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Research Article

Impact of Information Technology on the Accounting Profession, Lilongwe City, Malawi

Chifundo Chilongo [1*], Dr. N. Sankara Nayagam [2]
[1] Master of Commerce in Finance and Accounting, DMI St. Eugene University, Zambia
[2] Senior Lecturer, DMI St. Eugene University, Zambia

Corresponding Author: *Chifundo Chilongo

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Abstract

The study investigated the impact of information technology (IT) on the accounting profession in Lilongwe City, Malawi. Its objectives were to assess IT adoption levels in accounting departments, identify challenges in IT use, evaluate training needs, and explore accountants' perceptions of its benefits and drawbacks. A mixed-methods approach using a descriptive survey and snowball sampling was employed. Data were collected from 83 accountants through questionnaires administered via Kobo Toolbox, and analysed using SPSS with descriptive statistics.

Findings revealed that most institutions had adopted IT tools, actively used in daily accounting tasks. However, major challenges included poor network connectivity and inadequate training, with many accountants receiving only annual refresher courses. This limited training negatively affected their confidence and performance. Despite these challenges, accountants recognized IT value in improving efficiency, decision-making, and fraud detection. Concerns included over-reliance on technology and questions about its ability to support compliance.

The study recommends that organizations enhance IT competence through regular CPD programs, improved infrastructure, and hybrid skill development. Emphasis should be placed on cloud computing, change management, and cybersecurity. Policies supporting IT use, ongoing monitoring, and collaborative learning through mentorship and peer exchange can help ensure continuous improvement and alignment with technological advancements in accounting.

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1. INTRODUCTION

The accounting profession has undergone significant transformations since its origins five millennia ago. Early accountants relied on manual bookkeeping systems to maintain financial records, often performing tedious tasks such as recording expenses in handwritten ledgers and organizing paper receipts. These manual methods were labour-intensive and time-consuming, and the stereotypical image of accountants shifting through cabinets of financial documents often reflected the reality of the time (KPMG, 2017). However, the rapid advancement of accounting technology in recent times has revolutionized these traditional practices. Tasks that were taking weeks to complete now take mere minutes, enabling accountants to focus on higher-level tasks while reducing the time spent on routine bookkeeping (Deloitte, 2020). The integration of accounting apps, software, and other digital tools has resulted in the processes being streamlined, more accurate, improved efficiency, and better time management for professionals in the field. Despite these advancements, selecting the appropriate technology tools can present challenges, particularly for those new to computerized accounting systems. The variety of available tools requires careful consideration to ensure compatibility with business needs and workflows (PWC, 2019). Therefore, while technology offers vast benefits, the transition to digital accounting practices must be thoughtfully approached to fully capitalize on its potential. For years accounting profession has been evolving, facilitating the adoption of new technologies by the accountants, but the full potential of these technologies can only be realized if the way accountants think and work also evolves (Carlin, 2018). While emerging technologies have the power to dramatically change the accounting profession, it is not enough to simply create new tools (Moll & Yigitbasioglu, 2019). There also needs to be a shift in how accountants understand and use data and new methods of working (Marrone & Hazelton, 2019). Professional accounting bodies are aware of these challenges and have responded by developing frameworks and reports that focus on the future of accounting careers (International Federation of Accountants, 2019). These documents help prepare accountants for the changes and challenges that emerging technologies will bring, while also highlighting the opportunities they can create. The accounting profession must get ready for significant changes in the coming years, as new technologies could disrupt existing practices but also open new possibilities (Busulwa & Evans, 2021).

A key point is how accountants' careers will adapt and how the necessary skills will evolve. For example, the AACSB's 2018 accounting accreditation standard (A5) emphasizes that accounting graduate programs should focus on integrating information technologies. This standard highlights the importance of both faculty and students being able to adapt to new technologies and master current ones (Lin, 2016). This shows that technology, including emerging technologies, is crucial for the future of both accounting education and the profession itself. Modern technology and accounting are interconnected.

The development of IT in the accounting field has reduced the workload and increased the efficiency of accountants and various tech assistants. Digitalization and technology enhancements in the accounting field have become a necessity to increase the efficiency of the work. With technological change, accounting education has also changed. The new technologies and their impacts are taught at the university level to add to the skills and knowledge of accountants. Technology is transforming many lives of people in the Information Technology and Accounting sectors, with the introduction of several business software, thereby enabling individuals to save time and effort. Some of the technologies employed by accounting professionals for their everyday work are.

The rationale for this study is to understand how information technology (IT) is shaping the accounting profession in selected institutions within Lilongwe City, Malawi. As the accounting sector increasingly adopts technology, it is essential to assess how IT is influencing efficiency, accuracy, and decision-making in financial reporting and management. Despite the growing use of IT tools in accounting, many institutions still face challenges related to full adoption and effective utilization, such as a lack of training, infrastructure, and technical support.

This study aims to fill this gap by exploring the current state of IT adoption in accounting practices, identifying the obstacles accountants face, and assessing their training needs to manage emerging technologies. Furthermore, the study will offer insights into how accountants perceive its impact on their daily tasks, helping to highlight both the potential benefits and challenges of these technological advancements.

The findings will provide valuable information for policy makers, educational institutions, and accounting firms in Malawi to tailor their approaches to IT integration, professional development, and resource allocation. Understanding these dynamics will contribute to enhancing the overall efficiency, transparency, and effectiveness of the accounting profession in the country.

The research had several objectives as follows

1. To assess the level of IT adoption within accounting departments of selected institutions in Lilongwe City, Malawi.
2. To identify the challenges faced by accountants in adopting and using IT for accounting purposes
3. To assess the training and skill development needs of accountants in relation to emerging accounting technologies
4. To explore the perceptions of accountants regarding the benefits and drawbacks of using IT in their daily tasks

The study was conducted from July to November 2025 and focused specifically on Lilongwe City, Malawi. It was limited to assessing the impact of Information Technology (IT) on the accounting profession.

2. LITERATURE REVIEW

According to Diksha & Rupali (2024), Modern technology in the accounting profession shows a greater impact on the work of accountants. Technologies are designed to record accounting transactions and various business events, which can help in

making the accounting practices effective. Modern Technology and accounting can do wonders if they work with proper coordination. It improves efficiency and the effectiveness of the work. Accountants need to be disciplined with the changing technologies to use them efficiently, and a constant upgrade in their skills and education is needed. A lack of proper knowledge about modern technologies can make accountants outdated in the global world. The learning should start from the university level itself and should be introduced in their curriculum to increase the level of understanding of the future accountant. Jordan (1999) states that the change and advancement in technology have contributed heavily to the transformation of the accounting profession. According to Alves (2010), the business world continues to change, and it is changing at a faster rate. The reason for this is due to Globalization, high information technology (IT) investments, and the rapid pace of technological change. Organizations are responding to the wide range of IT-based opportunities and pressures in different ways and at different rates. The research attempted to analyze how information Technology affects the ability to solve accounting problems. Using a case study approach, the effect of information Technology and accounting processes was measured on accountants' tasks. The finding suggested a tendency for change, and the decentralization of accounting tasks was the reason for not embedding information Technology in the accounting processes.

Maziyar et al state that the impact of informational technology on modern accounting systems outlined the advantages and disadvantages of these technologies. They stated that companies were able to perform accounting functions more effectively because of the use of computerized accounting information systems, resulting in time and cost savings.

Lim (2013) examined the impact of Information technology on financial management. Studying financial forecasting, capital acquisition, fund investment, cash management, and the interrelation with other departments. Lim concluded that a company that effectively uses technology has a great advantage in the world of business. This relates to reliability and consistency, matching Information Technology resources to company needs, which in turn contributes to the overall success of the business. Information Technology really plays a great part in financial management. It promotes accuracy, efficient communication, improved information security, time, and money saving, promotes accuracy, efficient communication, improved information security, time, and money saving. The author believes that this field still has many areas for improvement. Damasiotis et al (2015) reviewed the information technology competency of the accounting profession. Information Technology competencies are considered imperative for accountants to perform their tasks. The determination of these competences is essential for accountants, but this involves, first, the determination of the roles of modern accountants in business and second, the definition of the term competences. The determination of the role of the modern accountants is important as it sets the framework within which an accountant operates, and hence this affects the IT/IS tools it is required. Additionally, reviewed the new emerging IT roles for accountants. It was early acknowledged that the profession of an accountant has a wide variety of roles, ranging from providing accounting services to providing consultancy services for planning, control, and decision making to businesses and individuals. The study concluded that Accounting and Information technology have been closely related for many decades now. Accounting was the domain of business that first adopted IT and made extensive use of it. During all these years, the IT competencies required by accountants have been under continuous change and evolution. Modern Accountants are expected to have a high level of IT Knowledge and skills. Curriculum in accounting education has adopted a wide range of modules to provide accounting students with the required competencies. Amiri & Amiri's (2014) study focused on the effects of organizational Information Technology changes on the performance of management accounting and concluded that the spread of information technology has a great impact on accounting practice and the accounting profession. The effects of IT on accounting practice and functions were measured along with the qualitative relationships between information Technology practices. They found that the decentralization function has been the focus of the accounting department.

Brands & Smith (2016) stressed that the automation of the accounting process has resulted in relieving accountants from various repetitive, insignificant, and manual activities executed daily and focusing on boosting efficiency, cost savings, and overall accuracy.

Major technological innovations have always been accompanied by extensive transformations in the labor market. By increasing labor productivity, innovation enables the production of more goods and services with less labor, thus leading to the possibility of technological unemployment. At the same time, innovation creates new employment opportunities in different industries and in newly created markets. Economic history shows that, after a period of disruption, economies have continued to generate enough jobs for their workforce, although some argue that digital technologies may replace labor more than any other technology before. (OECD, 2016) Kokina & Davenport (2017) outlined how Artificial Intelligence (AI) Technologies would impact the accounting profession. The research focused on the modern capabilities of cognitive technologies, as well as the impact of these technologies on accountants. Additionally, the research focused on the potential bias in the development and use of artificial intelligence. However, machine learning and deep learning neural networks are difficult or impossible to understand and interpret, even for technical experts. Until such technologies are made more transparent, it may be difficult for regulatory bodies, accounting firms, and audited organizations to turn over decisions and judgments to them. Research on the challenges this poses and some possible solutions to it would be helpful to the field. Dr. Abdullah Mohammad (2017) focused on identifying the impact of cloud computing on the elements of the accounting information, such as financial operations, documents, accounting books, financial reporting, users,

procedures, software, and physical devices. And he concluded that he Cloud Computing lead to Reducing the size of the enterprise in terms of the building and the offices because they allow property anywhere without management commitment to a specific location, Improving operational performance in terms of facilitating the completion of operations and accurate accounting operations, The cloud has become a place for the completion of operations and dialogue between employees or customers with enterprise system, Dispensing the documents to ensure they are self-service to customers, reduce the number of sales people because it enables customers to check out the established products and offer sales order electronically from a variety of geographical locations without the need to delegate sales to travel between clients and Finally It allows individuals and firms to use software and physical equipment without the need to buy the software and install it on their computers.

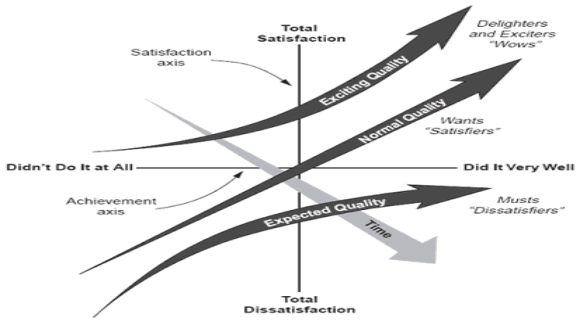
Gulin et al (2019) examined and summarized the significant problems that modernization brings to professional accountants. The findings indicated that digitalization and the development of Information technologies represent a great opportunity for companies. Furthermore, digitalization brings a lot of changes to the accounting profession. It will change the way accountants work and think. Despite many accountants thinking that digitalization will take their jobs and that robots will replace humans, results show that accountants will use digital solutions and automation for routine tasks rather than replace accountants. There are tasks and activities of accountants that require critical thinking and creativity, so it would not be so easy to automate those tasks and activities. Accordingly, digitalization will affect the development of the accounting profession. Khare (2021) comprehended the previous convergence of financial accounting with the development of information technology, describing how this convergence affects the accounting information systems. They stated that the Organisation's ability to build and deploy automated systems to track and record financial transactions has the greatest impact on accounting. The time taken by most accountants to plan and send annual management reports was cut in half with Information Technology networks and database systems. Further, they found that these systems helped the Organisation to easily produce specific reports important for management to make informed decisions extremely fast and easily. The study further highlighted other advantages such as enhanced quality, more flexibility, rapid execution, and improved external reporting.

Theoretical framework

2.2.1 Customer satisfaction models

Customer Satisfaction Model, also known as The Kano Model, is a theory of product development and customer satisfaction that was developed by Noriaki Kano in the 1980s (Kano, Seraku, Takahashi, & Tsuji, 1984). A customer satisfaction model is well well-structured approach to analyze, measure, and improve customer satisfaction. It is one of the best tools for customers to be with the company's products, services, and overall performance. This tool is helpful for companies to find ways to change, improve, and upgrade their products and services with the main goal of making customers happy, and takes into consideration various factors such as perceived quality, perceived value, and customer expectations in establishing customer satisfaction. This model can be developed in the finance industry, enabling the processing of transactions with both accuracy and efficiency. According to Andrei Octavian (2012).

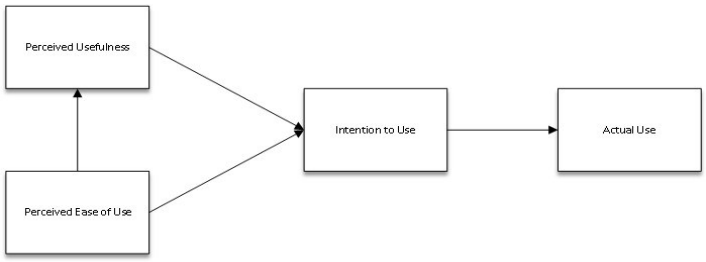
Figure 1: Kano Model, Source (Kano, Seraku, Takahashi, & Tsuji, 1984)



2.2.2 Technological Adoption/Acceptance Model

A theoretical framework that explains how users come to accept and use new technologies, which was developed by Fred Davis in 1986. The Technological Adoption/Acceptance Model (TAM) is widely used to predict and explain user behavior regarding the adoption of information systems and other technological innovations. The model focuses on two primary factors, which are perceived usefulness and perceived ease, that influence users' attitudes toward adopting new technology. (Davit & Papagiannidis, 2024).

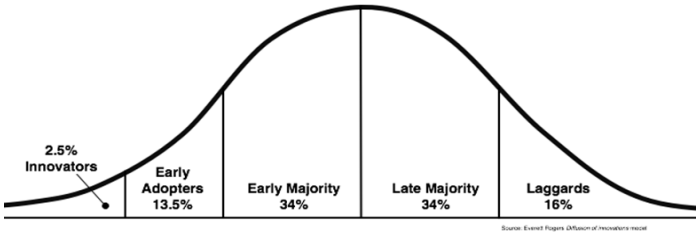
Figure 2: Technological Adoption Model ITAM), source (Andrei Octavian, 2012)



2.2.3 Diffusion of Innovation

The diffusion of innovation theory was developed by E.M. Rogers, a communication theorist at the University of New Mexico, in 1962. The theory explains the passage of a new idea through stages of adoption by different people who participate in or begin using the new idea. The main people in the diffusion of innovations are Innovators, early adopters, early majority, late majority, and laggards. (Rogers, 1962,1971 and 1983).

Figure 3: Innovation Adoption Curve, Source (Rogers, 1962,1971, and 1983)



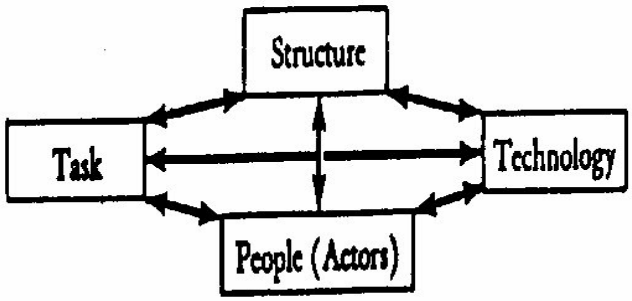
From the figure above, innovators are the first individuals to adopt the innovation. Mostly, they are risk takers and eager to experiment with new ideas. Innovators are often deeply involved in their respective fields and are willing to invest time and resources in exploring new possibilities. Early adopters are the second group to embrace an innovation. Early adopters closely observe innovators and are quick to realize the potential benefits of new technologies or ideas. They are willing to take calculated risks and serve as role models for others.

Thirdly, there are the early majority, and this group consists of individuals who prefer to adopt innovations once they have been tried and evaluated by others. Early majorities are motivated by practical benefits and seek evidence of the innovation's reliability and effectiveness before committing to adoption. Fourth is the late majority, who follow the early majority in adopting the innovation, and this group is more skeptical and cautious than early adopters. Later majority adopters are influenced by social norms and peer pressure, waiting until an innovation has become mainstream before embracing it. They may be reluctant to change and require reassurance regarding the stability and legitimacy of the innovation. Lastly are laggards, which is the final group to adopt an. This group of individuals is mostly recognized due to their resistance to change and traditional mindset. Laggards are often skeptical of new ideas and technologies, preferring to stick to traditional methods that are routine and most familiar with. They may only adopt an innovation when forced to do so or when it becomes necessary for survival.

2.2.4 Leavitt's Diamond Model

Leavitt's Diamond Model is a change management framework that provides a comprehensive approach to managing change within an Organisation. The model provides a comprehensive approach to managing the Organisation. This model was developed by Harold J Leavitt in the 1960s and recognizes that successful change requires consideration of four key elements such as people, tasks, structure, and technology. (Harold J., 1962).

Figure 4: Lavitt Diamond Model, Source (Harold J., 1962)



Harold J Leavitt argued that the four elements are interconnected and interdependent. And the elements were square-shaped to represent mutual connection.

The first component is task and focuses on the specific activities, functions, and tasks that individuals within an organization perform to achieve the organization's goals. It involves understanding the work processes, job roles, and responsibilities required for efficient task completion.

The second component is structure, which refers to the Organisation's structure and design. It encompasses the formal relationships, reporting lines, and hierarchies within an Organisation. The structure determines how authority, decision-making, and communication flow within the organization.

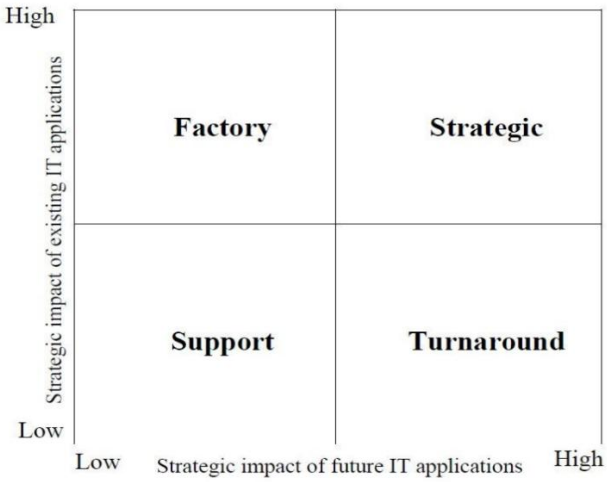
The third component is people or actors, and they relate to the individuals within the organization, including their skills, competencies, attitudes, and behaviors. It involves aspects such as recruitment, training, development, and motivation of employees to ensure they can perform their tasks effectively.

Forth component is technology and focuses on the tools, equipment, systems, and technology used by the Organisation to support its tasks and operations. It includes both physical technologies, such as machinery, software, hardware, and information systems, that enable efficient and effective work processes that require upgrading or replacing if necessary.

2.2.5 McFarlan's Strategic Grid Model

The model was proposed by McFarlan in 1984, which allows the use of visualization of the relationship between information Technology strategies strategy and business strategy & operations. The model analyzed the impact of existing information technology applications and of the future application by defining four boxes, each representing one possible role for information technology in the enterprise, such as support, factory, turnaround, and strategic. (McFarlan, 1981)

Figure 1: McFarlen Strategic Grid, Source *(McFarlan, 1981)*



A strategic system involves critical applications of systems to obtain competitive success for the enterprise. Examples would include applications for customer services and resource management, order management systems, product profitability systems, sales forecasts, and market intelligence.

Secondly is the turnaround, and these systems are high potential, high risk, and are essentially experimental in nature, which include proposals emanating from new business ideas that need to be studied, and the purpose is generally to give a test run, and if found cost-effective and feasible, it may be used for a variety of applications. Thirdly, a factory whereby there is an automation of existing operations to improve performance in terms of speed, accuracy, and cost savings by reduction of labour or other resource requirements is the key feature of factory systems. These systems are low-return, low-risk applications, and the likely benefits can be easily identified and estimated with a reasonable degree of accuracy. Lastly is support, and this system relates to routine applications such as payroll and financial accounting. These systems aim to improve the efficiency of tasks and statutory obligations, therefore employing the lowest budget while serving the purpose. Therefore, off-the-shelf software is opted for, which sometimes may not have the required information for the users. Given the rapid evolution of information technology and its integration into core business functions, the accounting profession has seen notable changes in how financial information is processed, reported, and analysed. While literature acknowledges these transformations, it remains critical to empirically assess whether these technological advancements significantly influence the performance, efficiency, and relevance of accounting roles. In line with this, the following hypothesis is formulated.

3. MAIN CONTENT/DISCUSSION

Gender of the Respondents

No.	Gender	Frequency	Percentage
1	Male	40	78%
2	Female	11	22%
	Total	51	100%

The figure above reveals that out of 51 respondent's majority were male, being represented by 72% and 28% males. In reference to the study conducted by Dorcas Adetula (2014) also revealed that the majority of individuals practicing accounting are males as compared to women.

Age Group of the Respondents

No.	Age Group	Frequency	Percentage
1	18-25	1	2%
2	26-30	14	27%
3	31-35	23	45%
4	36-40	8	16%
5	41-45	4	8%
6	Above 45	1	2%
	Total	51	100%

The table above shows that the majority were between the ages of 31-35(45%), followed by 26-30(27%), then 36-40(16%), and the least from 18-25 and 51 and above being represented by 1%. Despite that there is no proper evidence to substantiate the age groups of individuals practicing accounting, data published by chartered accountants worldwide indicates that the majority of accountants are within the range of 26-45. (Chartered Accountants, 2025)

Qualifications of Respondents

NO	Qualification	Frequency	Percentage
1	PHD	0	0%
2	Master	8	16%
3	Degree	34	67%
4	Chartered	1	2%
5	Diploma	8	16%
6	Certificate	0	0%
TOTAL		51	100%

The table above outlines the biographic population of the respondents in relation to the highest education qualification. The majority of respondents have degrees being represented by 67% followed by diplomas (16%), then master's 16% and the least with a chartered qualification. In many African countries, most accountants have a degree qualification, and it is very rare to see accountants having a PhD and a Master's, while some accountants hold both academic and international professional

qualifications. Accountants holding certificates and diplomas most of the time are at the entry level in the organization (Mdhluli, Msizi, & Masibulele, 2024)

Current Position with the Institution

NO	Current Position	Frequency	Percentage
1	Program Assistant	1	2%
2	Accountant	23	45%
3	Internal Auditor	1	2%
4	Head Teller	1	2%
5	Accounts Assistant	6	12%
6	Assistant Accountant	8	16%
7	Audit Senior	1	2%
8	Compensation and Benefits Manager	1	2%
9	Credit Analyst	1	2%
10	Finance and Credit Officer	1	2%
11	Finance Managers	6	12%
12	Financial and Compliance Auditor	1	2%
TOTAL		51	100%

The table above presents the current positions of respondents with their respective institutions. As indicated, the majority were accountants (45%) followed by assistant accountants (8%), then finance managers and accounts assistants at 12%, the rest positions at 2%. Across Africa, accountants typically progress through a structured career ladder, moving from entry level to senior leadership. According to Evelyn Isioye (2023), most of the accountants are at middle level, and these ranged from Assistant Accountant to Accountant, and the survey conducted indicated that 55% of the accountants were expected to move to the next roles within the period of 12 months, while 62% of respondents expected to move to other organisations.

Table 1: Experience with the current Institution

NO	Experience with Current Institution	Frequency	Percentage
1	Below 2	14	27%
2	2 to 5 years	15	29%
3	6 to 10 years	17	33%
4	10 to 20 years	4	8%
5	21 to 30 years	1	2%
TOTAL		51	100%

Table 6 above presents the respondents' experience with their current respective organisation. As indicated, majority of the respondents have been in the current position for a period of six to ten years representing 33%, followed by two to five years, represented by 29%, below two years, represented by 27%, ten to twenty years, represented by 8%, and the least was twenty-one to thirty years, represented by 2%. However, despite that, there is a good number of respondents below two years during the period when the survey was being conducted, it was found out that some respondents have just moved from a different organisation to their new roles with the current organisation. According to Evelyn Isioye (2023), most of the accountants are at middle level, and these ranged from Assistant Accountant to Accountant, and the survey conducted indicated that 55% of the accountants were expected to move to the next roles within the period of 12 months, while 62% of respondents expected to move to other organisations.

Registration with Professional Bodies

NO	Respondent Professional Bodies	Frequency	Percentage
1	CIMA	1	2%
2	ICAM	26	51%
3	ICAM, ACCA	5	10%
4	ICAM, IIA Malawi ACCA	1	2%
5	ICAM, Institute of People Management	1	2%
6	IIA Malawi	1	2%
7	Institute of Commercial Management	1	2%
8	IOBM	1	2%
9	Not Registered	14	27%
TOTAL		51	100%

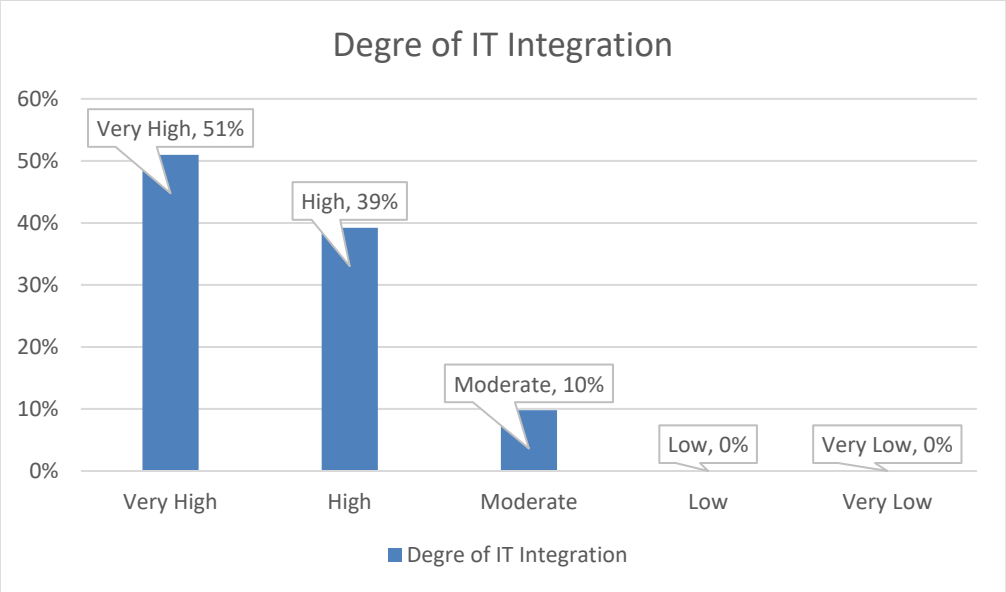
The study also aimed to identify if the respondents are registered and also maintain their membership with the professional board that governs their ethical conduct. Table 4.1.7 above presents the respondents' registration and membership with respective professional bodies. It was found that some respondents subscribed to more professional bodies due to the additional requirements governing the nature of work. As indicated, the majority of the respondents were registered with ICAM, representing 51%; however, at the time of the survey, some respondents (27%) were not members of any professional bodies, and one of the reasons was due to the discontinuation of payment of subscription fees, which resulted in ICAM removing them from the membership list.

Combination of Software used by Respondents

NO	Software	Frequency	Percentage
1	APT Next Gen Microsoft Excel	1	2%
2	Business World Microsoft Excel	1	2%
3	Cargowise	1	2%
4	Fund Master Microsoft Excel MoneyWare Sage	1	2%
5	IFMIS	3	6%
6	IFMIS Xero	1	2%
7	Microsoft Excel	8	16%
8	Microsoft Excel M-Seat SAP	1	2%
9	Microsoft Excel, PowerPoint, QuickBooks	1	2%
10	Microsoft Excel QuickBooks	3	6%
11	Microsoft Excel QuickBooks Sage	1	2%
12	Microsoft Excel Sage	3	6%
13	Microsoft Excel, Sage, SAP	2	4%
14	Microsoft Excel SAP	1	2%
15	Microsoft Excel SAP WINPACC	1	2%
16	Microsoft Excel WINPACC	1	2%
17	Microsoft Dynamics	1	2%
18	Navision	1	2%
19	NetSuite	1	2%
20	QuickBooks	7	14%
21	QuickBooks WINPACC	1	2%
22	Sage	5	10%
23	SAP	3	6%
24	SUN	1	2%
25	Tally 99	1	2%
TOTAL		51	100%

The table above outlines the combination of different software used by the respondent to deliver services in the course of their work. This table illustrates that Microsoft Excel is used when performing extra calculations to either upload data into the other accounting packages or extract data from the accounting package for ease of interpretation and presentation.

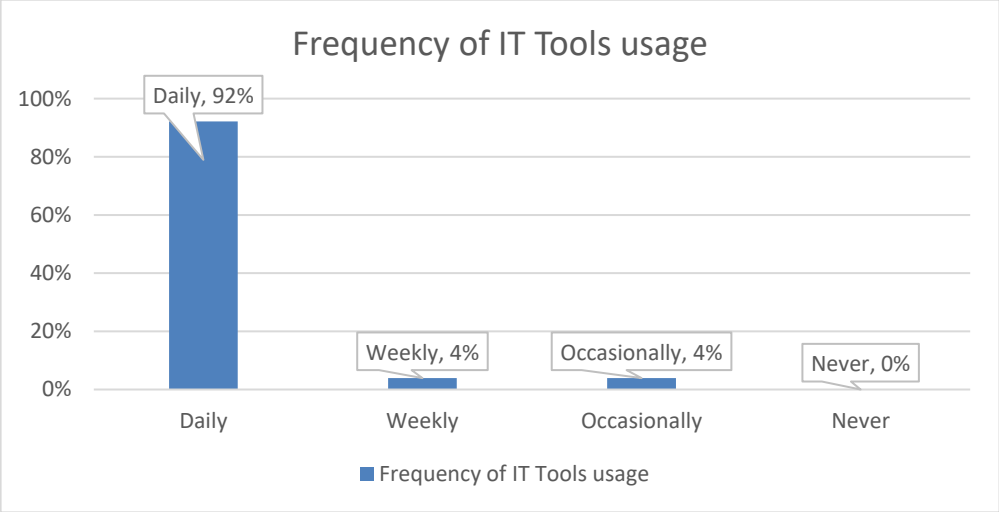
Degree of IT Integration



The figure above illustrates the extent of IT integration across respondents' departments. A majority of respondents, 51%, reported a very high level of IT integration, while 39% indicated a high level. Additionally, 10% reported a moderate level of integration. Notably, none of the respondents reported experiencing either low or very low levels of IT integration. This distribution clearly shows that IT integration is deeply embedded within the departments, with 90% of respondents falling between high and very high levels. The absence of low

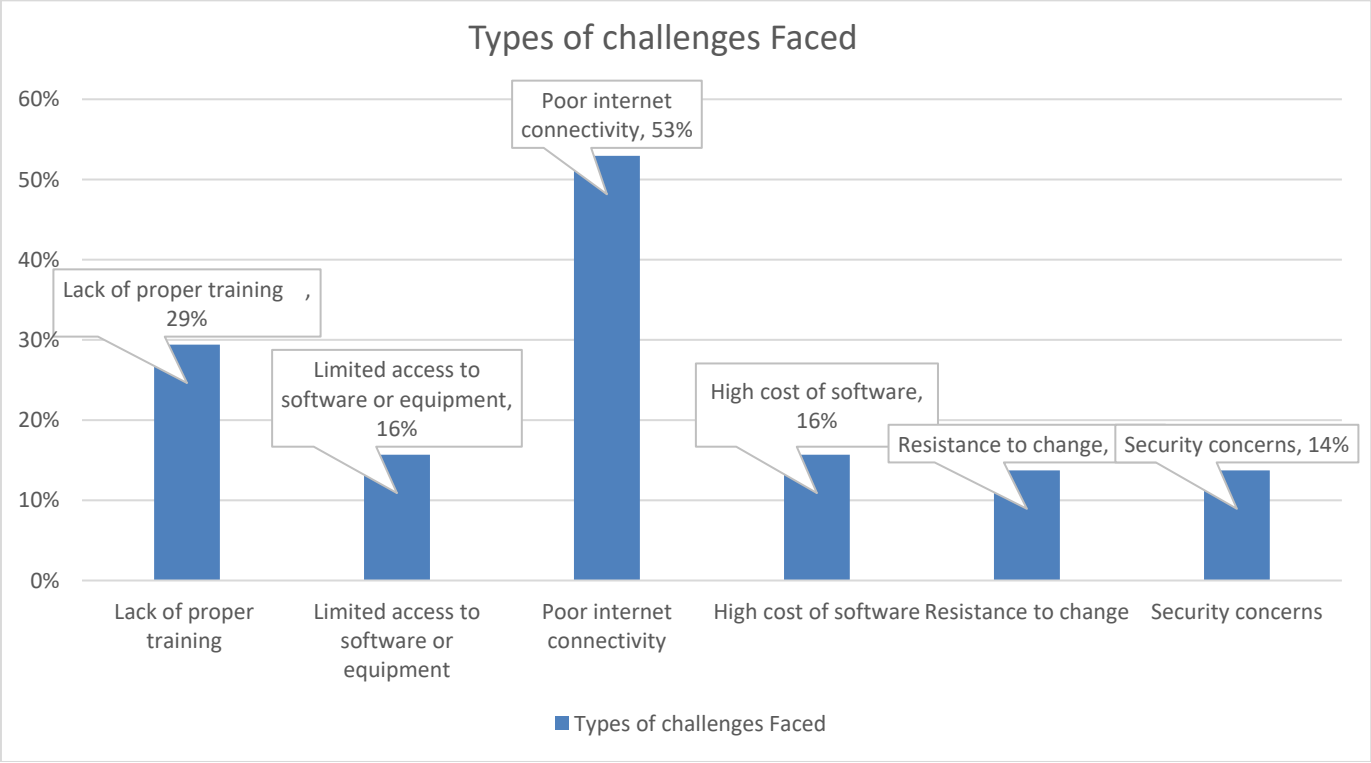
ratings highlights strong adoption and reliance on IT tools, reflecting a mature level of technological integration in organizational operations.

Figure 2: Frequency of usage of IT Tools in performing tasks



The figure above presents the frequency of IT tool usage across various respondent departments. The findings reveal a strong reliance on IT tools in daily operations, with 92% of respondents indicating that they use these tools daily to accomplish their tasks. A smaller proportion, 4%, reported using IT tools every week, while another 4% indicated occasional use. Importantly, none of the respondents reported being completely excluded from IT tool usage, underscoring the pervasive integration of technology in facilitating task execution within the departments, suggesting that most users interact with IT tools far more regularly.

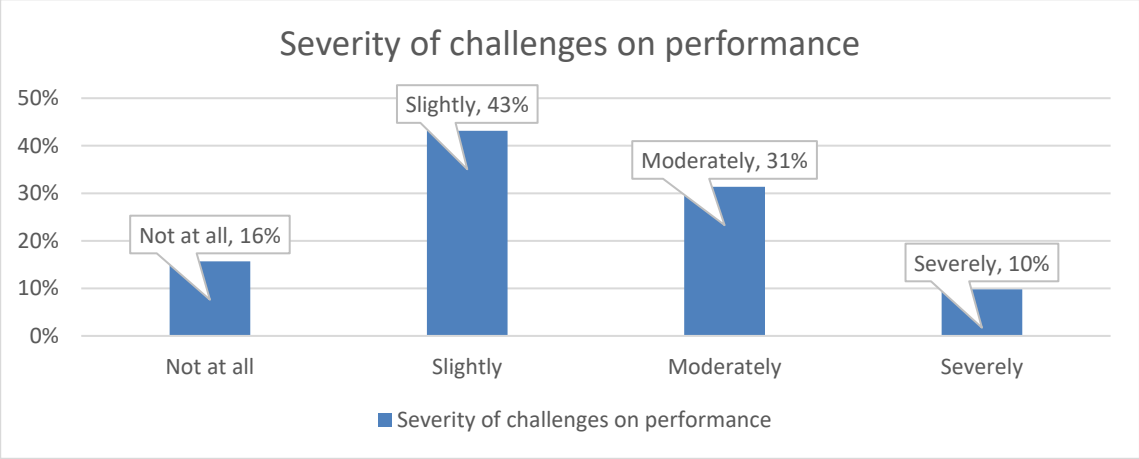
Challenges with using IT tools



The figure above illustrates the frequency of the types of challenges commonly faced by the respondents when using and starting to use IT tools. Respondents were allowed to give multiple responses. According to the data obtained, 53% of respondents indicated poor internet connectivity as a huge challenge, especially when it comes to cloud services, 29% of the respondents.

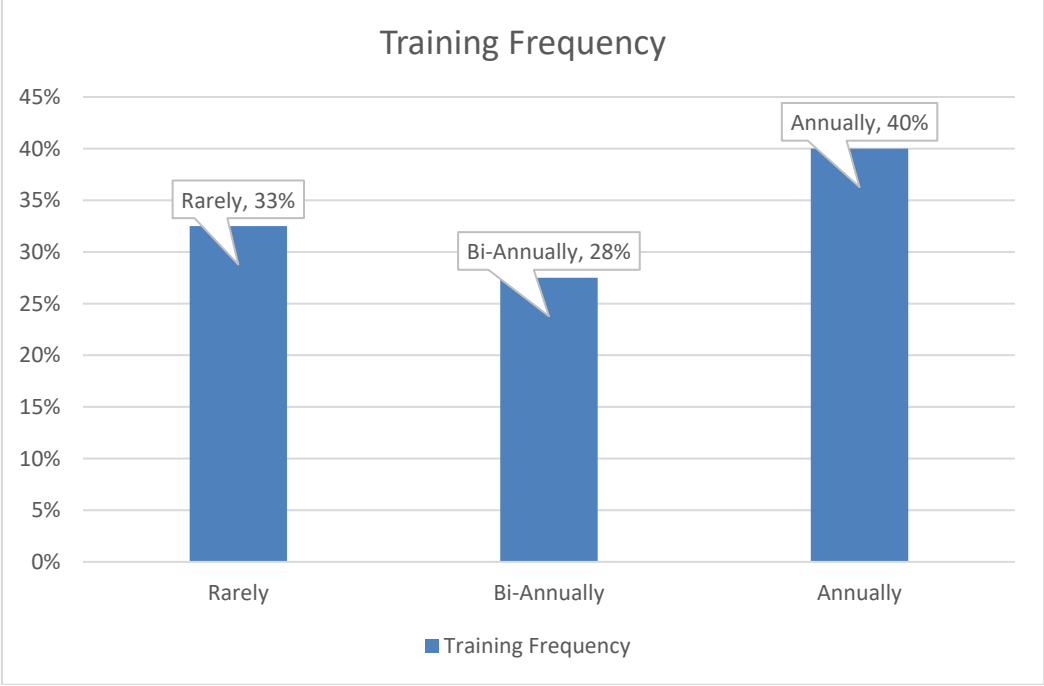
Respondents indicated a lack of training as a contributing factor. 16% of the respondents indicated limited access to software and equipment, and high cost of software as well. 14% % of the respondents indicated resistance to change and security concerns as contributing factors.

Severity of challenges to performance



The figure above illustrates the extent to which challenges with IT tools impacted respondents' performance. The data shows that 43% of respondents reported being slightly affected, while 31% indicated a moderate impact. Additionally, 16% stated that their Performance was not affected at all, whereas 10% reported being severely affected. These findings highlight that although IT tools are essential for task execution, varying levels of challenges exist, with the majority of respondents experiencing at least some degree of negative impact on their performance.

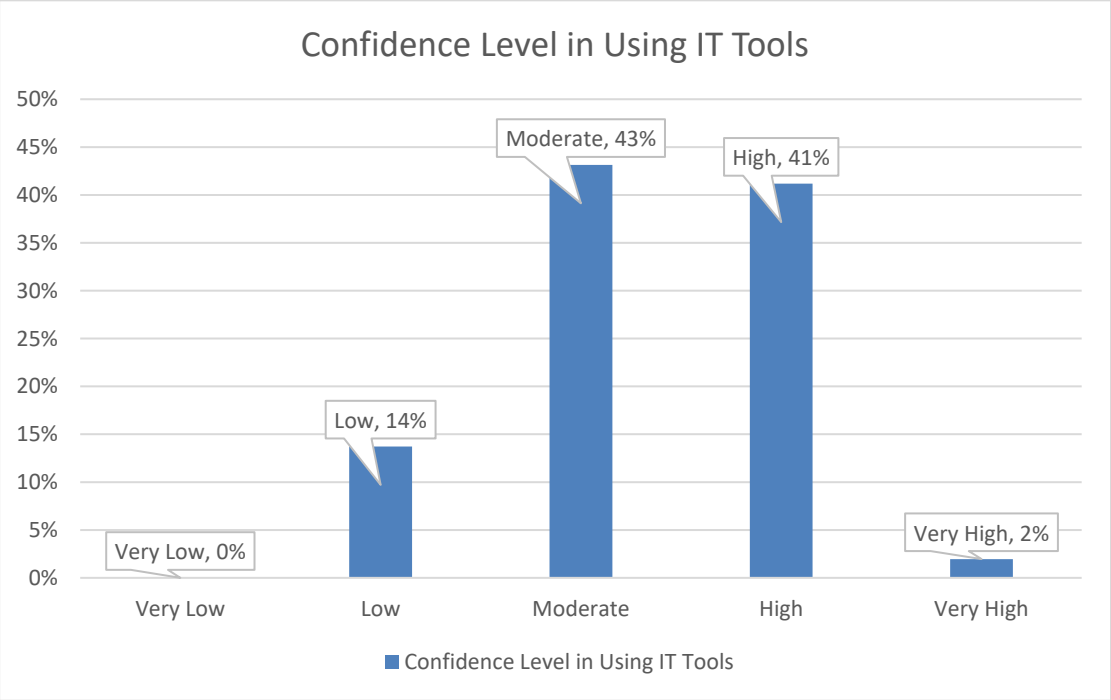
Frequency of IT Tools Training



The figure above illustrates the frequency of IT training received by the 40 respondents (out of 51) who reported having undergone formal training. The results show that 40% of respondents received training annually, 28% received it

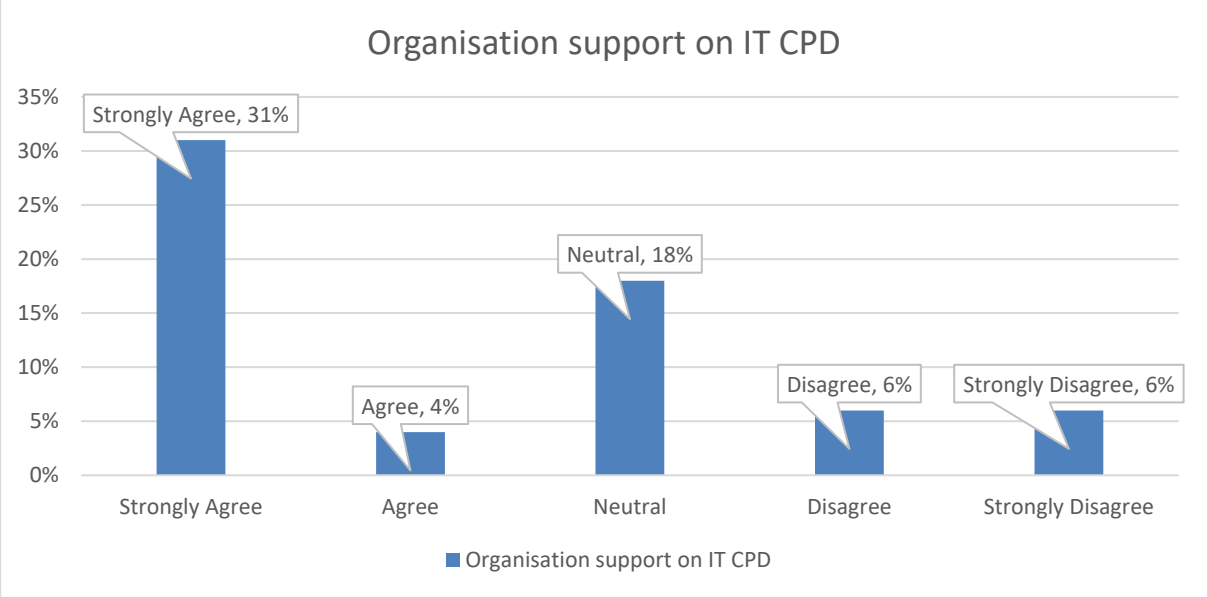
IT training occurred during induction, suggesting limited opportunities for continuous skill development thereafter.

Confidence Levels in using IT tools by respondents



The figure above illustrates the confidence levels of respondents in using IT tools. The data reveals that 43% of respondents reported moderate confidence, 41% indicated high confidence, and 14% reported low confidence. Only 2% expressed very high confidence, while none reported very low confidence. These findings suggest that the majority of respondents have a moderate level of confidence in their ability to use IT tools effectively, indicating a generally average level of competence across the group.

Organisation Support in Continuous IT Skills Development



The figure above illustrates the extent of organizational involvement in supporting Continuous Professional Development (CPD) on IT tools. The findings reveal that 31% of respondents strongly agreed that their organizations actively support CPD initiatives, while only 4% agreed. In contrast, 6% Of respondents disagreed, with an equal proportion strongly disagreeing. Additionally, 18% of respondents remained neutral. These results suggest that although some organizations demonstrate strong commitment to CPD on IT tools, overall support appears limited, with a notable proportion of respondents perceiving little or no organizational involvement.

Perception of IT in Accounting

NO	ITEMS	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation
1	IT increases accuracyin accounting tasks	0	0	1	17	33	4.63	.528
2	IT improvesefficiency and productivity	0	0	1	16	34	4.6471	.52244
3	IT reduces manual errors	1	1	1	22	27	4.3922	.80196
4	IT makes it easier tocomply with regulatory requirements	19	3	3	25	1	2.6471	1.42581
5	Over-reliance on ITmay lead to decline in individual skills	7	11	8	18	7	3.1373	1.29645
6	IT improves decision-makingby enabling access to real-time data	0	1	3	26	21	4.3137	.67794
7	IT helps in detectingfraud and irregularities more easily	0	6	4	24	17	4.0196	.94848

Table above for the items 1 to 7 shows the mean ratings and standard deviations of the respondents on the perception of IT in accounting are 4.63,4.6471, 4.3922, 2.6471, 3.1373, 4.3137, 4.0196 with standard deviations .528, .52244, .80196, 1.42581, 1.29645, .67794, .94848 indicating the degree level of agreement of mean variation of disagreement. IT is widely recognized for improving accuracy with a mean, efficiency and productivity, and error reduction. These findings confirm IT value in enhancing the quality and reliability of accounting processes. However, there are areas with mixed opinions, especially on the compliance with regulations, as respondents are polarized; some see IT as an enabler, while others feel it does not simplify compliance, as indicated by a mean of 2.65 and a standard deviation of 1.43. On skill decline responses were evenly spread, reflecting uncertainty about whether reliance on IT reduces accountants' professional competencies, with a mean of 3.14 and a standard deviation of 1.30.

4. Findings / Observations

- Most institutions have implemented IT tools, which are actively used by accounting professionals in their daily tasks. Nineteen different types of IT tools were reported, with Microsoft Excel being the most commonly used among respondents.
- Some accounting professionals face challenges in using IT tools, with poor network connectivity identified as the primary issue. This is followed by inadequate training. These challenges have a notable impact on work performance.
- Although accounting professionals receive training, it is often insufficient to meet the evolving demands of IT tool proficiency. Most respondents indicated they receive training or refresher courses only once a year, which
- affects their confidence and competence in using IT tools effectively.
- A majority of respondents strongly believe that IT tools significantly enhance efficiency, decision-making, and fraud detection. However, concerns were raised regarding
- over-reliance on technology and the adequacy of IT tools in supporting compliance efforts.

5. CONCLUSION AND RECOMMENDATIONS

- Enhancing IT Competence Among Accountants. Given the increasing reliance on IT tools in accounting, organizations should prioritize continuous professional development (CPD) programs focused on modern accounting software and digital tools. While basic proficiency exists, in-depth and regular training will ensure accountants can leverage IT solutions effectively, minimizing errors and increasing efficiency. Institutions should consider offering quarterly or biannual IT training rather than annual sessions to keep pace with technological advancements.
- Hybrid Skill Development. Technological advancements in accounting complement rather than replace traditional tools. Therefore, accountants should maintain a hybrid skill set, combining modern software proficiency with strong spreadsheet and manual accounting skills. Training programs should reflect this dual approach, ensuring professionals can adapt to both legacy systems and emerging digital platforms.
- Improving Access to IT Infrastructure. Organizations should invest in reliable IT infrastructure, including high-speed internet, modern hardware, and advanced accounting software. Where costs are prohibitive, institutions can explore cloud-based solutions or collaborative resource-sharing arrangements to reduce financial burden while providing access to cutting-edge tools.

- Addressing Resistance to Change and Security Concerns. Change management initiatives should be implemented to reduce resistance to IT adoption. This includes demonstrating the benefits of digital tools, providing hands-on support, and addressing security concerns through robust cybersecurity protocols. Awareness campaigns and workshops can increase trust and confidence in IT systems.
- Policy Development and Institutional Support. Organizations should develop clear policies supporting IT integration in accounting workflows. These policies may include mandatory IT training, regular system updates, and support channels for troubleshooting. Institutions should also recognize IT proficiency as a key competency in performance evaluations, encouraging staff to embrace digital solutions proactively.
- Monitoring and Evaluating IT Adoption. Continuous assessment of IT tool usage and effectiveness can help identify gaps and challenges. Surveys, feedback mechanisms, and performance audits can ensure that technology is being used optimally and that accountants have the necessary support to overcome barriers.
- Encouraging Collaboration and Knowledge Sharing. Accounting professionals can benefit from peer learning and knowledge-sharing forums to exchange best practices in IT usage. Mentorship programs or internal workshops can promote collaborative learning, enabling staff to stay updated with technological trends while enhancing collective competence.
- From the findings of the study, given that most respondents in this study were from NGOs, the challenges they face in adopting IT tools may differ significantly from those encountered in the government or private sectors. Therefore, a comparative study on IT tools adoption across different economic sectors, including government, NGOs, and private enterprises, would provide valuable insights into sector-specific barriers, strategies, and best practices. Such research could highlight how organizational context influences IT integration, training needs, infrastructure requirements, and overall accounting performance.
- Future studies could explore how the size of an organization (small, medium, large) influences IT adoption in accounting. This could help determine whether resource availability, infrastructure, and training opportunities affect the efficiency and effectiveness of IT tools
- Lastly, although accountants generally report confidence in using IT tools, many have received only limited training. Future research could investigate how various training approaches, considering frequency, depth, and delivery methods, affect accountants' proficiency, accuracy, and efficiency in performing routine accounting tasks.

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About the corresponding author

Chifundo Chilongo holds a Master of Commerce in Finance and Accounting from DMI St. Eugene University, Zambia. He specializes in financial analysis, accounting practices, and economic strategies, with a strong academic foundation in commerce and finance.