK

#### 3.1 Theoretical Framework.

##### 3.1.1 Introduction

This section contains theories which hold and support them. The theories describe and explain why the research problem under study exist. This paper aims to create a framework that can be used to access the impacts of COVID-19 and any future pandemic on AP.

##### 3.1.2 Overview

The study will be guided by both the theoretical framework (TF) and conceptual framework (CF), Theories are formulated to describe, forecast, and understand phenomena and, in many cases, to challenge and extend prevailing knowledge, which lies in the limits of the critical bounding assumptions. Theoretical framework is a structure that holds and support a theory of a research study. TF describes fully theories that explain the reason why a research problem exists (Scared Heart University Library, 2020).

##### 3.1.3 Theoretical Framework

The study will be governed by the following theories and models: Health Belief model; Agency theory of Accounting; Accounting Structure theory; Decision Usefulness theory; Interpretational Theory. And the Going Concern Postulate (Theory).

##### 3.1.3.1 Health Belief Model

The Health Belief Model (HBM) is a tool that scientists use to try to predict health behaviors of people. The model was coined in 1950, it explains the relationship between health and the change of behavior, the model is based on a person's willingness to change their behavior which comes from their health perceptions. The model persists that one's self beliefs about health and health conditions play a role in determining one's health-related behaviors, which are affected by the following conditions: Barriers standing in one's way; Information exposure which enables one to take action; The perceived benefits from engaging in behaviors; The perceived susceptible to health, the consequences of becoming sick, one's confidence in the ability to succeeding. Health Practitioners normally concentrate in finding ways on how the health model affects the action of people their behaviors that can have an impact on both individuals and public health. The model constitutes of six major components which include: Perceived

Severity, the probability that a person will change their health behaviors to avoid a consequence is reliant on how serious they believe the consequence will be; Perceived Susceptibility People are not more likely to change their health behavior unless they assume there are at risk; Perceived Benefits, it is apparently not easy to persuade people to transform the health behavior if there isn't something in it for them. Perceived Barriers One of the major reasons people don't change their health behaviors is that they think doing so is going to be hard. Changing health behaviors can require effort, money, and time. The advantage of the Health belief model is how accurately it frames people's behaviors. It recognizes the fact that sometimes wanting to change a health behavior isn't enough to actually make someone do it. (Abraham & Sheeran, 2011)

### 3.1.3.2 Agency Theory in Management Accounting

Agency theory is one of the oldest theory in business and economics it has for the past years provided theoretical foundations for numerous studies in, finance, accounting, management, economics, marketing, and information systems. The major emphasis of the Agency theory is to maximize the company's welfare through minimizing of agency costs. It is generally used to describe and resolve problems in the relationship between business people and their agents, relationships in a company include; shareholders, as principals, and company executives, as agents, which is present in all companies (Donleavy, 2016). The Agency theory was proposed by Jensen and Meckling (1976), the theory establishes the separation between owners and managers of a company can cause agency problems, Agency problem includes the occurrence of asymmetric information between those owned by the owner and manager, as such the unequal possession of information, lead to the management (agent) of the company to carry out adverse selection. Taking into consideration that managers have a commitment to maximize the welfare of shareholders, inversely shareholders also have an interest of maximizing their welfare, as such the combination of such problems creates a problem known as the agency problems (Amzat, et al., 2020). Agency theory contributes to the main goal of financial management, which is maximizing shareholder wealth, the importance of Agency theory to Accounting and Finance is that it assists in providing a significant role for accounting, predominantly in the provision of information after an event known as post-decision role. This major role is so much likened to the accounting stewardship role, which involves the agent giving a report to the principal after the event, this is what gives accounting its feedback value in addition to its predictive value. To sum it all up the agency theory solidifies the relationship between the

principal (owner/shareholder) and agent (manager), as such in contract agency a binding contract that the principle gives full authority to the agent to manage their business and make the best decisions for the principal, meaning accountants are agents to the principal (Shareholder), and have the responsibility of executing the best decisions to increase wealth, whereas the principle has the responsibility of providing a conducive work environments for the agents (Donleavy, 2016).

#### 3.1.3.3 Accounting Structure Theory.

Accounting structure theory also known as the Classical theory or descriptive theory is a theory that tries to answer why an existing practice is followed by the accountant and what would be done in a particular situation. The theory elaborates that Accounting is a mechanical process which involves the collection of data, through observing financial occurrences, of which the data is transformed into valuable output mainly financial reports, and financial statements (Ram & Tapria, 2019). This theory focuses mainly on the rationalizing and amalgamating actions of accountants through bringing them under the umbrella of generally accepted principles such as Generally Accepted Accounting Practice (GAAP), which tends to curtail dynamism of the accounting practices. The importance of the Accounting structure theory is it bring logic in explaining accounting practices, it explains and predicts the behavior of accountants. It also explains and evaluates the means of producing output (financial statements and financial reporting) instead of bothering about usefulness of the output (Ram & Tapria, 2019). Despite of this theory calling for unity and uniformity in the AP, the theory has brought alternative practices which have led to inconsistency in accounting practices. In the quest of unification the accounting practices classical theories restricts the application of judgments and also fails to give meaningful interpretation of accounting practices (Ram & Tapria, 2019).

#### 3.1.3.4 Interpretational Theory

Interpretational theories are part of the classical accounting theory (model) aimed at giving meaning of why accounting practices followed. This theory by all means tries to iron out nonconformities in interpretations, clarifications and meaning attached to information communicated by producers to the users of accounting information (Donleavy, 2016). The interpretational theory proponents were so much concerned with bringing out rationale behind

traditional accounting practice with a view of other contributors who are focused on investigating and finding out the major consequences of the accounting practices basically enhanced through evaluation, as such the theorists in this field help practitioners' of accounting in resolving accounting issues (Ram & Tapria, 2019).

#### 3.1.3.5 Decision-Usefulness Theory

According to the ((FASB), 2021), the major aim of reporting on financials, is to adequately provide information, to be used to present to potential investors, creditors, stakeholders and other users in making balanced consistent investment, credit and similar decisions. Thus information of financial statements should follow the qualitative characteristics as stipulated by the conceptual framework, such information should be comprehensible to those who have a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence (Merick & Steven, 2021). Noting that the information presented has the capability of either destroying or building a business. The influence of Accounting on business is totally dependent on quality information to influence key decision making, whereas Classical theories in Accounting are so much concern with giving logic and explanation of accounting practices, the interpretational theories in nature is inclined to giving meaning or establishing the influence of the accounting practices. However, the two theories barely recognize the aspect of useful information which is key in decision making, therefore the decision-usefulness theories concentrate on measuring and evaluating the impact of accounting procedures and modes of financial reporting on the individual and group behavior of users of accounting information.

#### 3.1.3.6 Going Concern Postulate (Theory)

Going concern means, that the business created is assumed to continue operations in the unforeseen future, In this case all business are created to operate for an indefinite period, meaning that business should be considered operational until it carries out its commitments' or 'charge the cost of fixed asset against the income (CIMA, 2015). The basic assumption is that; no business is created to close, hence continuation of business operation is highly probable, as there is certainty. The ((FASB), 2021), points out that the enterprise is normally viewed as a going concern, that is as continuing in operation for the foreseeable further, an enterprise is

considered as a long living entity, and an ongoing activity. As such Accountants at the end of each year are required to close balance and are carried forward to next year in the hope that, there is an opening for every close payments (Rani Channamma Univeristy, 2017).

#### 3.1.3.7 COVID-19 Pandemic, Financial Disclosure and Legitimacy theory.

Legitimacy theory denotes that companies lean towards to reporting on socially responsible information as to legitimize the business's behavior to its shareholders (Sultana, et al., 2021). Therefore, the legitimacy theory is used to describe social and environmental reports disclosure which can be used for corporate report, (Gray, 2008). Legitimate theory is used as a reporting framework, to communicate with the shareholders. Normally companies use legitimate theory to report for legitimacy purpose. It is a theoretical stance that forecasts companies' behavior toward managing and maintain the perspectives of key stakeholders though company disclosure (Sultana, et al., 2021). This theory identifies the role of legitimacy theory in explaining the behavior of organization voluntary disclosures in unrepresented situation such as COVID-19. Using disclosures companies can alert shareholders, so as to take precautionary decisions to hedge future risks that are associated with any economic downturn such as COVID-19. Taking into consideration that some companies managers and accountants can window-dress financial information to get short-term results which in the long run can lead to corporate scandals, thereby destroying the reputation of the organization. Adherence to society's expectation in the current disruption caused has disrupted the economic environment caused by the COVID-19, which has raised avenues for business to survive in more turbulent upcoming day , where the corporate world anticipates true and fair view of accounting disclosures as opposed to symbolic and inaccurate ones (Sultana, et al., 2021).

#### 3.1.3.8 Technology Acceptance Model (TAM)

The theory explains and predict the adoption of technology by users, TAM originated from the theory of reasoned Action (TRA), whose main objective is to elucidate the determining factor of technology acceptance it can be used to explain user behavior across end-user computing technologies (Kapasa & Sakyi, 2019). The theory has two main determinants Perceived usefulness, is how much someone believes a particular system would enhance their job performance and perceived ease of use is how much someone believes using a particular system would be without effort (Mwiiya, 2020)

### 3.2 Conceptual Framework

A conceptual framework is a representation of the relationship that exists between, variables that show an interlinkage, the CF shows the properties that will be discussed in the study (Swaen & George., 2019). Figure 1 below shows the CF of the study, which constitutes of two variables: Independent Variable; dependent variables. The Cause and effect relationship has been identified between COVID-19 and the AP, the independent variables which have been presented as the factors, that have intensified, the dependent variables. The independent variable consequently is inventory valuation, financial reporting, technological and sustainability reporting trends, which are shown in the diagram below

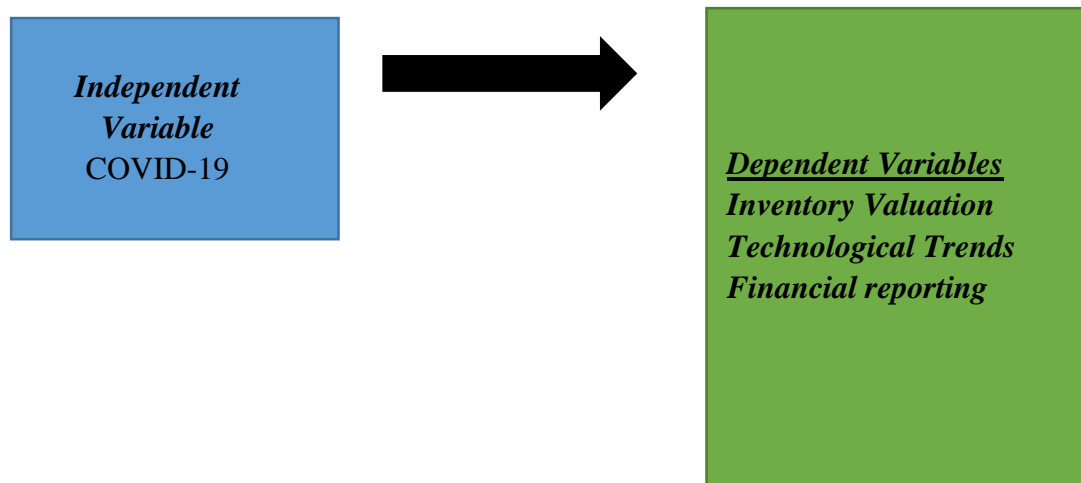


Figure 3. 1 Conceptual Framework

Source (Author)s

### 3.3 Conclusion

From the literature, it is clear that the COVID-19 pandemic has unfavorably affected the AP since its onset. The pandemic has also affected economies at large. The literature has brought to light how the pandemic has affected the AP developed and developing economies. From the literature it can be noted that the COVID-19 pandemic has affected the AP differently according to the level of their economies. On the other hand, it is yet to be established how the COVID-19 pandemic has impacted the AP in a developing country (Zambia)., all this will be made known subsequent chapter.

## **CHAPTER 4**

### **RESEARCH METHODOLOGY**

#### 4.0 Overview

This section discusses the research methodology which was used in the study to achieve the aims and objectives of the study. The research methodology identifies the procedures and techniques that were used to collect, process and analyze data. This section basically discusses the various ways that were used to address the research problem, included in this section is; research design/and sampling procedures, Location of the study, target population, sample selection, framework validation and design, research instruments, data collection procedure, analytical framework, validity and reliability, ethical consideration, pilot study, main study, time scale, budget, and data analysis.

#### 4.1 Research Type.

The research used Likert scale questionnaire for data collection. Thus quantitative data was collected. The researcher used electronic methods of data collection, therefore eliminating face to face interaction between the researcher and the participants.

#### 4.2 Study Area

The study covered all the ten provinces of Zambia, Since the questionnaire was distributed electronically using ZiCA database, to accountants across the country.

#### 4.3 Target Population

A population is a well-defined selection of all elements which the researcher uses to make some inferences. The idea behind sampling is to select specific elements in a population, of which inferences can be made about the whole population. A large set of observation becomes the population and the subset of which is called the sample. The target population were practicing accountants who were drawn from the ZICA database, questionnaires were sent through random emails, to accountants across the county.

#### 4.4 Research Design

The study used descriptive research design which applied quantitative method enriching the outcome of the study, The Justification to the use of descriptive research design is because of its described characteristics of the target population allowed the generalization of the findings to a larger population. The study also used primary information, since questionnaires were used to collect data.

#### 4.5 Sampling Technique

The research used the random sampling techniques to collect data. The study used purposive method since the target were practicing registered accountants. The Justification is that the study targeted qualified accountants with diverse accounting knowledge.

#### 4.6 Sample Selection and Procedure.

Sampling is a process used in statistical analysis where a predetermined number of observations are taken from a larger population. The study used ZiCA database which randomly selected respondents through simple random sampling from ZiCA database therefore each accountant had equal chances of been selected.

#### 4.7 Sample Size

Sample size is a set of participants selected from a population and is less in number (size) though it represents the population adequately from which it has been drawn from so that correct inferences concerning the population can be made using the obtained results. Sample size determination is, a process of selecting the number of observations, which will be included in a statistical sample. The total population is 6200, ZiCA registered accountants in Zambia (ZiCA, 2022). As such the sample size was calculated using Slovan and Taro Yamane's formula which gave 375.76 as the sample Size.

$$n = \frac{N}{1 + N(e)^2} = \frac{6200}{1 + 6200(0.05)^2} \approx 375.76$$

The sampling framework was selected because of its accuracy in data calculation and the efficiency of data saturation points.

#### 4.8 Data Collection Instruments

Research instruments are the tools for data collection. The study used questionnaires in electronic form sent through ZiCA database, google forms, email, administered to the target population, electronic questionnaire was used in the study because of its advantage of covering wide geographical area with less time and cost. The questionnaire used a five-point Likert-style rating scale which ranged from Strongly Agree, Agree, not sure, Disagree, and Strongly disagree. The Likert -style rating method of questionnaire design was used since enables numerical values to be assigned to cases for easy quantitative analysis.

#### 4.9 Data Collection Procedures

Practicing accountants were selected in Zambia using purposive sampling, through ZiCA database. ZiCA was selected because it is a regulatory body for accountants in Zambia. The data from the questionnaires was analyzed using the Statistical Package for Social Sciences (SPSS). The data collection process took a period of 68 days. 152 representing 41% responded to the questionnaire.

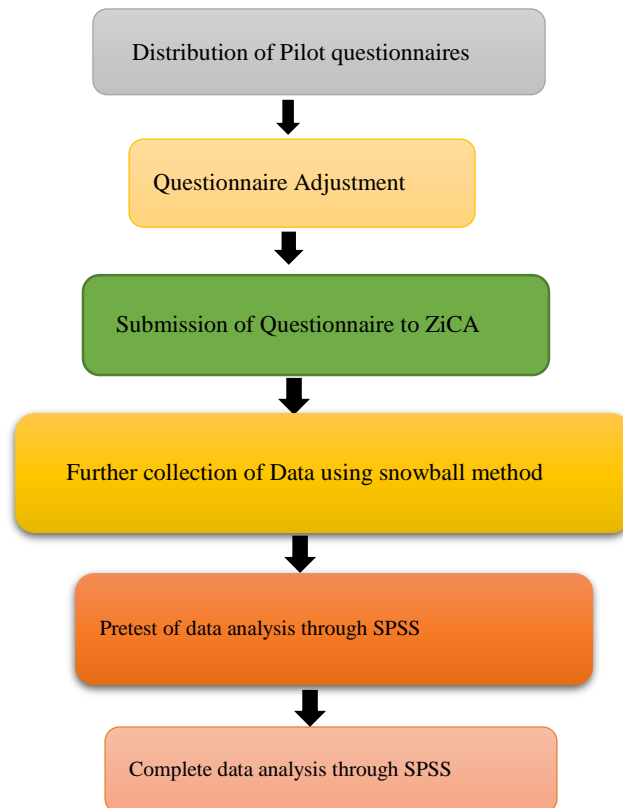


Figure 4. 2 Data collection procedure

#### 4.10 Validity and Reliability Test

Cronbach Alpha test using SPSS V20 was used to determine the reliability of data.

Table 2

The number of items that were tested is 13. The test gave a Cronbach's based on standardized items at .647, Cronbach Alpha .643, and inter-item covariance .230

Table 3 Reliability test: Cronbach's alpha coefficient.

| <b>Number of items</b> | <b>Cronbach's alpha based on standardized Items</b> | <b>Cronbach's Alpha</b> | <b>Inter-Covariance</b> | <b>Item</b> |
|------------------------|---|-------------------------|-------------------------|-------------|
| <b>13</b>              | .647  | .643                    | .352                    |             |

Table 4. 2 Reliability Test

According to previous studies by (Jabin, 2021) and (Maria Papadopoulou & Papadopoulou, 2020), five-point Likert scale was used the present study also adopted a five-point Likert style questionnaire with 19 items, with the scale ranges shown below.

| <b>Strongly Disagree</b> | <b>Disagree</b> | <b>Not Sure</b> | <b>Agree</b> | <b>Strongly agree</b> |
|--------------------------|-----------------|-----------------|--------------|-----------------------|
| <b>1</b>                 | 2               | 3               | 4            | 5                     |

Table 4.3 Five Point Scale

The five point Likert scale responses from the survey was analyzed and checked for reliability and internal consistency using Cronbach's alpha coefficient as shown in table. Hypothetically Cronbach's alpha should be between 0 and 1. However the recommended reliable value with Cronbach's alpha should score be greater than 0.6, and acceptable between 0.6 to 0.8 with an inter total correlation of 0.3 above. The approximate results in table 3 show a scale reliability coefficient of 0.647, and an average interim covariance of 0.352. The test indicates that Cronbach's alpha coefficient composite score (survey) is reliable, and the chosen items of the study best describes the targeted concept.

#### 4.11 Ethical Consideration

The researcher ensured privacy and confidentiality in data collection. Information was collected online without collecting any personal information such as email address from the respondents. The researcher did not have any personal contact with the percipients. All information that was collected was treated equal with caution and respect. Additionally, the data collection process adhered to the university standard procedure as such there was assurance of data confidentiality

through, clearance from the research ethic committee and introductory letter was issued as assurance to the participants that the data collected was strictly confidential.

#### 4.12 Pilot Study

A pilot study was done from 14<sup>th</sup> November to 16<sup>th</sup> December 2022. The aim of the pilot study was to gain familiarity with the assessment tools; to finalize the assessment tools; to determine the time required for each participant to respond to the questionnaire/interview and to assess the Validity and Reliability of the questionnaire. 20 surveys were done in the pilot study and following the pilot study a few changes were made to improve the reliability and validity of the questions.

#### 4.13 Main Study

Data collection for the main study started 19<sup>th</sup> December 2022 to 23<sup>rd</sup> February 2023, for a period of 68 days which equal 2 months 8 days. During this period, participants responded to the online questionnaire which were responded to electronically, and data was recorded in real time.

#### 4.14 Time Scale

The research was conducted within a given time scale. Different components of the research were systematically done according to the designated time. Table 3.15 below shows the research time scale.

Table 4: Time scale

| <b>Description</b>                            | <b>Time Scale (Months)</b>   |
|---|------------------------------|
| Pilot Program                                 | November-December 2022       |
| Instrument administration and data collection | December 2022- February 2023 |
| Data analysis                                 | February-March 2023          |
| Reporting of thesis                           | April 2023                   |

#### 4.15 Data Analysis

Primary data was gathered using questionnaires which was analyzed using IBM's SPSS V26 the results were presented using descriptive and inferential statistics, presented in form of mean scores, percentages, graphs and illustrations, and non-parametric tests. Pretesting of 20 questionnaires was done. Questionnaire responses were pre-checked for completeness and consistency. Data collected was coded while responses were grouped in various categories. The process of data analysis began with extracting data into excel, then coding entering of data, data cleaning, reliability testing and data analysis.

## CHAPTER 5

### PRESENTATION OF RESULTS

#### 5.0 Overview

This section of the study presents the research findings regarding the research objectives and questions. The themes, which became eminent resulting from the different respondents through the questionnaires are presented using descriptive and inferential statistics in form of tables, charts and graphs.

#### 5.1 Demographics of Participants.

Table 6 presents the demographic characteristics of the sample used in the present study. The sample that participated in the study is 152 representing 41%. The percentage of the demographic of the survey by each variable are:

Gender of the Participants: 56% of the participants in the survey were male, were as 41.4% were female; Age of the participants: The ages of the participants comprised of 4.6% aged between 18-25, 9.9% were aged between 26-30 years, 57.9% were in the age range of 31-45, 21.1% were between the age range of 46-54, and 6.6% were aged 55 years and above.;

Sector, the study presented a number of participants from different sectors which included; Manufacturing and construction sector participants were 10.5%, Government Agencies participants were 17.8%, while Non-governmental organizations (NGOs) participants were 9.9%, Participants from the Agriculture sector were 7.9%, while the Hospitality sector had 3.9% of participants, while Education sector had 7.9% of participants, mining, Travel and Logistics sector had 4.6% apiece. On the other hand, participants in the rofessional and Financial sectors were at 18.4%. Other sectors not listed in the questionnaire of the survey were 14.5%.

Job level of the participants; included a variety of Job levels, Participants in the Operations level, were 29.6%, participants in the strategic level were 26.3%, were as participants in the management level were 35%, participants in the Senior management level management were 13.8%, with participants in other Job levels not mentioned in the study been 14.5%;

Duration of practice of the participants were as follows: participants who have been working between 1-5 years were 29.6% similar with those participants who have worked between 6- 10

On the other hand participants who have worked between 11-15 years were 7.9% were as participants who have worked 16 years and above were 32.9%.

Education level of the participants; the survey included certificate holders who were 19.1%, Diploma holders been 36.2, Degree holders were 40.1% Master's degree holders were 3.3%, and PHD holders were 1.3%.

Table 6 Descriptive Statistics of Bio Data.

| VARIABLE                                   | FREQUENCY | PERCENTAGE % |
|--|-----------|--------------|
| <b>Gender</b>                              |           |              |
| <b>Male</b>                                | 89        | 58.6         |
| <b>Female</b>                              | 63        | 41.4         |
| <b>Total</b>                               | 152       | 100          |
| <b>AGE</b>                                 |           |              |
| <b>18-25</b>                               | 7         | 4.6          |
| <b>26-30</b>                               | 15        | 9.9          |
| <b>31-45</b>                               | 88        | 57.9         |
| <b>46-54</b>                               | 32        | 21.1         |
| <b>55+</b>                                 | 10        | 6.6          |
| <b>Total</b>                               | 152       | 100          |
| <b>SECTOR</b>                              |           |              |
| <b>Manufacturing and construction</b>      | 16        | 10.5         |
| <b>Government/Agency</b>                   | 27        | 17.8         |
| <b>Non-Governmental Organization (NGO)</b> | 15        | 9.9          |
| <b>Agriculture</b>                         | 12        | 7.9          |
| <b>Hospitality</b>                         | 6         | 3.9          |
| <b>Education</b>                           | 12        | 7.9          |
| <b>Mining</b>                              | 7         | 4.6          |
| <b>Travel and logistics</b>                | 7         | 4.6          |
| <b>Financial/Professional Services</b>     | 28        | 18.4         |
| <b>Other</b>                               | 22        | 14.5         |
| <b>Total</b>                               | 152       | 100          |
| <b>JOB LEVEL</b>                           |           |              |
| <b>Operational</b>                         | 45        | 29.6         |
| <b>Strategic</b>                           | 40        | 26.3         |
| <b>Management</b>                          | 35        | 23.0         |
| <b>Senior management</b>                   | 21        | 13.8         |
| <b>Other</b>                               | 8         | 5.3          |
| <b>Total</b>                               | 152       | 100          |
| <b>DURATION OF PRACTICE (YEARS)</b>        |           |              |
| <b>1-5</b>                                 | 45        | 29.6         |
| <b>6-10</b>                                | 45        | 29.6         |
| <b>11-15</b>                               | 12        | 7.9          |
| <b>16+</b>                                 | 50        | 32.9         |
| <b>Total</b>                               | 152       | 100          |
| <b>EDUCATION LEVEL</b>                     |           |              |
| <b>Certificate</b>                         | 29        | 19.1         |
| <b>Diploma</b>                             | 55        | 36.2         |
| <b>Degree</b>                              | 61        | 40.1         |
| <b>Master's Degree</b>                     | 5         | 3.3          |
| <b>PHD</b>                                 | 2         | 1.3          |

## Table 5.5 Discriptive Statistics

### 5.2 The Effect of COVID-19 on inventory valuation.

The first objective of the study was to investigate the effect of COVID-19 on inventory valuation. To achieve this objective, the mode, median, mean scores and standard deviation were used. Table 7 shows the median; mode and mean responses on the effect of COVID-19 on Inventory Valuation.

Remote inventory valuation variable has a median of 2, mode of 2 and mean of 2.34 all falling in the point 2 “Disagree” of the Likert scale. Indicating that before COVID-19 most Accountants did not conduct remote inventory valuation. This represents a negative impact of COVID-19 on Remote inventory valuation.

Physical inventory valuation During COVID-19 has a median of 2, mode of 2, median of 2, and mean of 2.88, which all fall in scale 2 of “Disagree”. The findings imply that that there was no physical inventory valuation conducted during COVID-19. This represents a negative impact of COVID-19 on Physical inventory valuation

Remote inventory Valuation During COVID-19 variable has a median of 2, mode 1 and mean 2.64, the majority fell in Scale 2 of “Disagree”. The findings reveal that there was no remote inventory valuation conducted during COVID-19. This represents a negative impact of COVID-19 on Remote Inventory Valuation During COVID-19

Challenges with inventory valuation during COVID-19 Variable has a median of 4, mode of 5 and median of 3.61, comparing the most frequent is Scale 2 “Agree”. The finding implies that there were a lot of challenges faced in inventory valuation during COVID-19. This represents a negative impact of COVID-19, as the challenges made it difficult to conduct any form of inventory valuation.

Table 7, median, mode mean and standard deviation scores of the responses with regard the effect of COVID- 19 on inventory valuation (Independent Variable – COVID-19, dependent variable Inventory valuation)

| <b>Variable</b>  | <b>Min<br/>Statis<br/>tic</b> | <b>Max<br/>Stati<br/>stic</b> | <b>Median<br/>statistic</b> | <b>Mode<br/>Statistic<br/>s</b> | <b>Mean<br/>Statisti<br/>c</b> | <b>Std.<br/>Devia<br/>tion<br/>Statis<br/>tic</b> | <b>Remarks</b>  |
|--|-------------------------------|-------------------------------|-----------------------------|---------------------------------|--------------------------------|---|---|
| <b>Remote<br/>Inventory<br/>Valuation<br/>before<br/>COVID-19</b>              | 1                             | 5                             | 2.00                        | 2                               | 2.34                           | 1.224   | The median, mode mean and standard “DISAGREES” that no remote inventory was conducted before COVID-19.                    |
| <b>Physical<br/>Inventory<br/>Valuation<br/>During<br/>COVID-19</b>            | 1                             | 5                             | 2.00                        | 2                               | 2.88                           | 1.487   | The median, mode mean and standard deviation “DISAGREES” that no physical inventory was conducted during COVID-19.        |
| <b>Remote<br/>Inventory<br/>Valuation<br/>During<br/>COVID-19</b>              | 1                             | 5                             | 2.00                        | 1                               | 2.64                           | 1.525   | The median, mode and mean and standard “DISAGREES” that there was no Remote inventory that was conducted during COVID-19. |
| <b>Challenges<br/>with<br/>Inventory<br/>Valuation<br/>During<br/>COVID-19</b> | 1                             | 5                             | 4.00                        | 5                               | 3.61                           | 1.657   | The median, mode, mean and standard deviation “AGREES” that there were challenges with Inventory valuation COVID-19.      |
| <b>Number of<br/>Responses</b>   | 152                           |                               |                             |                                 |                                |   |   |

Table5. 6 Effect of COVID-19 on inventory Valaution

### 5.3 The Effect of COVID-19- on Financial Reporting and Disclosure.

The second objective of the study was to assess the effect of COVID-19 on Financial Reporting and disclosure. To achieve this objective, the median, mode, mean and standard deviation were compared based on a 5 points Likert scale, of this order: 1- Strongly Disagree; 2- Disagree 3; Not Sure, 4; Agree, 5- Strongly Agree.

Table 8 consequently shows the mode, median and mean responses with regards to the effect of COVID-19 on financial Reporting. The following results were revealed.

Evaluation of going concern in relation to COVID-19 has a mode of 4, Median of 2 and mean of 3.25. Comparing the three statistics the median “Not Sure”. Indicating that most respondents neither agree nor disagree that that evaluation of going concern in relation to COVID-19 was conducted. This represents a negative impact of COVID-19 on Evaluation of going concern as business, there was business closure which resulted in the need for evaluation of going concern a priority.

Inclusion of Income tax cuts and Subsidies in Financial Statements variable has a mode of 2, median of 2 and mean of 2.46 with the median been “Disagree”. Implying that most companies did not include in their financial statements income tax cuts and subsidies. This represents a negative impact of COVID-19 on Inclusion of Income tax cuts and Subsidies in Financial Statements, because the actual tax and income and subsidies were not shown in the financial statements.

Assessment of COVID-19 Instability on Revenue Recognition variable has a mode of 4, median of 4 and mean of 3.30. the median been “Agree”. Thus Assessment of COVID-19 Instability on revenue recognition was conducted. This represents a positive impact of COVID-19 on Instability on Revenue Recognition, as COVID-19 compelled accountants to assessment of COVID-19 Instability on Revenue Recognition.

Disclosure of Accounting estimates and liabilities in Relation to COVID-19 has a mode of 4, median of 4 and mean of 3.45, Median been Agree. Implying that most accountants, disclosed accounting estimates and liabilities on revenue recognition. This represents a positive impact on disclosure of Accounting estimates and liabilities in Relation to COVID-19, as most accountants showed such disclosures.

Table 8, median, mode and Mean scores of the responses with regard to effects of COVID-19 on financial reporting.  
(Independent Variable – COVID-19, dependent variable financial reporting and disclosure)

| Variable  | Min<br>Statistic | Max<br>Statistic | Mode<br>Statistic | Median<br>Statistic | Mean<br>Statistic | Std.<br>Deviation<br>Statistic | Remarks   |
|---|------------------|------------------|-------------------|---------------------|-------------------|--------------------------------|---|
| <b>Evaluation of Going Concern in relation to COVID-19</b>                        | 1                | 5                | 4                 | 2                   | 3.25              | 1.288                          | The median, mode, mean and standard deviation “NOT SURE” If evaluation of going Concern in relation to COVID-19 was included in the financial statements. |
| <b>Inclusion of Income tax cuts and Subsidies in Financial Statements</b>         | 1                | 5                | 2                 | 2                   | 2.46              | 1.291                          | The median, mode, and mean states “DISAGREE”, That there was no inclusion of income tax cuts and subsidies in the financial statements.                   |
| <b>Assessment of COVID-19 Instability on Revenue Recognition</b>                  | 1                | 5                | 4                 | 4                   | 3.30              | 1.311                          | The median, mode mean and standard “AGREES” That Assessment of COVID-19 instability on Revenue recognition was conducted.                                 |
| <b>Disclosure of Accounting estimates and liabilities in Relation to COVID-19</b> | 1                | 5                | 4                 | 4                   | 3.45              | 1.370                          | The median, mode mean and standard Agrees that Disclosure of Accounting estimates and liabilities in Relation to COVID-19 was done.                       |
| <b>Number of Responses</b>  | 152              |                  |                   |                     |                   |                                |   |

Table 5.7 Effect of COVID-19 on financial Reporting and Disclosure FRD

#### 5.4 Technological Trends resulting from COVID-19 Pandemic

The third objective of the study was to examine the accounting technological trends resulting from COVID-19 pandemic. To achieve this objective, the median, mode, mean and standard deviation were compared based on a 5 points Likert scale, of this order 1- Strongly Disagree, 2- Disagree, 3- Not Sure, 4- Agree, 5- Strongly Agree.

Enhancement of Accounting Technology following COVID-19 has a mode of 5, Median of 4 and mean s of 3.95. The median is “Agree”. The results imply that most sectors adopted the use of Accounting technology following the pandemic, representing a positive effect as COVID-19 enhanced the use of accounting Technology.

Adoption of cloud Accounting, Artificial intelligence (AI), Data Analytics & forecasting and Block chain during COVID-19 has a mode of 5, Median of 4 and a mean of 3.39. Comparing the three statistic the median is “AGREE”. Thus there was massive adoption of Cloud Accounting, Artificial intelligence (AI), Data Analytics & forecasting and Block chain during COVID-19, representing a positive effect as COVID-19 enhanced the Adoption of cloud Accounting, Artificial intelligence (AI), Data Analytics & forecasting and Block chain

Conducting of meetings using video conference/zoom/google during COVID-19 has mode of 5, median of 5, and mean of 4.31. The median is “Strongly Agree”. Thus the findings indicate that during the pandemic most accountants conducted meetings using Video conference/Zoom/google, representing a positive effect as COVID-19 enhanced the Conducting of meetings using video conference/zoom/google in the accounting practice

Cyber security levels following COVID-19, has a mode of 5, median of 5 and mean of 4.04. the median is “Strongly Agree. Thus the finding indicates that there was massive increase in cyber security levels following the pandemic, representing a negative effect as COVID-19 increased the levels of Cyber security in the accounting practice.

Faced Challenges for Remote working during COVID-19, has a mode of 5 a mean of 5 and a median of 5 and a mean of 5 the median been Strongly agreeing that many accountants had challenges with the use of technology during COVID-19. Representing a negative effect because of remote working caused by COVID-19 may accountants faced challenges.

Table 9, median, mode and Mean scores of the responses examining the accounting technological trends resulting from covid-19 pandemic. (Independent Variable – COVID-19, dependent variable accounting technology trends)

| Variable  | Min Statistic | Max Statistic | Mode Statistic | Median Statistic | Mean Statistic | Std. Deviation Statistic | Remarks  |
|---|---------------|---------------|----------------|------------------|----------------|--------------------------|--|
| <b>Enhancement of Accounting Technology following COVID-19</b>  | 1             | 5             | 5              | 4                | 3.95           | 1.284                    | The median, mode, “AGREE” while the mean implies that Accountants Neither “AGREE NOR DISAGREE” that there was enhancement of Accounting Technology following COVID-19.   |
| <b>Adoption of Cloud Accounting, Artificial Intelligence (AI), Data Analytics &amp; forecasting and Block chain during COVID-19</b> | 1             | 5             | 5              | 4                | 3.39           | 1.624                    | The median, mode, “AGREE” while the mean implies that Accountants Neither “AGREE NOR DISAGREE” That there was Adoption of Cloud Accounting, Artificial Intelligence (AI), Data Analytics & forecasting and Block chain during COVID-19 |
| <b>Conducting of Meeting using video conference/zoom/google during COVID-19</b>   | 1             | 5             | 5              | 5                | 4.31           | 1.169                    | The median, mode” STRONGLY AGREE” while the mean “AGREE” That meetings were conducted using video conference/zoom/google during COVID-19.  |
| <b>Increase of Cyber Security Levels Following COVID-19</b>   | 1             | 5             | 5              | 5                | 4.04           | 1.41                     | The median, mode STRONGLY AGREE” while the mean “AGREE” That there has been an Increase of Cyber Security Levels Following COVID-19  |
| <b>Faced Challenges for Remote working during COVID-19</b>  | 1             | 5             | 5              | 5                | 4.14           | 1.240                    | Then median, mode “STRONGLY AGREE” while the mean “AGREE” that challenges for remote working were faced.   |
| <b>Number of Responses</b>  | 152           |               |                |                  |                |                          |  |

Table 5.8 Accounting Trends following COVID-19

### 5.5 Kruskal Wallis non Parametric Test

Figure 3 and Table 10 Shows a Kruskal Wallis test, that compares three independent variables of the effect of COVID-19 on the Inventory which include: Conducted inventory/Stock valuation remotely before COVID-19; Conducted physical inventory/stock valuation during COVID-19 in; and Conducted inventory/Stock valuation remotely during COVID-19. The correlation coefficient between “inventory valuation before COVID-19” and “Remote Inventory valuation during COVID-19” is 0.276. The correlation coefficient between “Remote inventory valuation before COVID19” and “Physical inventory valuation before COVID-19 is 0.19”. “Remote inventory valuation during COVID-19” and “physical inventory valuation during COVID-19 is 0.207”. Implying that the pairwise correlation of the correlations between our items testes are positive and significant at conventional level indicating a positive relationship between the items thus accepting the hypothesis of the items.

Pairwise Comparison where each row was tests the null hypothesis that the sample 1 and 2 distributes are the same. Asymptomatic (2 tailed tests are displayed). The significance is .05. Significance values have been adjusted by bonferroni correlation for multiple test.

| Sample 1-sample 2   | Test statistics | Std.Error | Sig. | Remarks   |
|---|-----------------|-----------|------|---|
| <b>HO<sub>1</sub> Remote Inventory Valuation before COVID-19-Remote Inventory Valuation During COVID-19</b>   | -.125           | .115      | .276 | Significant: the null hypothesis has been accepted. Showing a relationship between the two variables. |
| <b>HO<sub>2</sub> Remote Inventory Valuation before COVID-19-Physical Inventory Valuation During COVID-19</b> | -.270           | .115      | .019 | Significant: the null hypothesis has been accepted. Showing a relationship between the two variables. |
| <b>HO<sub>3</sub> Remote Inventory Valuation During COVID-19-Physical Inventory Valuation During COVID-19</b> | .145            | .115      | .207 | Significant: the null hypothesis has been accepted. Showing a relationship between the two variables. |

Table 5.9 Pairwise comparison

Figure 3 Shows, the paired comparison of three groups the test indicates that the central tendency of conducted inventory/stock valuation remotely before COVID-19, differs significantly from conducted physical inventory valuation During COVID-19. Similarly, there was no significant difference between remote inventory valuation before COVID-19 and remote inventory valuation during COVID-19. Physical inventory valuation has more agrees and disagree, remote inventory valuation has the second best agrees and strongly agrees and remote inventory valuation has the least agrees and strongly agree.

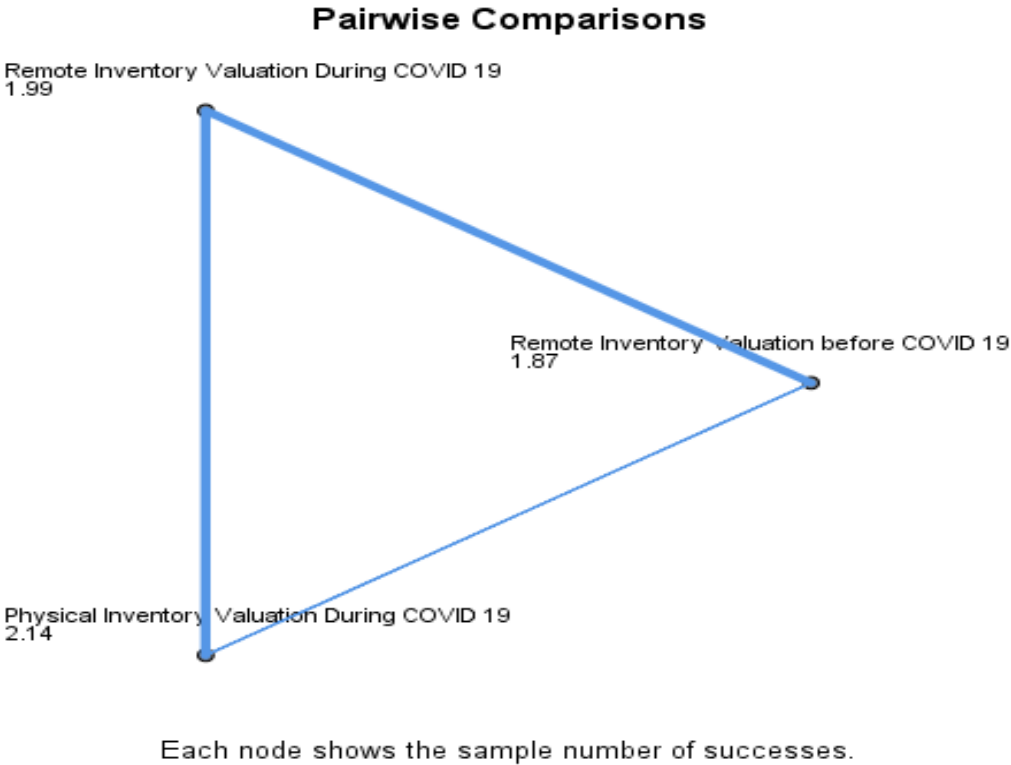


Figure 5.3: Pairwise comparisons

### 5.6 Spearman's RHO Correlation Coefficient Non- Parametric Test

Spearman's RHO Correlation coefficient non parametric tests was applied because of its efficiency in linking ordinal data to categorical data. Spearman's Test is a nonparametric measure of rank correlation, it is used as a test to measure, the strength of association between two variables of different measures.

Table 11 Spearman's RHO Correlation coefficient table of values.

| <b>Signs of Correlation efficient</b> | <b>Strong</b> | <b>Moderate</b> | <b>Weak</b>  | <b>Very Weak</b> |
|---------------------------------------|---------------|-----------------|--------------|------------------|
| <b>+ Values</b>                       | 0.5 to 1.0    | 0.3 to 0.49     | 0.1 to 0.29  | 0 to 0.09        |
| <b>- Values</b>                       | -1.0 to-0.5   | -0.49 to -0.3   | -0.29 to 0.1 | -0.09 to 0       |

Figure 5.4 RHO correlation table of values

A test between sector and challenges with inventory valuation during COVID-19, reveals 0.0210, showing a weak perfect positive correlation between the two variables. Since the sig (2 tailed correlation) is at 0.09 smaller that alpha value at 0.10 alternate hypothesis has been accepted, despite the weak positive relationship observed between the two variables, there are statistically significant. Indicating that the hypothesis, between sector and challenges with inventory valuation during the COVID-19 has been accepted.

Sector and Evaluation of going in relation to COVID-19 reveals a 0.057 correlation coefficient indicating a very weak perfect positive correlation between the two variables. The sig (2 tailed correlations is at 0.484 smaller than the alpha value of 0.05, thus alternative hypothesis has been accepted, despite a very weak relationship between the two variables they are statistically significant. Indicating that the hypothesis of the relationship between sector and evaluation of going concern in relation to COVID-19 has been accepted.

Sector and inclusion of income tax cuts and subsidies in financial statements reveals a -0.046 correlation coefficient indicating a strong negative correlation between the two variables the significant (2 tailed) variable is at 0.0575 greater that the alpha value of 0.05 therefore the null hypothesis has been rejected implying that the two variables are not statistically significant. The test indicates the relationship between sector and inclusion of income tax cuts and subsidies in financial statements has been rejected.

Education Level and assessment of the effect of COVID-19 related instability on revenue recognition and allowance for bad debts reveals -0.048 correlation coefficient indicating a strong negative correlation between the two variables the significant (2 tailed) variable is at 0.577 greater that the alpha value of 0.05 therefore the null hypothesis has been rejected. Despite

the negative strong relationship shown the two variables are not statistically significant. The test indicates that the hypothesis of the relationship between Education level and assessment of the effect of COVID 19 related instability on revenue recognition and allowance has been rejected.

Sector and disclosure of accounting estimates and liabilities in relation to COVID-19 reveals a 0.95 correlation coefficient showing a strong positive correlation between the two variables. The significant (2 tailed) Correlation is at 0.0244 smaller than the alpha value of 0.05 thus the null hypothesis has been accepted, also indicating that the variables are statistically significant. The test implies that a relationship between sector and the disclosure of accounting estimates and instability in relation to COVID-19 has been rejected.

Sector and enhancement of Accounting Technology following COVID-19 reveals a 0.053 correlation coefficient which shows a strong positive correlation between the two variables. The significant (2 tailed) Correlation is at 0.0514 bigger than the alpha value of 0.05 thus the null hypothesis has been rejected despite the strong correction the two variables are not statistically significant. Indicating that the hypothesis of a relationship between sector and enhancement of accounting technology following COVID-19 has been rejected.

Sector and Adoption of cloud Accounting, Artificial intelligence, Data Analytics & forecasting and Block Chain during COVID-19 reveals a 0.066 correlation coefficient showing a strong positive correlation between the two variables. The significant (2 tailed) Correlation is 0.066 smaller than the alpha value of 0.05 thus the null hypothesis has been accepted meaning that the two variables are statistically significant. Indicating that the hypothesis, of the relationship between sector and adoption of cloud accounting, artificial intelligence, data analytics and block chain during COVID-19.has been accepted.

Job Level and Conducting of meeting using video conference, /zoom/google during COVID-19 reveals a -0.144 correlation coefficient showing a weak correlation between the two variables. The significant (2 tailed) Correlation is at 0.0162 smaller than the alpha value of 0.05. The null alternative hypothesis has been accepted meaning that the two variables are statistically significant. Indicating that the hypothesis of the relationship exists between Job level and conducting of meetings using video conferences/zoom/google/ during COVID-19 has been accepted.

Job Level and Increase of Cyber Security Levels following COVID-19. Reveals -0.01 correlation coefficient showing a strong positive relationship between the two variables. The significant (2 tailed) Correlation is 0.0989 larger than the alpha value of 0.05 thus the null hypothesis has been rejected meaning that the two variables are not statistically significant. Indicating that no relationship exists between Job level and increase in cyber security levels following COVID-19. Indicating that the hypothesis of the relationship between Job level and increase of cyber security levels following COVID-19 has been rejected.

Age and challenges faced for remote working during COVID-19 reveals a 0.096 correlation coefficient showing a strong correlation between the two variables. The significant (2 tailed) Correlation is at 0.0327 smaller than the alpha value of 0.05. The null alternative hypothesis has been accepted meaning that the two variables are statistically significant. Implying that the hypothesis of the relationship between age and challenges faced for remote working during COVID-19 has been accepted.

Table 12 shows a tests of variables that have been conducted in Spearman's together with their correlation.

Non Paramedic Test: Spearman's RHO Correlations

| Variables Correlated   | Correlation Coefficient | Sig(2 Tailed) | Correlation sig at | Comment   |
|--|-------------------------|---------------|--------------------|---|
| H <sub>4</sub> Sector- Challenges with Inventory Valuation During COVID-19   | 0.0210                  | 0.09          | 0.10               | Significant accept alternative hypothesis.        |
| H <sub>5</sub> Sector- Evaluation of Going concern in relation to COIVID 19  | 0.057                   | 0.0484        | 0.05               | Significant accept alternative null hypothesis.   |
| H <sub>6</sub> Sector- Inclusion of income tax cuts and subsidies in Financial Statements  | -0.046                  | 0.0575        | 0.05               | Insignificant reject alternative null hypothesis. |
| H <sub>7</sub> Education level - Assessment of the Effect of COVID- 19 related instability on revenue recognition and allowance for bad debts. | -0.048                  | 0.0557        | 0.05               | Insignificant reject alternative null hypothesis. |
| H <sub>8</sub> Sector- Disclosure of Accounting estimates and liabilities in relation to COVID-19.   | 0.095                   | 0.0244        | 0.05               | Significant accept alternative null hypothesis.   |
| H <sub>9</sub> Sector- Enhancement of Accounting Technology following COVID-19   | 0.053                   | 0.0514        | 0.05               | Insignificant reject alternative null hypothesis. |
| H <sub>10</sub> Sector-Adoption of cloud Accounting, Artificial intelligence, Data Analytics & forecasting and Block Chain during COVID-19     | 0.066                   | 0.0418        | 0.05               | Significant accept alternative null hypothesis.   |
| H <sub>11</sub> Job Level- Conducting of meeting using video conference,/zoom/google during COVID-19   | -0.0114                 | 0.0162        | 0.05               | Significant Accept alternative null hypothesis    |
| H <sub>12</sub> Job Level- Increase of Cyber Security Levels following COVID-19.   | -0.01                   | 0.0989        | 0.05               | Insignificant Reject alternative null hypothesis. |
| H <sub>13</sub> Age- Challenges faced for remote working during COVID-19   | 0.096                   | 0.0237        | 0.05               | Significant Accept alternative null hypothesis.   |

Table 5.10 Spearman RHO's Collerations

## 5.8 DISCUSSION OF FINDINGS.

### 5.8.1 Overview

This Chapter focuses on the discussions of the research findings under the sub-heading of the objectives and the research questions.

The research objectives and question of the study were:

### 5.8.2 Objectives of the Study

- I. To assess the effect of COVID- 19 on inventory valuation.
- II. To investigate the effect of COVID-19 on financial reporting and disclosure.
- III. To examine the accounting technological trends resulting from COVID-19 pandemic.

### 5.8.3 Research Questions

- I. What is the Effect of COVID- 19 on inventory valuation?
- II. What is the Effect of COVID-19 on financial reporting and disclosures?
- III. What are the Accounting and technological trend that have resulted following COVID-19?

### 5.8.4 Descriptive Statistics

#### 5.8.4.1 Bio Data

The demographics of the study are as follows:

#### 5.8.4.2 Sex of the participants

The study had more males than female's participants. The difference between male and female was minimal therefore the study was not gender biased. Despite the difference in gender the study incorporated different views from both sexes

#### 5.8.4.2 Age of the Participants.

COVID-19, affected everyone differently mostly according to age. To get different responses of how COVID-19 effected accountants differently, the study constituted a combined age mix. consisting of different age groups ranging from 18- 55 years and above. However, the most dominant age group was the age group between 31-45 years. Possibly because it is the most active and productive age group. The variety of age group enabled a balanced data set, which full articulated the effect of COVID-19 on the AP on age groups.

#### 5.8.4.3 Sector

The pandemic affected different sectors differently, with each sector having its own challenges (Abbas, et al., 2021). The study therefore consisted of a variety of accountants who work in different sectors such as, manufacturing and construction, government/agency, non-governmental organization (NGO), agriculture, hospitality, education, mining, travel logistics, and financial professional services. The implication of the findings are that the study covered different sectors similar to the findings of (Jabin, 2021). As such the study got various responses on how different sectors were affected by the COVID-19 pandemic.

#### 5.8.4.4 Job level of participants.

Because of different Jobs responsibilities performed by accountants, the study constituted of all the five Job levels which include, operational, strategic, management, and senior management. The balanced Job mix helped to determine how the COVID-19 pandemic impacted all the Job levels of the AP.

#### 5.8.4.5 Duration of Practice

The results constituted of practicing accountants who have practiced from 1-5 years, 6-10 years, 11-15 years and 16 years and above. The study constituted practicing accountants who have worked for various years, thus validating the reliability of the responses.

#### 5.8.4.6 Education Level of Participants

Since the study targeted practicing accountants, the study required that all participants must have a minimal level of qualification of certificate in accounting, which was achieved, as all the participants of the study have different level of accounting qualification ranging from certificates, diplomas, degrees, master's degrees and PHDs, this is consistent with the findings of (Papadopoulou & Papadopolou, 2020) and (Jabin, 2021). This denotes that all participants had the appropriate knowledge to understand the items in the questionnaire enabling a practical and reliable response on the Effect of COVID-19 on the AP in Zambia.

#### 5.8.5 The effect of COVID-19 on Inventory Valuation.

During the COVID-19 pandemic concerns about inventory valuation have emerged. Inventory valuation is key in determining the financial status of a company, as noted by (Helzer & Mindak, 2021). Most accountants were unprepared for the COVID-19 pandemic thus adaption for inventory valuation in the short run was challenging. Evident as the majority of the Accountants in Zambia “DISAGREE” that no remote inventory valuation was done before the COVID -19 pandemic. Implying that inventory valuation before COVID-19 was purely physical. A prior

study by (Sultana & Sen, 2021) found that there was no remote inventory valuation conducted before the COVID-19 pandemic since most companies had not put in place remote inventory mechanics. The results of the present study are reasonable as very few sectors in Zambia have put in place mechanisms that conduct remote inventory valuation, one of the factors that can be attributed to the failure of remote inventory valuation is improvement in technology, theft, and lack of investment in infrastructure that support remote inventory valuation, these have made it difficult to adopt to remote inventory valuation in Zambia, However, there are modern computerized remote inventory valuation mechanisms that companies can develop, and adopt but such are rarely adopted in Zambia, making accountants depend on physical inventory valuation, which was also disrupted by COVID-19 pandemic.

Since remote inventory valuation was not conducted before the COVID-19 pandemic, it implies that accountants had to depended on physical inventory valuation. However, most accountants in Zambia “DISAGREE” that physical inventory valuation was not done during the COVID - 19 pandemic. A study by (El-Mousawi & Kanso, 2020), also found that physical inventory valuation became disrupted during COVID-19, the majority of companies did not conduct any physical inventory verification during the COVID-19 pandemic because of strict lock down and company shut downs. This effected valuation and reporting of inventory, during COVID-19 by delaying the reporting cycle.

The major transmitter of COVID-19 is human to human contact, and physical inventory valuation requires physical count, with human contact this halted physical valuation inventory, because of fear of contraction, the only alternative that companies had was to conduct remote inventory valuation. As noted earlier on COVID-19 came abruptly, and many companies were unprepared for remote inventory valuation during COVID-19 pandemic, therefore the majority of accountants in Zambia “DISAGREE” that no remote inventory valuation was conducted during the COVID -19. A prior study by (Sultana & Sen, 2021) found a significant relationship between COVID-19 and electronic inventory valuation during the COVID-19 pandemic. Implying that no electronic inventory valuation was conducted during the COVID-19 period, this is evident because strict lock down and company shut downs had a huge effect on inventory valuation during the COVID-19 pandemic.

Since inventory was not done remotely before COVID -19, Physically during COVID-19, and Remotely during COVID-19. The present study has established that there were a lot of

challenges in inventory valuation. Other prior studies by (Sultana, et al., 2021) (El-Mousawi & Kanso, 2020), (Alvarez-Placencia, et al., 2020), and (Blokdyk, 2021) also established that challenges in inventory valuation included:

Lack of inventory valuation, affected valuation and reporting of inventory, during COVID-19 by delaying the reporting cycle; Since inventory valuation was not conducted during the COVID-19 pandemic accountants were unaware of the physical assets that the company possessed, giving an adverse impact on financial reporting and disclosure during the COVID-19 pandemic.

Inventory valuation during the pandemic raised questions about the reporting and disclosure of inventory valuation estimates during the pandemic, making all financial statements that were prepared in the period of the COVID-19 pandemic suspicious.

There were massive risks of inventory, damage, pilferage, shrinkage, misstatement of stock value and cost of sale, stock runouts, over stocking, stock expiring, stock obsolesce, failure of identification of slow moving stock and incorrect valuation and recording of items, these largely impacted the accountants' ability to correctly have an absolute comprehensive value of the inventory during the pandemic.

Inventory reduction, less movement of inventory crippled the production capacity of most companies, this caused companies to have difficulties in converting inventories to cash therefore diminishing the companies' liquidity, Lack of inventory movement also caused most companies to head towards insolvency.

There were problems with inventory valuation because of huge shortage of inventory therefore prices of inventory fluctuated sharply in a short period of time this made it difficult to have consistent values of inventory, since inventory fluctuated within a short period of time many accountants were forced to review the cost of production and set up new prices more frequently than ever; raising costs of inventory management made it so difficult for many companies to mobilize inventory required for production and selling , because of such there were difficulties in reporting and disclosing of inventory, causing inventory to become over or undervalued;

There were increased rates of inventory impairment because of stockpiling which was done as a measure to cushion price fluctuation and reduce the cost of inventory management; Holding of inventory became so expensive because of stock piling this forced most companies not to hold inventory for longer but shorter periods;

There was a sharp decline on the net realizable value of inventory due to reduction in net realizable, demand and non-fulfilling of sale and purchase contracts; There were challenges in facilitating of auditors to conduct periodic audits because no physical or remote counting before and during the COVID-19 pandemic this made it difficult for auditor to ascertain the accuracy of inventory held in stock.

Reporting of inventory in company financial statement was a challenge owing to deterioration, obsolescence, of inventory, inability to identify theft of inventory which caused sharp decrease of inventory, reduced inventory management made it a challenge of adapting to inventory demand. The perishable nature of the goods together with the growing pressure of sustainability rules and standards caused massive challenges in inventory management; and there were challenges in the valuation and measurement of financial assets causing a lower fair value of the financial assets held by business organizations.

Despite many companies resuming business it cannot be ignored that inventory valuation is the major reason why companies in Zambia experienced huge losses and collapsed. The major factor is the incapability of accountants to conduct inventory valuation effectively in the COVID-19 period.

#### 5.8.6 Effects of COVID-19 on Financial Reporting and Disclosure.

The crisis of the COVID-19 pandemic hampered economic activities of many businesses. One of the most affected areas is the financial components which are required to run a business which include assets, liabilities, income and expenses, which have affected many businesses as a consequence influencing accounting of revenue cycle, enforceability of revenue contract, revenue estimation and loss on trade receivables. Results of the present survey indicate, that the majority of accountants in Zambia are “NOT SURE” if evaluation of going concern in relation to COVID was conducted. However prior studies by (Muqattash, et al., 2022) and (El-Mousawi & Kanso, 2020) argue that the majority of accountants in UEA and Lebanon conducted the evaluation of going concern in relation to COVID-19. The attributing factor to the “NOT SURE” calculated mean response is that the present study constituted of 29% of accountants in the operation level, the job level that mainly concern with the day to day operations of the business and does not evaluate going concern, which is mainly done at management level (ACCA, 2020). It is however important that all employees at each job level, are conversant with the going concern of their company during and post crisis such as COVID-19 pandemic, since

going concern is a bridge that exists between the business and its stakeholders, by giving foresight of knowing if the business continued operating amidst interruptions as COVID-19. The results thus suggest that it is uncertain whether accountants in Zambia conducted evaluation of going concern in relation to COVID-19 or not thus little is known on the extent of how the COVID-19 impacted the ability of companies in Zambia to continue as going concerns during COVID-19 which is probable, as supported by prior studies by (Muqattash, et al., 2022) and (El-Mousawi & Kanso, 2020) who equally confirms that COVID-19 outbreak had adverse impact on the capability of organizations to continue as going concerns, as it led to the loss in cash flow, incensed by different government measures put in place to contain the pandemic. The uncertainty if accountants in Zambia conducted going concern or not implies that it is unlikely that most companies in Zambia conducted sensitivity analysis before and during COVID-19. Sensitivity analysis is overemphasized by (KPMG, 2021) as it helps the provision of adequate disclosures in case of material uncertainty. Non evaluation of going concern has the capability of diminishing investor confidence, since most investors are interested in ascertaining the future prospect of the company especially during and after major crisis so as to decide whether to continue investing in a company or not.

The onset of COVID-19 has led to a closure of many companies and business. To reduce the burden of the COVID-19 pandemic and keep the economy on its wheels the government of the Republic of Zambia assisted business through government grants, tax cuts and lessening of income tax (Zambanker, 2020). Such benefits caused the need for financial reporting and disclosure. However, from the findings of the present study the majority of accountants in Zambia “DISAGREE”, that they did not include income tax cut and subsidies in the financial statements. These results are in disagreement with a prior study of (Muqattash, et al., 2022), who found that the majority of accountants in the UEA included tax cuts, government subsidies and lessening of income tax. The implication of non-inclusion of income tax cuts and subsidies in the financial statements is that adjustments to tax and subsidies were not disclosed in financial statements.

During the COVID-19 pandemic the government of the republic of Zambia stimulated companies, through the reduction in corporate income tax from 30% to 25%, (Zambia Revenue Authority, 2022). Stimulus packages coupled with government grants were given to businesses (EY Global, 2022), According to the findings it is now clear that these benefits were not

disclosed by the majority of business , these findings are in conflict with the requirements of IFRS, which recommends that grants should be reported as income when they do not impose any specified future performance-related conditions or imposed specified future performance related condition, and as liabilities when revenue recognition criteria are satisfied. Not reporting of grants and stimulus packages leads to over estimation of revenue or underestimation of liabilities on deferred tax liability in the income statement ((FASB), 2021) (ACCA, 2020). These findings strongly disagree with the study of (Sultana, et al., 2021) who draw conclusion by emphasizing that companies should disclose conclusively all the benefits that have been taken by business, as such benefits have major accounting impact in their financial statement. It is thus unclear what the impact of stimulus packages, deferred tax, high appraisals for employees, financial bailout are on the financial statements of most Zambian companies.

The Majority of the accountants in Zambia “AGREE” that assessment of COVID-19 Instability on Revenue Recognition was conducted, these results are consistent with prior study of (Muqattash, et al., 2022) who found that most companies conducted an assessment of COVID-19 instability, on revenue recognition allowance for bad debts, and critical accounting estimates during the COVID-19 pandemic. The present study therefore implies that economic performance, business operation, future earnings and all items that are directly related to financial statements are reported by the majority of accountants in Zambia.

As alluded earlier on the COVID-19 pandemic triggered business to shut down subsequently influencing accounting of revenue cycle, enforceability of revenue contract, revenue estimation and loss on trade receivables (KPMG, 2021), making reporting on instability of revenue recognition vital. The results further suggest that most accountants in Zambia prepared, financial statements in conformity to IFRS, while monitoring business cash flow, thereby reducing liquidity crisis, while adhering to producing such reports led to unavoidable liability that may arise or acceptance of loss making contracts. Most of the reports on instability of revenue recognition during the COVID-19 pandemic shows clearly how financial statements and business performance were impacted during the COVID-19 pandemic.

There results indicate that the majority of accountants in Zambia “AGREE” that they disclosed in their financial, accounting estimate and liabilities in relation to COVID-19. The results are in agreement with prior studies by (Muqattash, et al., 2022) (Jabin, 2021) and (El-Mousawi & Kanso, 2020) who in their studies indicated that all accountants disclosed in their financial,

accounting estimates and liabilities in relation to COVID-19. The results suggest further that most accountants in Zambia included the assumption on management about the future recoverability of asset which include: the net realizable value of inventories; Impairment charge of investments in associates and joint ventures accounted for following the equity method; remaining useful life and a residual value of the property, plant, equipment, intangible assets, and right-of use asset; Implying that most accountants in Zambia conducted proper accounting estimates and liabilities together with all information subject to trivial estimate uncertainty.

The study also suggests that in Zambia the COVID-19 pandemic, coerced accountants to prepare statements by readjusting policies, and estimates, consistent with a study of (Sultana, et al., 2021) who found that the pandemic affected the valuation and measurement of non-current assets through, depreciations, and impairments costs of various fixed assets which were affected by lower usage, while other companies that ceased business altered their reporting and disclosure as various activities had an adverse impact on reporting of critical estimates reporting and disclosures, since business closures and slowdowns largely affected estimates and measurements of various financial elements.

#### 5.8.7 Accounting Technological Trends Resulting from COVID-19 Pandemic

Following the COVID-19 pandemic in Zambia the majority of accountants “AGREE” that there has been an enhancement in the use of accounting technology by accountants. Other prior studies by (Jabin, 2021), (Hossain, 2021) and (Spratt School of Business, 2022). Found a positive increase in the use of accounting technology by accountants.

The implications of the findings are that, a lot of companies in Zambia adopted the use of accounting technology software which has seen most Zambian companies shift to paperless transactions, a move that has been adopted by developed countries such as Saudi Arabia (Sultana & Sen, 2021). Paperless transaction in Zambia is evident through the changes in submission and payment of taxes (Zambia Revenue Authority, 2022), and other online payment options that have been developed by most companies and organizations in Zambia. This signals the increase in cloud accounting and technology in Zambia, these advancements have enhanced accountants to accomplish tasks of automation, analysis, prediction, quality decision making and little interruption of work flow, all which work against the COVID-19 pandemic.

The enhancement of accounting technology following COVID-19 in Zambia has not only protected accountants from contracting the COVID-19 virus, but also altered accountant’s work

culture, through the enhancement of a work environment that is collaborative, time saving in execution of vital tasks of accounting and finance, and speed in execution of accounting activities. The enhancement in accounting technology has also enabled the increase in use of cloud computing. Despite little been known on the extent of accounting technology adoption by AP in Zambia, the present study indicates that there has been an increase in the adoption of accounting technology a study by (Mwiiya, 2020) also found that technology software has facilitated an improved work flow, increase in data storage of pertinent financial information via cloud technology, increased use of application resources by accounting workers, supporting of interaction of accounting practice at all levels, remote working, improved customer interactions, increase in productivity, altered work culture and reduced costs in operations, signifying that the adoption of accounting technology has been of a great advantage to the AP amidst the COVID-19 pandemic in Zambia. According to the present study accounting technology has become an inevitable tool that is on demand implemented by a lot of sectors in Zambia this is in line with the findings of (Jabin, 2021) who found a rapid increase in the adoption of accounting technology during the COVID-19 pandemic. Accounting technology has brought value and resolved existing and potential challenges in companies, which has now become a must for all accountants.

Additionally, the majority of accountants in Zambia “AGREE” that there has been adoption of cloud Accounting, Artificial intelligence (AI), Data Analytics & forecasting and Block chain during COVID-19. Other prior studies by (Hossain, 2021), (Jeremiah, et al., 2019) and (Jabin, 2021) also found that, the COVID-19 pandemic has pushed the AP towards cloud accounting, Artificial intelligence (AI), Data Analytics & forecasting and Block chain, a signal that the AP in Zambia is slowly moving away from the common traditional practice of accounting to a more different and advanced technological roles which has also increased team building, analysis, management and reporting, considering that these skills require minimum human to human contact, thus proving effective in the COVID-19 pandemic period. However little is known on how quickly companies in Zambia are switching towards artificial intelligence robotic process automation (RPA), cloud Accounting, artificial intelligence (AI), data analytics & forecasting and block chain. The adoption of cloud accounting has provided accountants with access of accounting services remotely as it provides, services that can be accessed irrespective of time and location, using data analytics and focusing, cloud accounting has enabled the progression

of suitable analysis of data accounting, using a combination of data analytics and forecasting. The adoption of cloud accounting in Zambia, will see the AP improve continuously and advance the AP in Zambia as supported by the findings of (Jeremiah, et al., 2019) who in their study concludes that technology in the 21<sup>st</sup> century has become predominate in the field of accounting and finance the digitalization of almost all accounting process, has pushed the AP more to digital transformation with the facilitation of cloud accounting, digital technology which is aiding the AP leverage technology to support accounting operations and strategies.

Because of the adoption of Accounting technology, the immense use of Artificial intelligence (AI), Data Analytics & forecasting and Block chain during COVID-19. The majority of Accountants “AGREE” that they Conducted meetings through video conference/zoom/google during COVID-19 pandemic. The results are in agreement with the findings of (Hossain, 2021), (Jabin, 2021), (Spratt School of Business, 2022) and (Papadopoulou & Papadopolou, 2020). Who all found that during COVID-19 pandemic the accounting practice worked virtually, with the aid of technology, they were able to conduct meetings and video conferences, virtually. The results of the present study suggest that remote working has led accountants in Zambia to adopt new work age of rapid adoption of remote working, through the use of cloud, Zoom, and other technology, which has created a more likely different work environment of adopting to work from home environment.

As for the increase in the use of technology and virtual working place the majority of accountants “AGREE” that Cyber security levels have increased following COVID-19. Other prior studies by (Hossain, 2021), (Jabin, 2021), and (Spratt School of Business, 2022). Who assert in their studies that remote working and use of accounting technologies has triggered a significant rise in cyber security concern more during than before COVID-19. The results suggest that consistent remote working has caused exposure to confidential information online, which has caused an increase in fraud arising from virtual and remote working for accountants, similar to the findings of (Mwiiya, 2020) whose study revealed an increase in ,identity theft, hacking of corporate level network, and mass data theft. Clearly indicating that the levels of cyber security in Zambian companies is high during than before COVID- 19, showing that cyber security concerns will continue increasing owing to the increase in the use of accounting technology, cloud Accounting, Artificial intelligence (AI), Data Analytics & forecasting Block

chain, and the conducting of meetings using Video conference/Zoom/google during COVID-19, which is more likely to impact sensitive financial information of companies.

The majority of accountants “AGREE” that they faced challenges using new technology for working remotely before and during COVID-19 pandemic, challenges which can be attributed to the immense use of technology. Other prior studies by (Sprott School of Business, 2022), (Jabin, 2021), and (Hossain, 2021) found that accountants faced a lot of challenges with the use of new technology, which includes cyber security, reduced productivity; increased cost of technology, deployment and training, need for productivity assessments on remote work, lack of monitoring of workers, high dependence on technology workers has led to inefficiencies; Internet overload, internet failure,; increased dependence on emails and meetings has led to shifting deadlines, blind spot communication with clients, isolation from team members, need for alternative performance measures, consistent technological evolution, need for developing adequate modifying technology skills for accountants, ethical challenges, evolution of technology, system upgrades and changes, high security protocols, and consistent training of accountants to have strong and efficient accounting financial supervision authorities to monitor remote working which comply with technological protocol to detect fraud.

### 5.8.8 Inferential Statistics

#### 5.8.8.1 Pairwise Tests

Pairwise comparisons, in table 16 shows that the result in  $H_1$ , indicates a pairwise correlation between remote inventory valuation before COVID-19 and remote inventory valuation during COVID-19, the coefficient is 0.276 which is below 0.5 signifies a significant relationship between remote inventory valuation before COVID-19 and remote inventory valuation during. The results indicate that there was a serious problem in the conducting of remote inventory valuation before COVID-19 and the conducting of remote inventory valuation during COVID-19. The conceivable explanation is that there was no inventory valuation conducted remotely both before or during COVID-19. Inferring that there were serious challenges of remote inventory valuation both before and during COVID-19. Remote inventory valuation would have been a good weapon if it was used during the COVID-19 pandemic as it does not require physical count, since there was no remote inventory valuation that was conducted both before and during the COVID-19 pandemic, accountants had to exclusively depend on physical inventory valuation during the pandemic.

The second pairwise test  $H_2$ , conducted between remote inventory valuation before COVID-19 and Physical Inventory Valuation During COVID-19. Points to a positive conventional pairwise correlation coefficient of 0.19 which is below 0.5. The study equally finds a significant relationship between remote Inventory valuation before COVID-19 and physical Inventory valuation during COVID-19. The pairwise test suggests a serious problem in conducting of remote inventory valuation during COVID-19 and physical inventory valuation during COVID-19. The plausible explanation is that many companies did not put in place and remote inventory valuation before COVID-19 probably because of the huge costs of investment, or the companies are not big enough to adopt remote inventory mechanisms, many companies did not conduct any physical inventory valuation during the COVID-19 pandemic, because of lock downs and fear of contracting the COVID-19 pandemic. A clearly indication that there was no inventory valuation that was conducted remotely before the COVID-19 pandemic and physical during the COVID-19 pandemic. This posed a great challenge on how to value the company's inventory especially during the COVID-19 crisis.

The last pairwise test  $H_3$  conducted between remote inventory valuation during COVID-19 and physical inventory valuation during COVID-19. Indicates a positive conventional pairwise correlation as the coefficient is 0.26 below 0.5. The results point out to a significant relationship between remote inventory valuation during COVID-19 and physical inventory valuation during COVID-19. The test suggests that there was a serious problem in conducting remote inventory valuation and physical inventory valuation during COVID-19. Remote inventory during COVID-19 was impossible since most companies had not set up infrastructure that facilitates remote inventory valuation and physical inventory valuation was impossible because of the threat the was posed by the COVID-19 pandemic.

In conclusion the Pairwise test  $H_1$ ,  $H_2$  and  $H_3$  suggests that there was no remote inventory valuation, conducted before, and during COVID-19, and no physical inventory valuation that was conducted during COVID-19. The test indicate massive challenges in inventory valuation as no inventory valuation was conducted, this means that the company's inventory valuation during COVID-19 was at high risk of been: undervalued, damaged, stolen, shrinkage, misleading stock valuation, stock obsolesce, stock runouts, over stocking, loss of inventory due to expiry, high costs of holding already in stock inventory, stock piling, high rate of inventory impairment. This brought massive challenges of conducting audits since no actual count of

inventory was done making it difficult to determine the actual inventory that was held in stock. All these challenges gave massive challenges to accountants in the presentation and disclosure of inventory in the financial statements of companies.

#### 5.8.8.2 Spearman's RHO Correlation

Using Spearman's RHO correlation, a weak perfect positive correlation in H<sub>4</sub> was tested, which reveals a significant relationship between sector and challenges with inventory valuation during COVID-19. The results suggest that challenges of inventory valuation differed from sector to sector. The conceivable explanation is that the study constituted of different sectors which included manufacturing and construction government agencies, non-governmental organization, agriculture, hospitality, education, mining, and many others. Evident enough that each sectors experienced different challenges with inventory valuation during COVID-19, which is consistent with a prior study by (Sultana & Sen, 2021), who found that each sector's inventory valuation was affected differently by the COVID-19 pandemic.

According to the prostrate going concern theory business are created with an assumption of continuity of operations, however different from this theory H<sub>5</sub> alludes a significant relationship between sector and evaluation of going concern. Indicating a serious problem between the two variables, showing that evaluation of going concern is so much compromised by sector, entailing that some sectors did not evaluate their going concern during COVID-19. The most plausible explanation is that some companies where some participant's works are not listed on the stock exchange not big enough with, and with little or no international affiliations making then not been mandated to evaluate their going concern, and mostly not in distress to provide notes to its shareholders with regards to their going concern. This assertion is supported by prior studies by (Muqattash, et al., 2022) and (Sultana, et al., 2021), who all indicate that some companies especially those not listed on the stock exchange are uninterested in conducting evaluations of going concern. It is evident some sectors included in the study are not under pressure to conduct evaluation of going concern because of either their size, affiliation with international bodies or are not been listed on the stock exchange.

According to the interpretation theory, it irons out nonconformities in interpretations, clarifications and meaning attached to the information communicated by producers to the users of accounting information, the theory propounds more in bringing out rational behind traditional accounting practice (Donleavy, 2016). However contrary to this view and H<sub>6</sub> there is an

insignificant relationship between sector and inclusion of income tax cuts and subsidies in financial statements.

These findings imply that the inclusion of income tax cuts and subsidies in financial statement is not affected by the sector or type of business. The reasonable explanation is that all companies, are mandated to include income tax cuts and subsidies as it is a traditional accounting practice that must be reported and presented consistently in the financial statement regardless of the sector. Additionally, benefits such as subsidies and deferred tax should be included in FR at all cost as they signal, a well regulated business structure. The insignificance relationship tests entails that most sectors in the study were not consistent in the indication of inclusion of income tax cuts and subsidies in financial statements, the findings are in disagreement with the position of (Sultana, et al., 2021) who found a positive significant relationship between profitability deferred taxes and subsidies, during the COVID-19 pandemic. This indicates that tax deferred, income tax, subsidies, government grants, and distribution of stimulus packages should be presented through FRD as they do have a role to play in profitability.

Accounting structure theory tries to answer why an existing practice is adhered to by accountants, and what should be done at a particular situation. (Masoodi, et al., 2021) gives key guidelines on what should be adhered to on the assessment of the Effect of COVID- 19 related instability on revenue recognition and allowance for bad debts, where accountants are required to use important key decision, which include elements consideration and constraints which need to be estimated, similar to the theory, H<sub>7</sub> reveals an insignificant relationship between education level and assessment of instability on revenue recognition and allowance of bad debts during the pandemic, meaning the education level of the accountants is unaffected by the assessment of instability on revenue recognition and allowance for bad debts. The credible explanation is that many accountants that participated in the study are well qualified and adhere to the accounting structure theory, and the different guidelines that are laid down by various independent regulating bodies such as (ACCA, 2020), (ZiCA, 2022) and ((FASB), 2021), who clearly guide on the assessment of the Impact of COVID- 19 to related instability on revenue recognition and allowance for bad debts. This proves that the target population of the study were practicing accountants who are knowledgeable with accounting practice procedures.

According to COVID-19 pandemic, financial disclosure and legitimacy, and the decision usefulness theories it offers a reporting framework, to communicate with the shareholders, toward managing and maintaining the perspectives of key stakeholders through company disclosure (Sultana, et al., 2021). Contrary to this view H<sub>8</sub> reveals a significant relationship between sector and the disclosure of accounting estimates and liabilities in relation to COVID-19. The results suggest that the disclosure of accounting estimates and liabilities in relation to COVID-19 is generally affected by sector. The plausible explanation is that some of the accountants work in Zambian companies do not comply with legitimacy and decision usefulness theory and are not in pressure to report and disclose some financial information to their stakeholders, because there are smaller in size, have no international affiliation, or perhaps are highly profitable, making disclosure not of a major factor to them. This position is consistent with the findings of (Kabwe, et al., 2021) who in their studies concluded that, companies that are larger in size are more pressured in disclosing more information in comparison to smaller firms, the reason is that larger companies have larger shareholder diversity, stakeholder demand and lower information processing costs. Additionally, companies that are more profitable do not disclose detailed information.

According to the Technology Acceptance Model (TAM) it explains the behavior of users in accepting technology, it clarifies the user behavior across end-user computing technologies. Similar to the TAM theory, H<sub>9</sub> reveal an insignificant relationship between sector and the enhancement of accounting technology following COVID-19. These results suggest that technology is not compromised by sector. The justification is that many companies during the COVID-19 pandemic in Zambia adopted the use of accounting technology, as it was a main tool that was used to reduce human to human contact, thus limiting the spread of the COVID-19 pandemic. These findings are consistent with prior studies by (Jabin, 2021), (Spratt School of Business, 2022), (Hossain, 2021) and (Papadopoulou & Papadopolou, 2020), Who all found a significant association between company and adoption of accounting technology. This is so because regardless of the size of the company technology is of significant importance and very appropriate during and after the COVID-19 pandemic. The importance of technology in Zambian companies cannot be underestimated especially during the pandemic, where the rapid expansion of technology has pushed more companies to accept the use of accounting technology which is evident in the massive expansion of technology, which is reaping substantial benefits

from its use mainly in emergency periods such as the COVID-19 crisis (Mwiiya, 2020). Accounting technology has been very crucial in the fight of the COVID-19 pandemic in the AP, the massive evolvement of technology has caused many companies to invest heavily in technology.

Contrary to the Technology Acceptance model, H<sub>10</sub> reveals a significant relationship between Sector and Adoption of cloud accounting, artificial intelligence, data analytics & forecasting and block chain during COVID-19. The results imply that the adoption of cloud accounting, artificial intelligence, data analytics & forecasting and block chain is compromised by sector. The findings suggest that the adoption of cloud accounting, artificial intelligence, data analytics & forecasting and block chain has not been adopted by many companies in Zambia because they require advanced latest technologies, which involve massive investment, and highly qualified skilled technicians to handle, consequently many companies in Zambia cannot manage because of their size and lack of resources, to add on ,Zambia is a developing country which has deprived technological advancements and a poor adoption of cloud technology, artificial intelligence, data analytics & forecasting and block chain, similar to other prior studies by (Mwiiya, 2020) and (Jeremiah, et al., 2019) conducted in Zambia and Nigeria both developing countries, but contrary to the findings of (Hong, 2021), (Comulese, et al., 2019) (Jabin, 2021), (Sultana, et al., 2021) , and (Sprott School of Business, 2022) who found an rapid expansion and adoption of cloud accounting, artificial intelligence, data analytics & forecasting and block chain in their respective developed countries.

According to the Health Belief Model (HBM) one's self beliefs about health conditions play a role in determining one's health-related behaviors, it shows that the health related conditions and risks often change people's behavior, this view is similar to H<sub>11</sub>, whose results reveal that there is a significant relationship between Job Level and conducting of meeting using video conference, /zoom/google during COVID-19. Signifying that the conducting of meetings using video conferences, /zoom/google during COVID-19 was affected by Job level of the accountants. The feasible explanation is that some Job levels do not require much use of technology compared to other Job levels. However, the studies suggest that most of the participants' health behavior changed during COVID-19, as there was an increase in demand in the use of f remote working, and technology with the view of minimizing human to human contact. Other prior studies by (Jabin, 2021), (Hong, 2021), (Papadopoulou & Papadopolou,

2020) and (Sprott School of Business, 2022), found an increase in the Conducting of meeting using video conference, /zoom/google during COVID-19 than before COVID-19 indicative of a change in health behavior.

H<sub>12</sub> reveals an insignificant relationship between Job Level and Increase of Cyber Security Levels. The finding imply that job level does not compromise cyber security, this is so because cybercrime is present regardless of job levels in an organization, these results are consistent with the findings of (Jabin, 2021), who reveals a positive significant relationship between increase in cyber security during COVID-19 as opposed to before COVID-19. The increase in cyber security has arouse mostly because of the immense use of technology and cloud computing. It is because of cyber security concerns that in Zambia cloud computing is besieged in growth. The major cybersecurity threats that are encountered by most employees in different job levels in Zambia include confidentiality, integrity and authentication data, (Mwiiya, 2020). H<sub>13</sub> reveals a significant, relationship between age and challenges faced for remote working during COVID -19. The significant relationship implies that the challenges faced in remote working vary according to age. The plausible reason is that the older age group of accountants faced challenges working from home perhaps because of family pressures, that often distracts their remote work. On the other hand, the young age group of accountants did not face much challenges working remotely, because of their family size and lack of distraction when remote working.

Generally, the results suggest that most accountants in Zambia found working remotely challenging consistent with the findings of (Jabin, 2021), and (Papadopoulou & Papadopolou, 2020), who all indicate that many accountants faced challenges from working remotely, due to security concerns, low management commitment to provide necessary materials for remote working, shortage of skilled technology experts, security and privacy concerns, difficulties in adapting to remote working, lack of physical social interaction with fellow colleagues, and cloud security challenges which can be categorized as inherited from the technology being used, and those that stem from the multi-tenancy nature of cloud computing and poor cloud security management.

### 5.9 Chapter Summary

The Chapter presented the discussion of findings from data that was collected from 152 practicing accountants in Zambia. The discussion of findings has been backed by various literature that has been written by various authors.

## CHAPTER 6

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 6.1 Conclusion.

The present study investigated the effect of COVID-19 on the AP. The study showed that the AP has been adversely affected by the COVID-19 Pandemic. The conclusion has been reached, through examining the effect of the pandemic in three fold namely: Effect of COVID-19 on inventory valuation; Effect of COVID-19 on financial reporting and disclosure; and accounting technological trends resulting from COVID-19 pandemic. It has been concluded that:

Inventory valuation was adversely impacted during the COVID-19 pandemic, many companies faced massive challenges in inventory valuation in the COVID-19 period, because of company closures and government restriction, which restricted physical verification of inventory, and accelerated, drastic impairment of inventory. The present study concludes that each sectors encountered different challenges of inventory valuation depending on the nature of the business; The study reveals that different sectors also faced different discrepancies in financial reporting and disclosure, many sectors did not completely disclose financial information in the COVID-19 period. A significant association between firm size and disclosure of financial information, was established concluding that smaller companies did not disclosure financial information fully, whereas bigger companies disclosed financial information during the COVID-19 period; Technology advancements was more eminent following COVID-19, showing that despite the negatives of the COVID- 19 pandemic, to the AP technology enhancement was a positive. The study established a significant relationship between sector and adoption of cloud accounting, artificial intelligence, data analytics & forecasting and block chain indicating that companies that are bigger in size were quick to adopt cloud accounting, artificial intelligence, data analytics & forecasting and block chain than smaller companies. Notably accounting practical's adopted to remote working and using of new technologies. The fast adoption of technology in the AP in Zambia has exposed accountants to cyber-attacks threats which has threatened the operations of accountants in Zambia.

The study also showed some conflicting results with other similar studies which can be attributed to differences in jurisdictions of the studies. Taking into consideration that the impact of COVID-19 on the AP varied between developing and developed countries.

## 6.2 Recommendations

Through the findings of the study the following recommendations have been reached.

There is no doubt that the impact of the pandemic on the AP will persist in future. It is imperative that accounting regulatory bodies are on high alert, on regulation of the AP during interruptive events, guidelines should be given on how to handle encountered events such as the COVID-19 pandemic.

There is need for inclusion of new IFRS notes in financial reports that will recognize uncertainties that may occur and affect reporting, in emergence period. The notes will help stakeholders have a complete view on how their companies have been impacted by a major interruptive event.

Accountants should therefore be in the capacity to anticipate any issues in accounting that can arise, thus the accountant should be able to collect timely data and know how to apply the situation concisely, to keep the business afloat during business interruptions.

Companies should enhance the adoption of remote inventory valuation, which can be a major weapon in times of business interruption such as COVID-19. Investing in facilities that enhance quality inventory valuation will reduce reporting delays and enhance timely reports of company's financial assets.

Company's should consider outsourcing external auditors, to review the company's financial reports that were produced in the COVID-19 period, this will ensure that all the financial errors that were inherited in the COVID-19 period are acted upon to avoid manipulation of financial statements by accountants and company CEOs.

The AP should take advantage of the impact of COVID-19 to gain experience, through enhancing innovation and exceptional management, so as to avert maladministration of similar events as the COVID-19 pandemic. it is therefore important that companies put in place exceptional risk management strategies to avoid such situations.

Accountants and accounting professionals are the key assets in a company as such organizations should put in place management systems and procedures that safeguards its employees from exposure to diseases at their work places, as such it's important that in situation of pandemics public health advise and government assistance is sought.

Additionally, it is vital that accountants maintain management of continuity in their operations, so as to adjust all activities to upholding company continuity, where business face major business interruptions.

It is also essential that future policies are developed to support the adoption of technology such as cloud accounting, automated accounting, artificial intelligence (AI), data analytics & forecasting and block. Policies that companies should consider are cyber security policy, cloud implementation policy and cloud governance policy which can be implemented.

### 6.3 Recommendations for Other Studies

Future research should focus on the financial adaptability of companies post COVID-19 and the adoption of cloud computing in the AP.

## REFERENCES

1. (FASB), F. A. S. B., 2021. MEDIA ADVISORY 12-22-21, s.l.: <https://www.fasb.org/Page/ProjectPage?metadata=fasb-ConceptualFramework—Presentation-022820221200>.
2. (ZBSR), Z. B. S. R., 2020. the Impact of Covid-19 on Zambian Enterprises., Lusaka Zambia: REPUBLIC OF ZAMBIA..
3. Abbas, J. et al., 2021. Exploring the impact of COVID-19 on tourism: transformational potential and implications for a sustainable recovery of the travel and leisure industry.. 1(1), pp. 1-20.
4. Abraham, C. & Sheeran, P., 2011. The health belief model. United Kindom : Macgregor publishers.
5. ACCA, 2016. Practiseal accountants – the future. Drivers of change and future skills.
6. ACCA, 2020. Technical factsheet Accounting for Covid 19 Grant and Relifes , s.l.: ACCA think ahead .
7. ACCA, 2020. The impact of Covid-19 on Audit and Assurance – challenges and considerations, s.l.: <https://www.frc.org.uk/about-the-frc/covid-19/covid-19-bulletin-march-2020>.
8. Alao, B. & Lukman, G., 2021. Coronavirus Pandemic and Business Disruption: The Consideration of Accounting Roles in Business. Revival. International Journal of Academic, 4(5), pp. 132-140.
9. Alexander, et al., 2020. Severe acute respiratory syndrome-related coronavirus:. Covid 19, 1(1), pp. 1-14.
10. Ali, O. & Soar, J. Y. J., 2016. Cloud Computing Adoption Models; An investigation of the challenges and issues. Journal of Information Security and Application, pp. 19-34.
11. Alvarez-Placencia, Sánchez-Partida, D., Cano-Olivos, P. & Martínez-Flores, J. L., 2020. Inventory management practices during COVID 19 pandemic to maintain liquidity increasing customer service level in an industrial products company in Mexico. Advances in Science, Technology and Engineering Systems, 5(6), pp. 613-626.
12. Amzat, m., Aminu, K., Kolo, V. I. & Adenike A. Akinyele, 2020. Coronavirus Outbreak in Nigeria: Burden and Socio-Medical Response. International Journal of Infectious Diseases, pp. 1-23.
13. Amzat, m., Aminu, K., Kolo, V. I. & Adenike A. Akinyele, 2020. Coronavirus Outbreak in Nigeria: Burden and Socio-Medical Response. International Journal of Infectious Diseases, pp. 1-23.
14. Baecht, M., 2012. 21 Century Accounting Skills. Retrieved from <https://prezi.com/chpuctayycwj/21st-century-accounting-skills>.
15. Bakarich, K. M., Marcy, A. S. & O'Brien, P. E., 2021. Pandemic Perceptions Accounting Firms' Organizational Support during COVID-19. The CPA Journal , 91(2/3), pp. 17-19.
16. Bank of Zambia, 2021. Monetary Policy Announcement, Lusaka Zambia: BOZ.

17. Beaver, S., 2021. 15 Accounting Trends to pay attention in 2021. Business Solution Articles, pp. 1-7.
18. Berkmana, H. & Malloch, H., 2021. stock valuation during the COVID-19 pandemic: An explanation using. New Zealand : The University of Auckland Business School, New Zealand.
19. Blokdyk, G., 2021. Inventory valuation Complete Self-Assessment Guide. Birmingham United Kingdom : s.n.
20. Bray, M. & Chapman, M., 2020. What does an Integrated Report look like. KPMG INTERNATIONAL , pp. 1-15.
21. Brunelli, L., 2015. What is an Accountant.  
<http://workathomemoms.about.com/od/accountingfinancial/g/accountant.htm>.
22. Buyya, R. et al., 2009. computing and emerging IT platforms : Vision , hype , and reality for delivering. Future Generation Computer Systems,, 25(6), pp. 599-616.
23. CIMA, 2015. Management Accounting; Study Notes , Wokingham, Berkshire: Kaplan Publishing UK.
24. CMA, C. C., 2021. New Accounting Trends in 2020. International accounting Articles, 1(1), pp. 1-12.
25. CMA, C. C., 2021. New Accounting Trends in 2020. International accounting Articles, pp. 1-12.
26. Common Market for Eastern and Southern Africa, (., 2020. SOCIO-ECONOMIC IMPACTS EVIDENCE FROM COMESA REGION, Tanzania: Comesa.
27. Comulese, Gabriela, C., Socoliuc. & Mihaela-Ionela, E., 2019. ACCOUNTANCY PRACTICE IN THE 21ST CENTURY. EUROPEAN JOURNAL OF ACCOUNTING, FINANCE & BUSINESS, IX(XIX), pp. 1-5.
28. Correa, C. & Larrinaga, C., 2011. "Engagement research in social and environmental accounting". Sustainability Accounting, Management and Policy Journal, pp. 265-368.
29. Davis, S., 2015. What Roles does an Accountant Play in Business Oparations.  
<http://smallbusiness.chron.com/role-accountant-play-business-operations-411.html>.
30. Diaconu, P., 2020. Impact of Globalization on International Accounting. Available:  
<https://ssrn.com/abstract=958478>. DOI:, pp. 1-6.
31. Donleavy, G., 2016. An Introduction to Accounting Theory , Austrial : University of Western Minister .
32. El-Mousawi, H. & Kanso, H., 2020. Impact of COVID-19 Outbreak on Financial Reporting in the Light of the International Financial Reporting Standards (IFRS). Research in Economics and Management , 5(2), pp. 21-38.
33. EY Global, 2022. Zambia issues additional fiscal measures to mitigate the impact of COVID-19, Lusaka Zambia: Zambia issues additional fiscal measures to mitigate the impact of COVID-19.

34. FASB, F. A. S. B., 2021. MEDIA ADVISORY 12-22-21, s.l.:  
<https://www.fasb.org/Page/ProjectPage?metadata=fasb-ConceptualFramework—Presentation-022820221200>.
35. French, C., 2005. Computer Science 5th Edition. British: British Catalogy in Publication data.
36. Geda, A., 2021. The Economic and Social Impact of COVID-19 in Zambia. UNCTAD Research Paper No. 79, pp. 1-27.
37. GGKP Research Committee on Trade and Competitiveness, 2015. MEASURING ENVIRONMENTAL ACTION AND ECONOMIC PERFORMANCE IN DEVELOPING COUNTRIES, Norway: Green Growth knowledge platform.
38. Global Reporting Initiative, G., 2017. The GRI Standards: for Sustainability Reporting, Amsterdam: Barbara Strozziilaan.
39. Gondwe, G., 2020. Assessing the Impact of Covid 19 on Africa's Economic development, South Africa: United Nation Confrence on Trade and Development.
40. Gray, R., 2008. Social and Environmental Accounting and From Ridicule to Revolution. Issues in Social and Environmental Accounting, 1 January , pp. 1-15.
41. Gray, R., 2005. Taking A Long View On What We Now Know About Social And Environmental Accountability. Centre for Social and Environmental Accounting Research, 28 April , pp. 1-15.
42. Guesmi, K., Saadi, S., Abid, I. & Ftiti, Z., 2019. ortfolio diversification with virtual currency: Evidence from bitcoin.. International Review of Financial Analysis,, Volume 63, pp. 431-437.
43. Hamouche, S., 2021. Human resource management and the COVID-19 crisis:implications, challenges, opportunities, and future. Faculty of Management, Canadian University Dubai, Dubai, UAE, pp. 1-16.
44. Hawison, B., 2003. Accounting practice in the new Millenium is Accounts education ready to meet the Challenge. The British Accounting Review, pp. 1-36.
45. Helzer, W. & Mindak, M., 2021. Covid 19 and the Accounting Proffession. Journal of Accounting, Ethics & Public Policy, 22(1), pp. 155-205.
46. Herrmann, F. F., Barbosa-Povoa, A. P., Butturi, M. A. & S. M. a. M. A. S., 2021. Green Supply Chain Management: Conceptual Framework and Models for Analysis. Sustainability Review, pp. 1-20.
47. Hong, B. B. a. E., 2021. The Accountancy Practice in the New Normal. International Federation of Accountants, pp. 1-5.
48. Hossain, D. A., 2021. The Impact of Covid-19 on Accounting Practice. Graduate student, Department of Accounting and Information Systems University of Dhaka, pp. 1-4.
49. Ibn-Mohammed, T. et al., 2021. A critical analysis of the impacts of COVID-19 on the global economy and ecosystems and opportunities for circular economy strategies. National Library of Medicine, pp. 102-121.
50. IESBA, 2010. Accounting, the Accountant and the Growth of Business,. Agenda Paper 7-B.

51. Ilemona, Alfred, S., S & Nwite, 2020. ENVIRONMENTAL ACCOUNTING PRACTICE, REPORTING AND SOCIAL RESPONSIBILITY PERFORMANCE EVIDENCE FROM MANUFACTURING FIRMS IN NIGERIA. *Journal of international Accounting Research*, April, pp. 54-58.
52. Ilesanmi, O. S., Abayomi Akande & Afolabi, A. A., 2020. Overcoming COVID-19 in West African countries: is herd immunity an option?. *Pan African Medical Journal*, 28 October , pp. 1-28.
53. International Federation of Accountants, 2020. *Accountancy Skills Evolution: Impact of COVID-19 & the Path Forward*, United Kingdom: International federation of Accountants.
54. International Federation of Accountants, 2021. *Accountancy Skills Evolution: Impact of COVID-19 & the Path Forward*. IFAC, pp. 1-5.
55. Jabin, S., 2021. The Impact of COVID- 19 on the Accounting Practice in Bangladesh. *Journal of Industrial Distribution & Business* , 12(7), pp. 7-14.
56. Jabin, S., 2021. The Impact of COVID- 19 on the Accounting Practice in Bangladesh. *Journal of Industrial Distribution & Business*, 14 7, pp. 1-8.
57. Jabotinsky, H. Y. & Sarel, R., 2021. How Crisis Affects Crypto Coronavirus As a Test Case.. Available at SSRN 3557929..
58. James, P. M., 2003. Disclosure and Co-oprate social Environment. *Journal of Coporate and Social Accounting*, 2(1), pp. 20-56.
59. Jeremiah, Ofonime, Daferighe & Emeakponuzo, E., 2020. The Evolving Dimensions Of The Accounting Practice And The. *Archives of Business Research*, 7(5), pp. 1-8.
60. Jeremiah, O. O., Emeakponuzo, E. & Daferighe., 2019. The Evolving Dimensions Of The Accounting Practice And The 21st Century. *Archives of Business Research*, 7(5), pp. 226-232.
61. Kabwe, M., Mwanaumo, E. & Chalu, H., 2021. Antecedents of IFRS Compliance: The Moderating Effect of Audit Quality. *Journal of Finance and Accounting*, Vol 9(No 6), pp. pp 216-229. .
62. Kapasa, G. & Sakyi, K., 2019. Building sustainable supply Chain Investment Decison Through financial Analysis- Case study of Lusaka SMEs.. *American Scientific Research Journal of Engineering, Technology and Sciences*, 59(1), pp. 81-92.
63. Khan, S. Y., Khawaja, A. A. A., Gheblehzadeh, M. & Kidwai, O. K., 2021. IMPACT OF COVID-19 ON PRICE VOLITALITY. *International Journal of Management (IJM)*, 12(3), pp. 193-203.
64. Klein, A. & Smith, E., 2021. Explaining the economic impact of COVID-19: Core industries and the Hispanic workforce, Mexico: Covid 19 Impacts.
65. KPMG, 2021. mpact of COVID-19 on the Going Concern Assessment and Disclosures,. [online], <http://home/kmpg/xxhome/2020/03/covidgoingconcern-3ahtml>, p. Accessed (21 Feburaury 2023).

66. Mano, B., Wilson, R., Khazaei, B. & Hirsch, L., 2016. Enablers and barriers of Cloud Adoption Among Small and Medium Enterprises in Tabu. s.l., International Conference on Cloud Computing in Emerging Markets.
67. Maria Papadopoulou & Papadopoulou, S., 2020. The Accounting Practice Amidst the Covid 19 Pandemic. *International Journal of Accounting and Financial Reporting*, 10(2), pp. 39-59.
68. Masoodi, H., Al-Kawaz, S. & Abbas, 2021. Accounting Readings During the Time of Covid-19. *International Journal of Multicultural and Multireligious Understanding* , 7(5), pp. 158-166.
69. Mattern, C. a., 2020. The Impacts of Covid 19 in the Accounting Profession. *Business Review*, 1(1), pp. 8-12.
70. Melnyk, N. et al., 2020. ACCOUNTING TRENDS IN THE MODERN WORLD. *INDEPENDENT JOURNAL OF MANAGEMENT & PRODUCTION (IJM&P)*, 11(9), pp. 2403-2416.
71. Merchant, G., 2013. Management Accounting in the 21st Century. *Journal of Applied management Accounting Research* , 11(2), pp. 1-4.
72. Merick & Steven, C., 2021. Financial Analysis. *Coprate Finance and Accounts*, 20 February, pp. 3-10.
73. Ministry of the Environment Japan Government, 2003. Environmental Reporting Guidelines Tentative Translation, Japan: Japan Government Printers.
74. MOH, M. o. H. Z., 2022. Covid 19 Update April 11, Lusaka: MOH.
75. Muqattash, R., Kolsi, M. C. & Al-Hiyari, A., 2022. Financial reporting considerations in response to the COVID-19 pandemic: empirical evidence from the evidence from the UEA accounting Professionals. *Accounting, Auditing and Performance Evaluation*, x(x,xxxx), pp. 1-18.
76. Mwiiya, N. W., 2020. A SECURE CLOUD COMPUTING ADOPTION FRAMEWORK, Kabwe Zambia: Unpublished Master's Thesis Mulungushi University.
77. Mwiiya, N. W., 2020. A SECURE CLOUD COMPUTING ADOPTION FRAMEWORK, Kabwe Zambia: Mulungushi University.
78. Nexia, A., 2020. Accounting in the 21st Century, s.l.: [ps://nexia.com.au/accounting-in-the-21st-century/#:~:text=Accounting%20in%20the%2021st%20Century%20incorporates%20the%20best%20of%20traditional,and%20simultaneously%20](https://nexia.com.au/accounting-in-the-21st-century/#:~:text=Accounting%20in%20the%2021st%20Century%20incorporates%20the%20best%20of%20traditional,and%20simultaneously%20).
79. Nixon, P., 2020. Soft skills and your future as an accountant. *A Plus. Hong Kong Institute Certified Accountant*, pp. 234-256.
80. Olaru, M. A., 2014. Advantages and challenges of adopting cloud computing from an Enterprise Perspective. *Procedia Technology*, Volume 12, pp. 529-534.
81. Ozdogan, B. (., 2017. The Future of Accounting Practice in an Era of Start-Ups.. *Accounting and Corporate Reporting - Today and Tomorrow.*, Issue . DOI:.
82. Papadopoulou, S. & Papadopolou, 2020. The Accounting Practice Amidst the Covid 19 Pandemic. *International Journal of Accounting and Financial Reporting*, 10(2), pp. 39-59.

83. Percy, H., 2018. Accounting and Finance Data Security. *Business review Journal* , pp. 8-12.
84. Ram, D. M. & Tapria, D. R., 2019. ACCOUNTING THEORY: CONCEPT AND IMPORTANCE. *International Journal of Education, Modern Management*, 1(2), pp. 129-134.
85. Rani Channamma Univeristy, 2017. Accounting Theory. B.Com – 2nd Semester ed. s.l.:s.n.
86. Reuters, T., 2022. Accounting Technology: What is is and how it works. *Tax and Accounting*, Volume Accessed (03/11/2023: Time 09:15), pp. ax.thomsonreuters.com/blog/accounting-technology-what-it-is-and-how-it-works/#:~:text=What%20is%20accounting%20technology%3F,7%20via%20cloud-based%20software..
87. Rinaldi, L., 2021. Accounting and the COVID-19 pandemic two years on: insights, gaps, and an agenda for future research.. *Accounting Forum*.
88. Rob Gray, 2009. Social and Environmental Accounting and Reporting: From Ridicule to Revolution? From Hope to Hubris? - A Personal Review of the Field. *Social and Environmental Accounting Research*,, pp. 1-7.
89. Savage, D. E., Ligon, P. J. & Lomsek, J., 2001. *Environmental Management Accounting Policies and Linkages*, New York : United Nations .
90. Sacred Heart University Library, 2020. Organising Research Papers, s.l.: ibrary.sacredheart.edu/c.php?g=29803&p=185919#:~:text=The%20theoretical%20framework%20is%20the,research%20problem%20under%20study%20exists..
91. Smith, M., 2011. *The Father of Accounting*. Retrieved from <http://aaahq.org/southwest>.
92. Sprott School of Business, 2022. COVID-19 and the accounting Practice: The impact, the challenges, the future. Canada: Carleton University.
93. Sultana, R., Ghosh, R. & Sen, K. K., 2021. Impact of COVID-19 pandemic on financial reporting and disclosure. *AJEB*, pp. 118-140.
94. Sultana, R. & Sen, R. G. a. K. K., 2021. Impact of COVID-19 pandemic on Fianancial Reporting and disclosure Practice: Emprical evidence from Bangladesh. *AJEB*, 6(1), pp. 122-139.
95. Swaen, B. & George., T., 2019. *What Is a Conceptual Framework*. Thesis and Dessertation , pp. 1-9.
96. Thornton, G., 2021. New development Summary. Covid 19 Accounting and finance considerations , 04 January , pp. 1-37.
97. Treasury, 2021. *Guidance on Likely Impacts of COVID-19 for Inventories*, s.l.: NSW Governmnet Treasury .
98. UNISA, 2013. *The History of Accounting*. <http://www.library.unisa.edu.au/about/exhibitions/historyacc.aspx> .
99. Villers, R., 2010. The incorporation of soft skills into accounting curricula: preparing Accounting graduates for their unpredictable futures. *Meditari Accountancy Research* , pp. 1-22.

100. Wei, H. C., 2008. Globalisation and Its Effects On Accountants. *Asian Journal of Accounting Perspective*, pp. 81-84.
101. Whitehead, W., 2006. Its not easy been Green. *Harvard business review* , 02(01), pp. 46-52.
102. WHO, W. H. O., 2021. COVID 19 NUMBERS, Geneva Sweden: WHO.
103. World Health Organisation WHO, 2021. West Africa COVID-19 deaths surge amid Ebola and other outbreaks, Ghana: World Health Organisation.
104. World Health organisation WHO, 2022. Impact of COVID-19 on people's livelihoods, their health and our food systems, Switzerland: World Health organisatio.
105. World Health Organisation, 2022. Impact of COVID-19 on people's livelihoods, their health and our food systems, Switzerland: World Health organisatio.
106. Wyatta.A .R, 2004. Accounting Practicealism - They Just Don't Get It!. *Accounting Horizons*, 18(1), pp. 45-53.
107. Yuanyan, S. & Pipin, S., Febuary 2022. The Accounting Practice and the Pandemic Temporary and Long-term Changes. *CPA Journal* , pp. 1-10.
108. Zambanker, 2020. BoZ responds to deteriorating Macro economic Environment and Covid 19. *A Bank of Zambia Journal* , pp. 1-44.
109. Zambia Revenue Authority, 2022. Tax Amnesty, Lusaka Zambia : ZRA.
110. Zhang, Xiong, f. y. & x., f., 2020. The Impact of Artificial and Blockchain in the Accounting Proffession. . *IEEE Access*,, 3(1), pp. 24-24.
111. ZiCA, Z. I. o. C. A., 2022. BUSINESS COUNCIL COVID19 EMERGENCY TASKFORCE (BCCET), s.l.: <https://www.zica.co.zm/covid19/>.
112. ZiCA, Z. I. o. C. A., 2022. BUSINESS COUNCIL COVID19 EMERGENCY TASKFORCE (BCCET), s.l.: <https://www.zica.co.zm/covid19/>.

## APPENDICES

### QUESTIONNAIRE.



THE UNIVERSITY OF ZAMBIA

GRADUATE SCHOOL OF BUSINESS

### QUESTIONNAIRE

#### **TOPIC: THE EFFECT OF COVID-19 ON THE ACCOUNTING PRACTICE IN ZAMBIA**

##### **CONSENT:**

Dear Respondent,

I am **Temwani Zulu** a postgraduate student at University of Zambia, pursuing a Master's of Science in Accounting and Finance. I am carrying out a research on "*The Effect of COVID-19 on the Accounting Practice in Zambia*". I am in the process of data collection which will be used for my dissertation. Therefore, you have been randomly selected to help in providing information on this study. Please be assured that any information provided in this questionnaire will be strictly used for research purposes and will be treated in confidential manner.

The success of this research depends on your co-operation and the correctness of the information you provide in the spaces provided. I therefore, kindly request you to fill in this questionnaire. Thank you for your time and cooperation

## INSTRUCTIONS

- Do not write your name or any identification mark on this questionnaire to ensure anonymity
- You are required to tick the option that is applicable to you.
- Answer all questions.

### SECTION A: GENERAL INFORMATION (Please fill in by ticking in the appropriate box)

1. Select name of your industry or sector:

- a. Manufacturing and construction     b. Government/Agency     c. NGO   
d. Agriculture     e. Hospitality     f. Education     g. Mining   
h. Travel and logistics     I. Financial/Practical Services    j. rs\_\_\_\_\_

2. Indicate your Gender: Male     Female

3. Indicate your age: a) 18-25     b) 25-30     c) 31-40     d) 41-45     e) 46-50   
f) 51-60

4. How long have you been practicing as an accountant?

0-5 years     5-10 years     10- 15 years     16 years and above

5. Indicate the level of Job position:

Operational     Strategic     Management     Senior management

6. Education Level

Certificate     Diploma     Degree     Master's Degree     PHD

**SECTION B: EFFECTS OF COVID-19 ON INVENTORY VALUATION** (Kindly tick where appropriate)

| Statement  | Strongly Disagree<br>(1) | Disagree<br>(2) | Not Sure<br>(3) | Agree<br>(4) | Strongly Agree<br>(5) |
|--|--------------------------|-----------------|-----------------|--------------|-----------------------|
| 7. Conducted inventory/Stock valuation <b>remotely</b> before COVID-19 in your organization.     |                          |                 |                 |              |                       |
| 8. Conducted <b>physical</b> inventory/stock valuation during COVID-19 in your organization.     |                          |                 |                 |              |                       |
| 9. Conducted inventory/Stock valuation <b>remotely</b> during COVID-19 in your organization.     |                          |                 |                 |              |                       |
| 10. Faced <b>challenges</b> with inventory/stock valuation during COVID-19 in your organization. |                          |                 |                 |              |                       |

**SECTION C: EFFECTS OF COVID-19 ON FINANCIAL REPORTING AND DISCLOSURE** (Kindly tick where appropriate)

| Statement  | Strongly Disagree<br>(1) | Disagree<br>(2) | Not Sure<br>(3) | Agree<br>(4) | Strongly Agree<br>(5) |
|--|--------------------------|-----------------|-----------------|--------------|-----------------------|
| 11. Evaluated before publishing the financial statements the going concern in relation to COVID-19?  |                          |                 |                 |              |                       |
| 12. Included income tax cuts and other subsidies that government introduced to lessen the effects of the COVID-19 pandemic on your organization in the financial statements? <i>Leave blank if not applicable.</i> |                          |                 |                 |              |                       |
| 13. Assessed the effect of COVID-19 related instability on the revenue recognition and allowance for bad debts.  |                          |                 |                 |              |                       |
| 14. Disclosed in the financial statements critical accounting estimates of assets and liabilities in relation to COVID-19.   |                          |                 |                 |              |                       |

**SECTION D: EXAMINE THE ACCOUNTING TECHNOLOGICAL TRENDS RESULTING FROM COVID-19 PANDEMIC (Kindly tick where appropriate).**

| Statement  | Strongly Disagree<br>(1) | Disagree<br>(2) | Not Sure<br>(3) | Agree<br>(4) | Strongly Agree<br>(5) |
|--|--------------------------|-----------------|-----------------|--------------|-----------------------|
| 15. Enhanced the use of accounting technology following COVID-19 in your organization.   |                          |                 |                 |              |                       |
| 16. Adopted the use of technology such as Cloud Accounting, Automated Accounting, Artificial Intelligence (AI), Data Analytics & forecasting and Block chain during COVID-19 in your organization. |                          |                 |                 |              |                       |
| 17. Conducted meetings through video conference/zoom/google during COVID-19 pandemic in your organization.   |                          |                 |                 |              |                       |
| 18. Cyber security levels were increased following COVID-19 in your organization.  |                          |                 |                 |              |                       |
| 19. Faced challenges using new technology for working remotely before and during COVID-19 pandemic in your organization.   |                          |                 |                 |              |                       |

## BUDGET

| Activity   | Amount      |
|--|-------------|
| Proposal writing and Presentation                | 300         |
| Literature Review and Questionnaire Preparations | 300         |
| Ethical Clearance                                | 2000        |
| Data Collection                                  | 2000        |
| Data Analysis                                    | 1000        |
| Presentation of Research Findings                | 1000        |
| Draft Presentation of the research               | 1000        |
| Final Presentation of the Research               | 1000        |
| <b>Total</b>                                     | <b>8600</b> |

ETHICAL CLEARANCE FORMS



**THE UNIVERSITY OF ZAMBIA**  
**DIRECTORATE OF RESEARCH AND GRADUATE STUDIES**

Great East Road Campus | P.O. Box 32379 | Lusaka10101 | Tel: +260-211-290 258/291 777 Fax: (+260)-211-290 258/253 952 | E-mail: [director.drgs@unza.zm](mailto:director.drgs@unza.zm) | Website: [www.unza.zm](http://www.unza.zm)

**APPROVAL OF STUDY**

***IORG No. 0005376***

***HSSREC IRB No. 00006464***

18<sup>th</sup> November, 2022

**REF NO. HSSREC:-2022-NOV.004**

Mr. Temwani Zulu,  
The University of Zambia  
Graduate School of Business,  
P.O. Box 32379,  
**LUSAKA.**

Dear Mr. T. Zulu,

**RE: “THE IMPACT OF COVID 19 ON THE ACCOUNTING PRACTICE IN ZAMBIA”**

Reference is made to your submission of the protocol captioned above. The HSSREC resolved to approve this study and your participation as Principal Investigator for a period of one year.

| <b>REVIEW TYPE</b>        | <b>ORDINARY REVIEW</b>                            | <b>APPROVAL NO. HSSREC:-2022-NOV.004</b>        |
|---------------------------|---|---|
| Approval and Expiry Date  | Approval Date:<br>18 <sup>th</sup> November, 2022 | Expiry Date:<br>17 <sup>th</sup> November, 2023 |
| Protocol Version and Date | Version - Nil.                                    | 17 <sup>th</sup> November, 2023                 |

|   |                                   |                |
|---|-----------------------------------|----------------|
| Information Sheet,<br>Consent Forms and Dates | <input type="checkbox"/> English. | To be provided |
| Consent form ID and Date                      | Version - Nil                     | To be provided |
| Recruitment Materials                         | Nil                               | Nil            |
| Other Study Documents                         | Questionnaire.                    |                |
| Number of Participants<br>Approved for Study  |                                   |                |

Specific conditions will apply to this approval. As Principal Investigator it is your responsibility to ensure that the contents of this letter are adhered to. If these are not adhered to, the approval may be suspended. Should the study be suspended, study sponsors and other regulatory authorities will be informed.

### **CONDITIONS OF APPROVAL**

- No participant may be involved in any study procedure prior to the study approval or after the expiration date.
- All unanticipated or Serious Adverse Events (SAEs) must be reported to HSSREC within 5 days.
- All protocol modifications must be approved by HSSREC prior to implementation unless they are intended to reduce risk (but must still be reported for approval). Modifications will include any change of investigator/s or site address.
- All protocol deviations must be reported to HSSREC within 5 working days.
- All recruitment materials must be approved by HSSREC prior to being used.
- Principal investigators are responsible for initiating Continuing Review proceedings. HSSREC will only approve a study for a period of 12 months.
- It is the responsibility of the PI to renew his/her ethics approval through a renewal application to HSSREC.
- Where the PI desires to extend the study after expiry of the study period, documents for study extension must be received by HSSREC at least 30 days before the expiry date. This is for the purpose of facilitating the review process. Documents received within 30 days after expiry will be labelled “late submissions” and will incur a penalty fee of K500.00. No study shall be renewed whose documents are submitted for renewal 30 days after expiry of the certificate.
- Every 6 (six) months a progress report form supplied by The University of Zambia Humanities and Social Sciences Research Ethics Committee as an IRB must be

filled in and submitted to us. There is a penalty of K500.00 for failure to submit the report.

- When closing a project, the PI is responsible for notifying, in writing or using the Research Ethics and Management Online (REMO), both HSSREC and the National Health Research Authority (NHRA) when ethics certification is no longer required for a project.
- In order to close an approved study, a Closing Report must be submitted in writing or through the REMO system. A Closing Report should be filed when data collection has ended and the study team will no longer be using human participants or animals or secondary data or have any direct or indirect contact with the research participants or animals for the study.
- Filing a closing report (rather than just letting your approval lapse) is important as it assists HSSREC in efficiently tracking and reporting on projects. Note that some funding agencies and sponsors require a notice of closure from the IRB which had approved the study and can only be generated after the Closing Report has been filed.
- A reprint of this letter shall be done at a fee.
- All protocol modifications must be approved by HSSREC by way of an application for an amendment prior to implementation unless they are intended to reduce risk (but must still be reported for approval). Modifications will include any change of investigator/s or site address or methodology and methods. Many modifications entail minimal risk adjustments to a protocol and/or consent form and can be made on an Expedited basis (via the IRB Chair). Some examples are: format changes, correcting spelling errors, adding key personnel, minor changes to questionnaires, recruiting and changes, and so forth. Other, more substantive changes, especially those that may alter the risk-benefit ratio, may require Full Board review. In all cases, except where noted above regarding subject safety, any changes to any protocol document or procedure must first be approved by HSSREC before they can be implemented.

Should you have any questions regarding anything indicated in this letter, please do not hesitate to get in touch with us at the above indicated address.

On behalf of HSSREC, we would like to wish you all the success as you carry out your study.

Yours faithfully,



*Dr. J. I. Ziwa*

**DR. J. I. Ziwa**

**ACTING CHAIRPERSON  
THE UNIVERSITY OF ZAMBIA HUMANITIES AND  
SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE - IRB**

**CC:** Director, Directorate of Research and Graduate Studies  
Assistant Director (Research), Directorate of Research and Graduate Studies  
Assistant Registrar (Research), Directorate of Research and Graduate Studies

UNZA GSB INTRODUCTORY LETTER.



THE UNIVERSITY OF ZAMBIA

---

Mobile : 0953-975662/0977-613985  
Email : [directorgsb@unza.zm](mailto:directorgsb@unza.zm)/[gsb@unza.zm](mailto:gsb@unza.zm)  
Tel : +260 211 294105

Graduate School of Business  
P.O. Box 32379  
Lusaka, Zambia

22<sup>nd</sup> November, 2022

TO WHOM IT MAY CONCERN

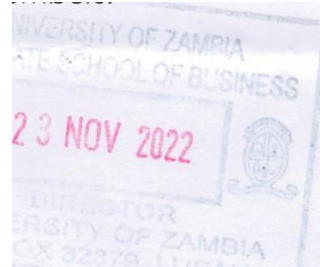
RE: INTRODUCTORY LETTER FOR TEMWANI ZULU

This letter serves to introduce Temwani Zulu a bonafide student in our Master of Science (MSc) Accounting and Finance programme at the University of Zambia — Graduate School of Business (UNZA-GSB). In partial fulfilment of their Postgraduate studies, the students are required to undertake a Dissertation (research) in the final year of study.

This entails that students collect data from various Institutions in line with the research they are conducting. This research is purely for academic purposes and the student is ethically bound to treat the provided information with strict confidentiality.

We will appreciate the assistance that you will render Mr Zulu to collect the data and the information from your institution that will assist him to carry out this research.

Should you have any queries or would like further information about him, please contact the UNZA-GSB on the above e-mail address or telephone numbers.



Yours Faithfully,

A handwritten signature in blue ink, appearing to read "Bupe G Mutono-Mwanza".

Dr Bupe G Mutono-Mwanza

ACTING DIRECTOR - GRADUATE SCHOOL OF BUSINESS

ccAssociate Director- Graduate School of Business

Assistant Registrar - Graduate School of Business

Yours Faithfully,

A handwritten signature in blue ink, appearing to read 'A. Mutono-Mwanza', is placed over a light blue rectangular background.

Dr Bupe G Mutono-Mwanza

ACTING DIRECTOR - GRADUATE SCHOOL OF BUSINESS

ccAssociate Director - Graduate School of Business

Assistant Registrar - Graduate School of Business

## ZiCA APPROVAL LETTER



(Established under the Accountants Act of 1982 and as amended under the Accountants Act 2008) (All communications to be addressed to the Secretary and Chief Executive)

Your reference:

ZiCA/12/1/46

Our Reference

12<sup>th</sup> December 2022

Mr Temwani Zulu  
Kabanga Christian Secondary School  
Private Bag 2  
KAI-OMO

Attn: Mr. Zulu

RE: REQUESTING ASSISTANCE TO USE ZICA DATABASE FOR THE PURPOSE OF A UNIVERSITY THESIS SURVEY

Reference is made to your letter dated 11<sup>th</sup> November 2022.

We request that you avail a soft copy of your questionnaire for us to review prior to sharing it with our members. You may send the questionnaire to the Director — Membership and Corporate Services ([patriciah@zica.co.zm](mailto:patriciah@zica.co.zm)).

Anthony Bwembya  
CHIEF EXECUTIVE OFFICER

---

Plot 2374/a Thabo Mbeki Road P.O. Box 32005 Lusaka, Zambia Tel: +260 211 37455  
1-9 Email: [zica.admin@zica.co.zm](mailto:zica.admin@zica.co.zm) ,Website: [www.zica.co.zm](http://www.zica.co.zm)

## **PAPA**

A member of the Pan African Federation of Accountants (PAFA), International Federation of Accountants (IFAC) and Chartered Accountants Worldwide (CAW)