

## Remote Auditing, Aspect of Auditor Behavioral and Use Of Technology

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### ABSTRACT

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*This scoping review aims to map out existing studies related to remote auditing that focus on the topics of auditors' behavioural and technology use. The importance of auditors' adaptation to the challenges posed by the pandemic and the need for improved skills and knowledge in the face of a changing work environment. This review refers to five stages, namely: 1) identification of research questions; 2) identification of relevant research; 3) selection of articles; 4) data mapping; and 5) compiling, summarising and reporting the results. The time span of the article is 2021-2024. The results of this review revealed that most studies recognised an increase in the efficiency of their daily tasks in terms of remote auditing. However, there is still debate regarding auditor behaviour that is influenced by remote auditing activities, which is feared to reduce skepticism. In addition, the use of technology in remote auditing brings data security threats. Therefore, further research is needed to uncover auditor scepticism and data security in remote audit activities. This review is expected to provide greater insight into the importance of remote auditing, auditor adaptation to change, and technology utilisation in improving audit quality in today's digital era.*

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## INTRODUCTION

Remote auditing is defined as a process in which auditors perform audit procedures from a location outside the auditee's location with the help of digital tools (Teeter et al., 2012). Remote auditing requires auditors to have the competence to gain stakeholder trust, act proficiently in information technology systems to understand risks and control the information technology environment, and analyse big data to cover a wider scope (Zahrawati et al., 2021). The various conveniences that can be felt from remote audit activities do not necessarily deny the shortcomings and challenges in implementing them. Remote auditing raises concerns about audit quality and the level of auditor scepticism due to the belief that auditors are more likely to uncover accounting malpractice when they are physically at the client's premises (Sorensen & Ortegren, 2021). This is closely related to how the social life of an auditor. Perceived pressure is a factor that affects the quality of audit results, considering that work-life balance is closely related to audit quality (Khavis et al., 2020), and this makes problems for auditors (Hermanson et al., 2016). Employees with low levels of work-life balance usually experience more stress and burnout (Anderson et al., 2002).

Remote audit activities or hereinafter referred to as remote audits utilising technology bring convenience, especially for auditors. Such as the use of cloud computing with its advantages including rapid elasticity, scalable services, minimal capital investment, lower maintenance costs, and location-independent service access (Kumar & Lu, 2010). Remote auditing is becoming more commonly used as the level of accessibility to information technology computers is increasing. This allows auditors to communicate globally and facilitate access to data and information (ISO & IAF, 2020). Changing workplace environments and cost-cutting initiatives are fuelling the transformation (Raphael, 2017). It is important to explore these changes through research studies because financial statement audit results and quality are inseparable from the interaction between audit clients and audit staff. On the other hand, Cloud Service Providers (CSP) are achieving higher levels of resource utilisation and thus saving energy consumption (Sookhak et al., 2014). It is necessary to adjust the

way of working in remote audit (Zulfikri & Wijayati, 2023). A study showed that auditor work efficiency in remote auditing is significantly affected by the level of digitisation of audit activities (Farcane et al., 2023). However, there are concerns that these changes bring security issues (Ali et al., 2015; Ren et al., 2012), such as when saving data to a remote server, users lose physical control of the data and instead delegate data management to untrusted parties (Wang & Ren, 2010; Wei et al., 2014). Malicious CSP may even tamper with some data to gain economic benefits (Han et al., 2022).

This study explores the findings related to remote audit activities on external auditors' performance in various countries, with a focus on the behavioural aspects of auditors and the use of technology. Much of the literature we encountered is related to the COVID-19 pandemic and its relevance to the use of technology for audit activities (Baatwah & Al-Ansi, 2022; Barretto et al., 2022; Farcane et al., 2023; Sian, 2022). Auditors in normal times do most of their work at their clients' locations, but during COVID-19 it becomes impossible to physically attend their clients (Christ et al., 2021). Remote auditing improves the efficiency of auditors daily tasks and work-life balance through increased flexibility, job autonomy and control (Lorentzon et al., 2024). In addition, remote auditing implies negative impacts, as well, for example (Saiewitz & Kida, 2018) found that clients provided lower quality evidence through Communication Mediated Computer (CMC) than through face-to-face (F2F) or telephone interactions and auditors were more likely to ask follow-up questions when communicating in person than through email (Bennett & Hatfield, 2018).

We are interested in deepening the discussion of the relevance of remote auditing to the changing auditors behavior and the use of technology in remote audit activities. For example, from the aspect of technology use, the use of blockchain will also be used to ensure the integrity of audit reports (Tiron-Tudor & Deliu, 2022). This scoping review follows the method used in the scoping review by (Irafahmi, 2019) which includes: 1) identification of research questions; 2) identification of relevant research; (3) selection of articles; (4) data mapping, and (5) collating, summarising and reporting the results. This review highlights the need for increased professional accountability and focus on quality audits. The importance of human resources in adapting and the need for effective communication between the auditor department and business management, also discusses the importance of financial reporting in a company and the ability to perform financial reporting in a timely manner using technology. Thus, the purpose of this research is to map existing studies related to remote auditing or remote auditing in terms of auditor behaviour and technology use.

## **RESEARCH METHODS**

This scoping review follows the method used in the scoping review by (Irafahmi, 2019) which includes: 1) identification of research questions; 2) identification of relevant research; (3) selection of articles; (4) data mapping, and (5) collating, summarising and reporting the results.

### **Identifying the Research Questions**

Research questions are essential to guide the direction of discussion in this study. As our topic relates to remote auditing, the questions we develop are: "How does remote audit affect auditor behaviour and the frequency of using technology for audit activities?"

### **Identifying Relevant Studies**

Key search terms that are closely related to remote auditing are: "remote auditing" OR "Remote Data Auditing"; The search focused on these keywords to gather all articles that specifically discuss "remote auditing" or "remote data auditing." So that in general, only articles that discuss remote auditing will be collected. After that, the articles will be classified according to the research questions.

**Table 1. Inclusion Criteria**

<b>Cirteria</b>	<b>Inclusion</b>	
Periode	2021-2024	14 years of observation
Language	English	Most peer-reviewed articles are published in English
Publication Type	Journal Article	Only articles published in reputable journals
Geographic Region	All	Findings from all countries

### **Study Selection**

Article searches were conducted through the Publish or Perish (PoP) application. The search results using the search keywords found 294 articles, which were published by various publishers with the standards we determined, namely Q3-Q1 international journals. These articles were then examined to determine their suitability for the research question. They were also checked for possible duplication of articles in different databases. At this stage of selection, 287 articles were discarded as they did not meet the requirements of the article to answer the research question. Most of the articles did not fit the topic we were researching, which was related to remote auditing.

### **Charting the Data**

At the data charting stage, the selected articles were reduced to summarise the most important data, the data recorded were data about the author, year of research, research location, purpose, design/methods, and findings. The articles that have been collected will then be selected articles focused on remote audits that discuss aspects of auditor behavior and technology use. The discussion presents the findings of the selected articles then reduced to aspects of auditor behavior and technology use, especially related to limitations and future research opportunities.

### **Collating, Summarizing and Reporting the Results**

The final stage of the scoping review is collating, summarising and reporting the results of the research, collating produces a table containing the extracted articles done at the data charting stage. Summarising produces the main themes or patterns of the main findings, and reporting produces a report format which in this case is for publication purposes. Table 2 shows the results of the data collation.

**Table 2. Data Collating**

No.	Author	Year	Study location	Aims	Design/Method	Major Findings
1	(Sorensen & Ortegren)	2021	Australia	Examine How The Shift Towards Remote Auditing May Affect Auditors' Professional Doubt	Experimental design	Found that auditors who feel they have a greater social presence with clients tend to be more sceptical.
2	(Han et al.)	2022	China	Includes evaluation and comparison of various existing blockchain-based data integrity	Comprehensive survey	This research identifies open issues in the implementation of blockchain technology

				auditing schemes, as well as identification of open issues and future research directions		for cloud data integrity auditing, such as corrupt data recovery, evaluation of cloud service provider reputation, and operation log storage efficiency.
3	(Sian)	2022	UK	Examine how they continue to deliver professional services while negotiating challenges such as communication in absence of face-to-face engagement, remote collection of audit evidence and coaching/interaction in a virtual setting. and coaching/interaction in a virtual setting.	Qualitative, semi-structured interview	Audit teams successfully adapt to working from home and creating virtual audit rooms during the Covid-19 pandemic
4	(Barretto et al.)	2022	Brazil	Presents a case study in which the Internal Process Safety Audit practice of the company under study needed to develop a remote audit system during the COVID-19 pandemic.	Qualitative, case study	The systematic approach involved developing specific procedures for planning and conducting audits using digital platforms. This practice was implemented from March 2020 to August 2021.
5	(Jarva & Zeitler)	2023	Germany	to examine the implications of the COVID-19 pandemic on internal audit	Qualitative	Audit technology remains important as it aids the efficiency of remote audits. Well-functioning ICT facilitates effective remote communication, collaboration, and data exchange. Remote audit challenges include auditing non-digital processes and limited interaction. A hybrid approach combining onsite and remote auditing is expected in the future.
6	(Farcane et al.)	2023	Romania	To identify auditors' perceptions of various factors that influence work adaptability in remote audit activities.	Quantitative, survey of 182 respondents	Auditors' perceptions of how the transition to remote auditing has affected their work efficiency

				activity.		
7	(Lorentzon & Fotoh)	2024	Swedia	To explore the impact of remote auditing on auditors' work and work-life balance	Qualitative survey	Auditors underlined that remote auditing has improved their work-life balance as it offers flexibility, greater autonomy, and efficient use of time.

## RESULTS AND DISCUSSION

Sorensen & Ortegren (2021) conducted a study to examine the impact of Computer Mediated Communication (CMC) versus face-to-face (F2F) communication on professional scepticism and offered a potential intervention (increasing feelings of accountability). Approximately 101 participants were recruited from Big 4 accounting firms. The study found that auditors who felt they had a greater social presence with clients tended to be more sceptical. Increased auditor feelings of accountability may also increase the level of professional doubt. Increasing accountability in an environment of low social presence can reduce lower levels of professional doubt.

Lorentzon et al. (2024), their study of 98 auditors in Sweden aimed to explore the impact of remote auditing on auditors' work and work-life balance. The auditors underlined that remote auditing has improved their work-life balance as it offers flexibility, greater autonomy, and efficient use of time. However, they believe that reduced social contact due to remote auditing may interfere with their work. Their findings underscore the potential of remote auditing to improve auditors' work-life balance through increased flexibility, job autonomy and control. However, to effectively reap the benefits of remote auditing, audit firms must address several drawbacks. Their research also sheds light on the need for managerial control in resolving work-life boundary issues. Likewise, the use of sophisticated videoconferencing tools with deep learning and textual analysis can increase auditors' social presence and facilitate the likelihood of detecting fraud and misstatements. In addition, they argue that junior auditors should not perform complex tasks that require guidance in a remote working environment. It should be noted that the sample of this study consisted mostly of highly experienced auditors, not junior auditors, who experienced lower job satisfaction compared to managers and partners. In addition, since the holistic focus of the study lies on work-life balance, gender was not a concern in this study.

Farcane et al. (2023) aimed to identify auditors' perceptions of various factors that influence work adaptability in remote audit activities. The quantitative analysis was based on data collected through a survey conducted among financial auditors, members of the Romanian Chamber of Financial Auditors (hereafter CFAR), the competent professional body that regulates and monitors the development of the audit profession in Romania. Auditors' perceptions of the effect of remote auditing on their work efficiency are in adaptability to time or space constraints, logistics and IT software solutions, and new technologies for remote testing. Their study revealed that most Romanian auditors found an increase in the efficiency of their daily tasks in terms of remote auditing. In terms of auditors' perceptions of the advantages and disadvantages of transitioning to teleworking, they expressed some difficulties in work-life balance, although most auditors believe that by adapting to remote auditing, work efficiency and the quality of audit engagements remain the same. In addition to the benefits of working remotely, although there are disadvantages in terms of social life, these are offset through programme flexibility or time savings on travel. Auditors assume that the transition to remote auditing does not affect their professional activities, while psychological aspects are also assumed. Even if they are not provided with comfortable conditions for conducting audits, they show pragmatism and ambition in seeking proactive solutions, and also ignore the difficulties posed by remote work. The perceived disadvantages of remote auditing did not affect auditors' views on adaptability. A limitation of this study is that it only consists of a small

sample of the Chamber of Financial Auditors of Romania (CFAR).

Han et al. (2022) research objectives include evaluation and comparison of various existing blockchain-based data integrity auditing schemes, as well as identification of open issues and future research directions. The research results of this comprehensive survey included the identification of various existing blockchain-based data integrity auditing schemes, critical evaluation of the strengths and weaknesses of each scheme, and the development of evaluation criteria to compare the schemes. In addition, the research also identified open issues in the implementation of blockchain technology for cloud data integrity auditing, such as recovery of corrupt data, evaluation of cloud service provider reputation, and efficiency of operation log storage.

Sian (2022) provided new insights into how audits can be effectively conducted in remote working situations during the pandemic, as well as filling existing research gaps and making new contributions to the accounting literature related to responses to global disasters. This research shows that audit teams successfully adapted to working from home and creating virtual audit rooms during the Covid-19 pandemic. The use of technology, such as video conferencing platforms and digital document sharing, played an important role in facilitating communication and collaboration between auditors and clients and within audit teams. Despite challenges in the physical collection of audit evidence, such as physical inspections and visual verification, this study shows that the audit team's ability to deliver quality audit services is not compromised while working from home.

Barretto et al. (2022) present a case study where the Internal Process Safety Audit practice of the company under study needed to develop a remote audit system during the COVID-19 pandemic. present a successful experience in implementing a system to conduct Remote Process Safety Audits in a Brazilian energy company.

Jarva & Zeitler (2024), their paper aims to examine the implications of the COVID-19 pandemic on internal audit as the pandemic forced individual internal auditors and audit teams to perform work remotely. Audit technology remains important as it aids in the efficiency of remote audits. Well-functioning ICT facilitates effective remote communication, collaboration, and data exchange. Remote audit challenges include auditing non-digital processes and limited interaction. A hybrid approach combining onsite and remote auditing is expected in the future.

### **Relevance of Remote Audit from the aspect of Auditor's Social Life**

It is important to look at remote auditing from the aspect of the auditor's social life. Research by Sorensen & Ortegren (2021) as well as Lorentzon et al. (2024) examined this. As findings by Sorensen & Ortegren (2021) suggest that auditors who feel they have a greater social presence with clients tend to be more sceptical. Meanwhile, Lorentzon et al. (2024) stated that remote auditing has improved their work-life balance because it offers flexibility, greater autonomy, and efficient use of time. Both studies indicate that remote audit activities from the auditor's personal side are beneficial in increasing time efficiency to flexibility, but on the other hand, the auditor's scepticism is better when carried out in the form of face-to-face due to social presence.

Behavioural changes due to the pandemic and remote work have been highlighted by several authors. For example, the behavioural changes mentioned by Loscalzo (2021) show a strong correlation with adaptive processes. The authors highlighted a significant increase in productivity, once relocation time was eliminated and spaces for lunch and breaks were adapted to organisational and personal needs. Similarly, some authors such as (Lindström & Flou, 2021) mention in their research that many of the employees involved have shown this kind of interest, despite reporting long working days, higher than those stipulated in their contracts. During the interviews conducted, it was found that 45% of auditors extended their working hours beyond 12 and 14 hours a day in their homes (Eales et al., 2021). Other studies have shown that remote working can remove fragile legal and regulatory barriers, encouraging the removal of specific timeframes for a working day, as well as suppressing breaks or meals. These behavioural changes, as suggested, corroborate what the authors mentioned about workforce adaptation to remote work, even if it impacts their quality of

life or family relationships. When questioned about the benefits of remote work, all auditors interviewed mentioned flexibility as a positive factor.

Lorentzon et al. (2024) pinned an idea for future research on the fact that their sample consisted mainly of highly experienced auditors, not junior auditors, who experienced lower job satisfaction compared to managers and partners. Also, due to our holistic focus on work-life balance, gender was not a concern in this study. Requires expansion of the research sample, given the different geographical, policy and cultural conditions of each country or region.

Research by Sorensen & Ortegren (2021) menyebutkan keterbatasan serta penelitian pada masa depan, yaitu berkaitan dengan generalisasi temuan. Penelitian mereka hanya berfokus pada sampel auditor dari perusahaan akuntan Big 4, sehingga hasilnya mungkin tidak dapat langsung diterapkan pada auditor dari latar belakang yang berbeda. Selain itu, diduga terdapat variabel lain yang dapat memengaruhi keraguan profesional auditor yang tidak dipertimbangkan dalam penelitian ini. Oleh karena itu, studi lanjutan dapat melibatkan sampel auditor yang lebih beragam untuk memperluas generalisasi hasil. There is a need to further examine how changes in the work environment, such as remote auditing, may affect other aspects of audit practice. While the study by Lorentzon et al. (2024) also has limitations in that the sample used consisted mostly of highly experienced auditors, not junior auditors, who experienced lower job satisfaction compared to managers and partners. In addition, our analysis does not distinguish between Big Four and non-Big Four auditors or their experience. Big Four audit firms generally have better technological infrastructure and more experience in remote auditing through collaboration with peer firms in other countries. In addition, due to the holistic focus of the study on work-life balance, gender was not a concern in this study.

### **Relevance of Remote Audit from the aspect of Technology Usage**

This scoping review also looks at remote auditing from a technological aspect. Han et al. (2022); Sian (2022); Barretto et al. (2022); Jarva & Zeitler (2024) and Farcane et al. (2023). Based on the findings of these studies, it tends to reveal the role of using technology to increase the effectiveness and efficiency of activities in remote audit activities.

This study explores the findings related to remote audit activities on the performance of external auditors in various countries, focusing on the importance of remote auditing and potential solutions. This review highlights the ability of public audits for cloud data storage security using Remote Data Auditing (RDA) techniques. Remote auditing as a process in which internal auditors combine ICT information and communication technologies with analytical procedures to collect electronic evidence, interact with the audited party, and report on the accuracy of financial data and internal controls, independent of the auditor's physical location. Due to the lack of ownership and control over data, outsourced data cannot always be trusted. As a result, many researchers have focused on eliminating the security threats of outsourced data by enabling public auditing capabilities over data stored in the cloud by using Remote Data Auditing (RDA) techniques. RDA is a useful technique for checking the integrity and reliability of data outsourced to a single or distributed server. Since all RDA techniques for single cloud servers cannot support data recovery, they are complemented by redundant storage mechanisms. In particular, external auditors, who are the most critical and reliable accreditation of financial statements, are in an unprecedented situation to perform audit work and collect sufficient and appropriate audit evidence. Di satu sisi, temuan menekankan bahwa persepsi auditor terhadap efisiensi kerja auditor dalam audit jarak jauh dipengaruhi secara signifikan oleh tingkat digitalisasi aktivitas audit. Tinjauan ini juga menguraikan ancaman dan peluang utama audit jarak jauh dalam konteks pembatasan pandemi saat ini. Ketika auditor merasakan manfaat audit jarak jauh, mereka mengapresiasi secara positif tingkat kemampuan beradaptasi dan efisiensi kerja dalam hal kerja jarak jauh. Audit data dapat memungkinkan pemilik data menemukan perilaku jahat CSP yang merusak data outsourcing

mereka. Audit publik memberi wewenang kepada auditor bagian ketiga (TPA) tepercaya untuk mengaudit data yang dialihdayakan pemilik dan membebaskan pemilik dari tugas rutin.

Traditionally, audits have been conducted at the client's office where face-to-face (F2F) is the primary means of communication between client and auditor. This dynamic is rapidly changing as auditors increasingly rely on computer mediated communication (CMC) both with their clients and within their audit teams (Baltes et al., 2002; Bennett & Hatfield, 2013; Brazel et al., 2004; Teeter et al., 2012). This trend most likely began as a response to young auditors' communication preferences and as an attempt to reduce social incompatibilities between auditor staff and older, more experienced client employees (Bennett & Hatfield, 2013, 2018). Other research reveals that clients provide lower quality evidence via CMC than via F2F or telephone interactions (Saiewitz & Kida, 2018) and auditors are more likely to ask follow-up questions when communicating in person than via email (Bennett & Hatfield, 2018). Overall, this suggests that auditor staff are more likely to communicate with more thoughtful and experienced personnel if CMC communication channels are available, but the amount of information communicated to auditors is less, and the mixed results of previous research suggest that further investigation is needed.

The study by (Rachmad et al., 2023) conducted at a public accounting firm revealed that remote auditing has a positive effect on audit quality, computer-aided audit techniques have a positive effect on audit quality. These findings are in line with research by Nugrahanti (2023). Therefore, it is very important for public accounting firms to provide training related to the work of auditors, especially in the technological aspect which is expected to improve auditor performance. Azizah & Wahyuni (2022) portray the results of remote auditing practices using simple facilities that can meet audit standards and are able to convince auditors of management assertions. proves that switching audit practices to remote auditing does not mean that it does not meet audit standards, even procedurally the management assertions are met. Therefore, it is necessary to increase the use of technologies such as blockchain, cloud computing, and big data to increase confidence in these management assertions.

The use of technology in audit activities, especially remote audits, is closely related to how technology adoption, ease of use, storage and information security (Han et al., 2022; Kő et al., 2023; Raudeliuniene et al., 2020; Thottoli et al., 2022). Thottoli et al. (2022), in their study stated that there is a significant positive relationship between technological characteristics such as technology adoption, technological challenges and ease of use on audit practices. Remote audits really need to use information and communication technology in audit activities (Nurwulan & Maulida, 2023). Given the beneficial role of technology on audit practice, it is important for audit firms to decide to invest in technology. However, the technology investment is highly dependent on how the Chief Auditor Executive (CAE) decides (Garven & Scarlata, 2020).

Investigations into the determinants of Information Security Awareness (ISA) maturity levels revealed that if the authors identify the right risk assessment mechanisms (through documented methodologies and reliable results), they can expect high ISA levels. If there is a well-defined organizational structure with clear responsibilities, this will support the link between risk management mechanisms and the ISA level. The relationship between organizational structure and ISA maturity level is supported by ISA activities: increasing the level of awareness strengthens the organizational structure through best practices learned by staff (Kő et al., 2023). Sookhak et al. (2014) mentioned that when users outsource data files on a remote server, physical access to the files is actually lost and file administration is delegated to the cloud provider as an unreliable third party.

Information technology and social networks positively influence the knowledge management cycle, including five processes (acquisition, creation, storage, sharing, and application) in audit and consulting firms in the Middle East (Raudeliuniene et al., 2020). Related technology investment decisions are strongly driven by the Chief Auditor Executive (CAE). Additionally, data shows that internal audit functions have not fully utilized information technology (IT) tools and



techniques, with the average use of ten of the eleven tools and techniques studied falling below a moderate level (Garven & Scarlata, 2020). Some of the factors studied related to ICT and audit practice, namely ICT adoption, ICT competence, and ICT training, have a positive relationship between the three factors, while the ICT confidence factor has a negative relationship with audit practice. Thus, the availability of ICT competent staff, practical ICT knowledge, sufficient and adequate ICT training helps audit firms in conducting audits by implementing customized audit software for audit practices (Thottoli et al., 2022).

Based on the review of relevant articles related to the use of technology in remote audit activities, there are several further studies for future research that can develop data recovery designs, CSP evaluation designs, operation log storage methods and attack detection and defense (Han et al., 2022). These designs are closely related to the threats faced by auditors in the use of technology, especially in remote audit activities. It is also important to conduct an in-depth study on the quality of remote audit services. Remote working may have decreased the work efficiency of those working from home due to unusual circumstances (Farcane et al., 2023). Although existing research suggests it does not reduce service quality, it does reveal some missing aspects of communication such as missing visual or emotional cues. For example, by conducting quantitative research that can examine the relationship or influence of remote audits on service quality to the determinants of remote audit success (Barretto et al., 2022; Sian, 2022). In addition, similar research is needed with different contexts and expanded samples both in terms of industry and country contexts, especially examining the combined approach of remote and on-site audits from various perspectives, including the audited party, external parties and company management (Farcane et al., 2023; Jarva & Zeitler, 2024).

## **CONCLUSIONS AND SUGGESTION**

Auditors who feel they have a greater social presence with clients tend to be more skeptical. While a study by Lorentzon et al. (2024) stated that remote auditing has improved their work-life balance because it offers flexibility, greater autonomy, and efficient use of time. Both studies indicate that remote audit activities from the auditor's personal side are beneficial in increasing time efficiency to flexibility, but on the other hand, auditor skepticism is better when carried out in the form of face-to-face due to social presence.

The focus of the discussion on aspects of auditor behavior and the use of technology in remote audit activities is none other than because these two things are closely related to one another. The implementation of remote audits that require the role of technology, for example as a medium for communication, needs to be a concern because it relates to how auditors behave towards their clients, especially regarding skepticism. In addition, it is important to explore data security from a technology perspective, as the interaction between audit clients and audit staff through communication media involves a lot of data and information exchange, which is a security concern.

This scoping review has mapped the existing literature related to remote audit from the aspects of auditors' social life and technology use. This scoping review has some limitations. Relevant articles can only be obtained from a few specific journal databases due to limited researcher access. In addition, the keywords used need to be consulted with researchers, academics and librarians. Furthermore, the next scoping review can explore other aspects, such as the existence of remote auditing in accordance with applicable rules and guidelines.

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