Sustaining Remote Auditing in Zimbabwe during the COVID-19 Era

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Abstract

The study aimed to explore remote auditing in Zimbabwe during the COVID-19 pandemic. It looked at the technological tools, equipment and skills required to conduct remote auditing and the likely risks brought about by these technological tools and equipment. The study also sought to find out how technological tools and equipment enhanced audit performance during COVID-19. The target population of the study was 60 participants, made up of external auditors, internal auditors and trainee auditors. These were selected using purposive, homogenous and snowball non-probability sampling techniques to make up a sample size of 20 participants. Primary data was collected through in-depth interviews, undertaken in person and virtually using the Zoom platform. The collected data was analysed using Thematic Data Analysis and presented in the form of tables, graphs, pie charts and explanations. Although remote auditing was accepted and implemented by most audit firms in Zimbabwe certain areas and industries still required the traditional, in person and on-site audits. Auditor validation of assets required the a*uditor's physical* control of the assets, which was not possible through use of technological tools and equipment. Despite that drawback, use of technological tools and equipment enhanced the *auditor's performance, as the auditor made use of time saved from travelling to and from* the office to thoroughly inspect audit evidence and give opinions within the expected time. The study recommends that for successful and comprehensive remote audits, human resources managers should ensure that both the audit staff and clients are well trained and skilled in the use of technological tools and equipment.

Key words: Remote auditing; risk; audit performance

1.0   Introduction

The impromptu 21days total lockdown imposed by the Zimbabwean government in March 2020 following the first death of a confirmed COVID-19 patient in the country forced business operators to shut down immediately. It was the state's greatest fear that the pandemic would overwhelm the general health system in the country, hence the sudden lockdown. In compliance with these government regulations, non-essential service, work and travel was banned. The regulatory decision hit hard on the audit and accounting professions, as they are considered non-essential service providers.

The purpose of this study is to explore remote auditing in Zimbabwe during the COVID-19 pandemic, establish the risk factors associated with remote auditing as well as assess whether remote auditing enhanced audit performance during the pandemic. The proposition that COVID-19 pandemic made the traditional way of auditing less preferred to remote auditing also guided the study. In this study, technological tools and equipment will mean desktop or laptop computers, accessories, hardware, software, mobile smart phones, cameras, drones or other similar innovative devices.

The study shows that it is impossible to comprehend remote auditing outside technological tools and software. MS Teams, Skype, Zoom, GAS, and Primavera were amongst the most used. Primavera was used as an enterprise portfolio management software for project management, scheduling and risk analysis. Management and control of these tools and applications are prone to various risks that, if poorly managed, affect the effectiveness and efficiency of the auditor's

performance. Teeter, Alles & Vasarhelyi (2010) observed that to understand remote auditing well one has to acknowledge the environment that surrounds gathering of audit evidence.

Brown et al (2007) averred that it is not possible to comprehend remote auditing outside the framework of technological tools needed to power it. In support of this view, Tysiac (2020), observed that the majority of internal audit firms adopted the use of computer-aided-audit-techniques (CAATs) to enable evidence gathering. According to Tardy et al (1988), technological tools are not only limited to simple extractions of data but also include sophisticated macros that group transactions within normal ranges of acceptability.

1.1 Background to the Study

Remote auditing has been in existence alongside traditional auditing since time immemorial as it was used to gather evidence in explosive testing and other inaccessible areas (Hutchins, 2018). Teeter et al (2010) posited that preference of the traditional way of auditing over the remote way has been largely circumstantial. Due to the COVID-19 pandemic, face-to-face interactions were prohibited, from which time audit practitioners gradually moved from traditional way of auditing to adopting communications and analytic technology (Barker, Cobb and Karcher, 2009)**.**

In Australia, Canada and United States of America (global north countries), remote auditing has been viewed as the process by which auditors make use of information and communication technology together with analytical procedures to collect evidence, interact with the auditees, report on the accuracy of financial data and internal controls (Barker et al, 2009). According to ISO 9001 Guidelines On Remote Auditing, most countries in the global north lamented risks with this form

of auditing which range from security and confidentiality violations, differences in time zones, authentication of the person, low quality of communication, to mention but a few (Hutchins, 2018). An inseparable risk with remote auditing is the weakened possibility of observing the organisation in a more autonomous and independent way since the auditor loses physical control of the camera (Ahmad, Cisewski, Miniño, and Anderson, 2020).

In March 2020, the United States Food and Drug Administration (FDA) reduced the foreign and domestic surveillance way of inspections and introduced other tools of reviewing records remotely. In an effort to prevent unnecessary delays due to deferred audits, global north audit firms diverted their attention to remote or virtual audits. According to the FDA (2020) report, activities such as inventory counting were done remotely by other businesses.

According to Louw (2020), in South Africa remote auditing was adopted on a small scale through the SIZA platform, which ensured sufficient navigation for its members who were farmers, suppliers, pack houses, processing facilities, audit entities, audit teams, industry organisations, consultants, and buyers around the globe.

COVID-19 adversely affected Zimbabwe resulting in many business operations being brought to a standstill. Business interruptions necessitated by the pandemic did not spare internal and external audit practices whose situation worsened by the fact that they were not categorised under essential services.

How Zimbabwe carried out remote auditing is the gap that the researcher sought to fill.

1.2 Objectives of the Study

The following objectives guided this research:

i)   To identify technological tools, equipment and skills required to conduct remote auditing efficiently.

ii)   To examine the risk factors associated with remote auditing for the period March 2020 to December 2021.

iii)   To assess how remote auditing enhanced audit performance.

1.3 Risks associated with remote auditing

Burr et al (2016) conducted a study on computer-based assessments with the aim of establishing how to manage the risk of technical failure and found that computer systems are never one hundred percent (100%) secure from unauthorised use. This is in line with the study carried out by Castka et al (2021) on remote auditing assessment in New Zealand and China who confirmed that despite having firewalls in place and a clear history of access into client's servers, there was no guarantee that client's information was 100% safe from unauthorised access.

However, Burr et al (2016) noted that to mitigate the risk of unauthorised use, it is important to update regularly installed firewalls and software and ensure compliance with licencing authorities. In addition, identifying users by fingerprints or electronic photographs before allowing access to the system protects the system from unauthorised users (Castka et al, 2021.

Tian & Wang (2020) undertook a study to find an efficient and secure data-auditing scheme that protected client information from intruders. Their findings were that encrypting sensitive information allowed only the owner of the data and intended recipient access to it. Another finding was that clients should make use of a private key that allowed access to information in two parts, one signature key at generation

of information and the completing signature key given by the fog to cloud computer sensor. This allowed blinding of information until the fog to cloud computer sensor released the second signature thereby securing information from unauthorised users.

Lois et al (2020) in a study on opportunities, risks and challenges faced by internal auditors in the digital era, observed that data protection was of paramount importance in order to safeguard client information against cyber-attacks. In his study on cloud computing risk and audit issues, Cho's observation (2010) agreed that of great concern in remote auditing is security risk as private and confidential data is stored in a remote provider's cloud thereby making it prone to cyber-attacks.

Xiao et al (2005) observed that fraud risk was an increasing problem as remote auditing provided more opportunities for fraud. The reason being that auditors failed to keep a watchful eye on the quality and distribution of electronic information as they focused more on systems rather than on data giving leeway to internet users to temper with the data.

1.4 Technological tools, equipment and skills required to conduct remote auditing

In a conducted study on remote auditing by Teeter et al (2010), technological tools and data analytics tools were identified as the primary tools without which remote auditing is not possible. Automated tools enabled testing internal controls and transactions, and also extracting and analysing data. Hardware and software installations on both the auditor and auditee's computers and other computer assisted auditing techniques (CAAT) were necessary to enable the auditor to smoothly extract and analyse data. The findings in this study were that with sufficient access control, these tools enabled the auditor to efficiently assess and analyse big data.

Whilst Serag & Daoud (2021) in a conducted study on internal audit challenges agreed with the findings of Teeter et al (2010), they added that for efficient and effective results, the audit team has to be competent in the use of accessible and user-friendly technical tools. The duo also observed that diverse skills of the internal audit team such as project management, financial experience, data analytics, and a thorough knowledge of enterprise systems and operations could balance up the different activities of the firm. In addition to these skills, Power (2009) in his study on the current implications and future direction of information, communication and technological tools and auditing, found out that whilst audit software helps auditors to better understand complex information systems, remote audit practices such as continuous auditing and artificial intelligence are projected to enhance remote auditing's future.

In another study conducted in Tanzania by Shilla (2014) which sought to assess the impact of technological tools on internal auditing, the findings were that although their use detected a lot of fraudulent activities, auditors were however not skilled enough and experienced in the use of those tools which adversely impacted their efficiency and effectiveness. In support of this view, Lois et al (2020) observed that employees lacked skills and training on use of technological tools although the tools promptly increased processing and transfer of data. This lack of skill and training essentially hampered auditor's performance in gathering audit evidence.

1.5 Influences of remote auditing on audit performance

Moorthy et al (2011) undertook a study on how technological tools enhanced internal auditing procedures. The findings of this study revealed that use of technological tools enhanced the effectiveness of internal controls resulting in efficient monitoring processes for the auditor.

Tardy et al (1988) in his study on the effect of remote auditing in improving internal auditors' efficiency observed that remote audits were an efficient approach to the auditing process compared to traditional auditing processes. He also placed great importance on the adoption of latest technological tools in order to continuously assess and monitor risk. In agreement, Teeter et al (2010) added that decision making proved faster as keeping up to date with technology and latest audit support systems aided auditors in detecting fraudulent posts, errors and promptly identifying unauthorised access. The duo also stated that auditors efficiently and speedily assessed the existence of documentation and its legitimacy through the expansion of digital evidence and monitoring techniques. Auditors used light semantic processing and text-mining techniques to verify documents, to rule out fraudulent activities, to determine the author of the document and to identify any person who had tried to access it and/or made any changes to it (Allan, 2015).

1.6 Research Methodology

This research focused on qualitative research methodology which established how remote auditing had been implemented and effected in Zimbabwe at the same time looking at the skills, technological tools and risks associated with remote auditing. Observing things unfolding from a comprehensive view is the goal of a qualitative research and also the poor often find a platform to air their views as there is nothing too insignificant to be ignored when undertaking qualitative research (Taylor et al., 2015). The strengths of a qualitative research is that its conclusions are drawn from collaborative actions of what people have said and from observing a particular situation (Maxwell, 2005). Maxwell (2005) also stated that, the intrinsic openness and elasticity of a qualitative research allows the researcher to understand new discoveries and processes in the study.

The researcher chose an exploratory design as there was very little known about the phenomena under study. Not only does an exploratory design discover new technologies, relationships and themes, it also identifies innovative management practices (Hair, 2015). Further, Hair (2015) avers that an exploratory design makes use of in-depth interviews to identify attitudes of participants towards the subject under study. The researcher used this design to find out how prominent and small audit firms in Zimbabwe had faired with remote auditing during the pandemic in comparison to audit firms in global north countries. As there was very little known or published materials in Zimbabwe in connection with the topic under study, the researcher chose to explore this phenomenon in Zimbabwe.

Primary data was collected by undertaking interviews virtually and face to face under strict adherence to COVID-19 regulations. The participants were from different firms and of different age groups and gender with audit experience ranging from four years to 15years.

In line with the suggestions by Hennink et al, (2020), the researcher created a question guide with open ended specific questions constructed from the research objectives to ensure that the same questions were posed to all participants. The structure of open ended questions allowed participants to give credible solutions that could be applied in the future (Maxwell, 2005). Appointments were made by telephone and to allow participants to prepare for the meetings, the researcher e-mailed the question guide to participants. This also prepared the participants to openly give broad responses and to expand their answers (Bless & Higson-Smith, 2000).

Survey interviews are conducted face to face, where there is dialogue between two or more persons to gather in-depth knowledge on a topic in order to understand

experiences and reconstruct events (Rubin et al., 2005). In-depth interviews are comprised of either semi-structured and unstructured questions and these are extensively used in gathering qualitative data (Edwards & Holland, 2013).

Rubin et al, (2005) state that in-depth interviews close historical gaps between younger generations as they understand the older generations better during interview sessions. The researcher chose to use in-depth interviews with the aid of a question guide based on the study concepts. The question guide which comprised open ended questions was used in all interviews to ensure that the same questions were posed to each respondent.

The target population of the study was 60 participants, made up of external auditors, internal auditors and trainee auditors. From this population a sample size of 20 participants was drawn.

In this research, a non-probability sampling method known as purposive sampling was used to select participants. This method, which is also known as judgment sampling is suitable for small populations (Emmel, 2013). The researcher used own judgment to collect a sample from the list of registered audit and accounting firms with the Public Accountants and Auditors Board (ICAZ, 2018).

The selected sample was categorized into four groups namely: the big four (B_4), internal auditors of privately owned business organisations (IA), general privately owned audit firms with two or more partners and one-man band firms (GEN). To ensure gender balance in the research, the researcher coupled purposive sampling with another non-probability sampling technique called homogenous sampling technique. This is strategic sampling that purposely focuses on investigating a sub-group in significant detail (Emmel, 2013). The researcher identified women led audit firms (FM) as a sub-group to be investigated in significant detail.

Qualitative research aims at describing a phenomena and interpreting findings, therefore no specific rules determine the sample size as it is highly dependent on the researcher's judgment (Lichtman, 2012). Qualitative research makes use of in-depth data collection and as such the sample size is always small and researcher's focus should be on participants who contribute to a better understanding of the study objective (Dhivyadeepa, n.d.).

The researcher also used snowball sampling technique whereby researcher inquired from participants for any recommendations from their business contacts (Tardy et al., 1988). Some of the interviewed participants were therefore as a result of recommendations.

1.7 Results and Discussion
The results were gathered are discussions were made upon them.

1.7.1 The risks associated with remote auditing
- **Electronic information systems and cyber-security risks**

The findings revealed that the risk of losing information due to system failure was due to a number of reasons. Information was lost due to loss of power supply in the middle of a session or uploading files. Electricity load shedding/power cuts were a daily occurrence which interrupted business operations and made team co-ordination difficult. Poor service delivery from internet providers was attributed to system overload and shortage of manpower as demand for their service had increased. This was in line with what was stated by Deloitte (2019) who noted that system failure was due to system overload as many people actively used the internet at the same time.

Participants installed alternative power supply as a back-up measure which mitigated the risk of losing information due to power cuts. Participants also

mitigated the risk of loss of information by ensuring that all data was served on the central servers or cloud back up. That way, even damage to hardware would not result in loss of information. Mourning about the loss of electricity supply and internet connectivity, one respondent had this to say: -

> *"With* Zimbabwe experiencing load shedding and intermittent Wi-Fi challenges, there is a risk that audit firms fail to meet deadlines as a result ……….." (**Gen. Female**)

Client portals, where clients uploaded documents for audit purposes also kept the information and documents safe from unauthorised users. Data was password protected and access to the portals strictly restricted to clients and assigned audit team members. Information on the client portal could not be intercepted or accessed by unintended recipients as both the audit team and client were trained on how to use of the portal. This is in line with what Tardy et al (1988) stated that for remote auditing to be successful, both client entity and audit team should be well trained on the use of information technology tools. One respondent interviewed stated that;

> *There is no way client's information can be accessed by an authorized* user as huge data is collected from client via One Drive or Drop Box and there is no way any unauthorized person could intercept the information or access the portal. (**B₄ Male**)

Yet another respondent lamented that: -

> With auditing going digital, a lot of company information is carried on the work laptops. With the increase in cybersecurity risk, chances of client information falling into the wrong hands are high (Gen. Female)

Although the researcher did not have the opportunity to interview anyone from the IT departments, credit was given to IT departments which ensured that firewalls

were in place to protect client information. Use of personal gadgets like memory sticks or CDs on the business laptops was prohibited and this protected the systems from viruses and phishing. As alluded to by Pathak (2005) unsolicited emails find their way through the system and to alleviate this problem, business assets should not be for personal use.

One respondent narrated that: -

> Auditing business is a very low risk business unlike a financial institution or government institution where hackers will be targeting a particular transaction or client account. (**Gen, Male**)

1.8.2 Third party risks.

Whilst past research has revealed that there was a global increase in third-party related incidences, participants confirmed that all likely risks pertaining to third party ecosystem were identified and assessed. Necessary steps were taken to ensure that client's data was safe and heavily secured on the clients' portals and that file sharing on those portals was safe. This is in line with Ahmad et al (2020) who stressed the point that auditors ought to assure clients that their connections are secure for file sharing and that firewalls are installed to keep away unauthorised users. Such steps have protected participants from third party claims as none of them at the time of interviews, had any claim filed against them.

1.8.3 Fraud and corrupt practices

Previous research by Xiao et al (2005) observed that fraud risk was an increasing problem as remote auditing provided more opportunities for fraud. These scholars noted that the auditor must keep a questioning mind and critically evaluate all the responses from the reporting firm's management. Most participants agreed with those findings but averred that audit procedures were not undertaken particularly to

unearth fraudulent activities, unless of course where management had pointed out the need to do so.

The participants interviewed did not experience any corrupt practice neither were they aware of any auditor in Zimbabwe who had been accused of being involved in corrupt practices.
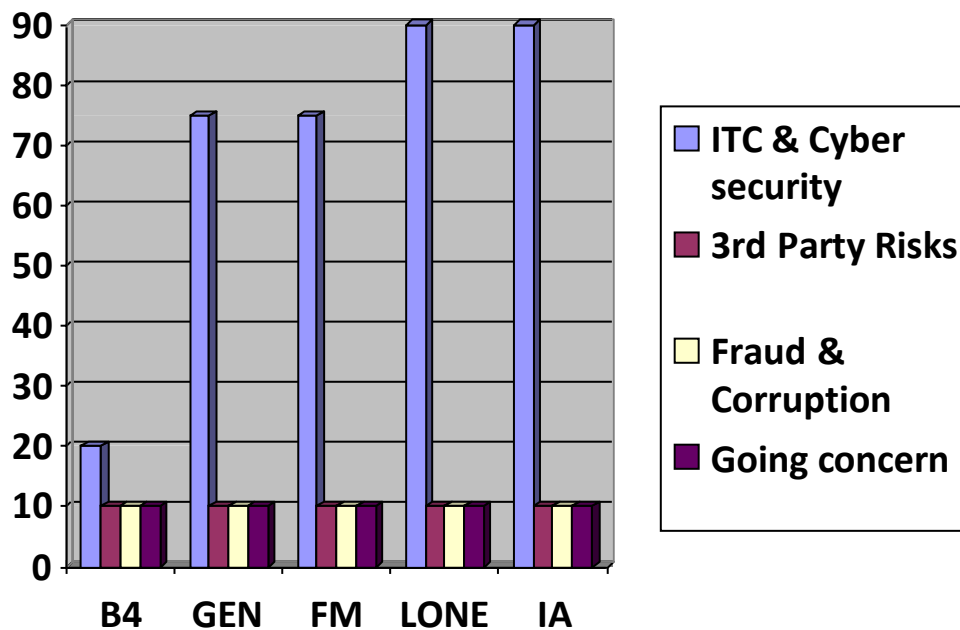

Figure 4.4 Risks associated with Remote Auditing
Source Interview Data (2022)

Auditors were encouraged to be skeptical when assessing management's disclosures concerning the business' continuity. Research findings revealed that participants had, in terms of GAAP, assessed the business' ability to continue in operation for the foreseeable future based on management's assertions and disclosures. As at the time interviews were conducted, despite the financial challenges faced by business entities,

none of the participants had seen any of their client's business collapsing pursuant to an audit report.

1.9 Conclusions

From the study findings it was evident that remote auditing had been implemented in Zimbabwe and to a certain extent, it was functional. The following research-based conclusions were made.

1.9.1 Risks Associated with Remote Auditing

Risks associated with remote auditing were identified. Research findings revealed that loss of information due to technical glitches were highly necessitated by loss of electrical power. The findings also showed that poor network connections were a result of system overload as network providers failed to meet demand. Although third party risk was safely guarded against as participants ensured that effective firewalls and safe network connections were in place, there was a slight increase in cybersecurity risk, and the risk that client information may fall into the wrong hands was evident. Participants made every effort to ensure that the going concern risk was mitigated by being sceptical when conducting audit procedures and assessing management's disclosures. It can be safely concluded that risks that affect remote auditing are similar in nature to those that affect traditional auditing and due regard was given at managing and monitoring the risks.

1.9.2 Technological Tools, Equipment and Skills

Participants affiliated with a global network of firms made huge investments in technological equipment and tools whilst the rest of them demonstrated that they made full use of technological tools and equipment which they had acquired prior to the pandemic. However, physical verification of assets could not be carried out remotely as participants averred that auditor control was paramount for verification

as videos could be faked whilst cameras and drones could easily be manipulated. As such asset validation could not be done except in person.

Evidence showed that some of the participants did not have the necessary hardware and software to effectively conduct audits remotely. This was due to lack of finances to purchase the same as ICT tools and equipment were not locally available and participants could not afford to import.

Apart from that, participants lamented that they had clients who operated in rural Zimbabwe who still maintained the book system of accounting and these clients lacked both in knowledge and skill. Almost all participants lost their skilled staff to emerging firms which forced unskilled and inexperienced staff to take up challenging positions.

It can be concluded that although some procedures required physical validation, lack of finance hindered some participants from acquisition of remote auditing technological tools, equipment and from maintaining skilled personnel to efficiently conduct remote auditing. It can also be concluded that without the necessary skills to conduct remote auditing, deadlines could not be met resulting in clients' dissatisfaction.

1.9.3 Remote Auditing Enhancing Audit Performance

Research also revealed that for remote auditing to effectively enhance audit performance, both the client and auditor have to be fully equipped and skilled to undertake the audits remotely. Findings proved that it is essential to invest in information and technological equipment as, in the long run, it enhances the auditor's efficiency, speed and quality of the audit. It can therefore be safely concluded that despite the huge initial set up costs incurred in ensuring proper equipment, tools and skills, remote auditing improves the auditor's performance.

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