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AUDITOR'S INTENTION TO ADOPT COMPUTER-ASSISTED AUDIT TECHNIQUES (CAATs) IN PERFORMING AUDIT TASKS

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ABSTRACT

Computer-Assisted Audit Techniques (CAATs) have become an integral tool in modern auditing practices, offering numerous advantages in terms of efficiency, accuracy, and the ability to analyze vast amounts of data. However, the adoption of CAATs among auditors has been uneven. This conceptual paper explores the factors influencing auditors' intention to adopt CAATs in their audit tasks. Drawing upon established theories such as the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB), the paper examines the role of perceived usefulness, perceived ease of use, subjective norms, and perceived behavioral control that drive or hinder the adoption of CAATs. This paper also discusses the challenges and opportunities presented by CAATs and offers recommendations for fostering their broader adoption in the auditing profession.

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INTRODUCTION

In the digital age, auditing is increasingly relying on technology to enhance the effectiveness and efficiency of audit processes. One such technology that has gained prominence is Computer-Assisted Audit Techniques (CAATs). These techniques enable auditors to perform data analysis, identify anomalies, and test controls in a way that would be difficult or impossible using traditional manual methods (Stone, 2023). CAATs can improve the quality of audits by increasing the accuracy of data analysis, enabling the handling of larger datasets, and allowing real-time monitoring of transactions (Atta et al., 2024; Daoud, 2023). This advancement not only enhances the overall effectiveness of audits but also fosters greater confidence in the reliability of financial information.

Despite these benefits, not all auditors have fully embraced CAATs in their daily tasks (Almagrashi et al., 2023). Some auditors perceive CAATs as complex or unnecessary, while others lack the requisite skills or resources to implement them effectively (Medha et al., 2023; Senan, 2024; Siew et al., 2020). Thus, this paper aims to investigate the key factors influencing auditors' intention to adopt CAATs, focusing on the perceptions, attitudes, and external factors that shape their decision-making.

THEORETICAL FRAMEWORKS

To understand auditors' intention to adopt CAATs, this paper draws on two primary theoretical frameworks: the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB). These models have been widely used to explain technology adoption in various fields and provide insights into the psychological and social factors driving such decisions.

Technology Acceptance Model (TAM)

The Technology Acceptance Model, developed by Davis (1989), posits that two key factors, perceived usefulness (PU) and perceived ease of use (PEOU), influence an individual's intention to adopt new technology. Perceived usefulness refers to the extent to which a person believes that using a particular technology will enhance their job performance, while perceived ease of use refers to the degree to which a person believes that the technology is easy to use.

In the context of auditing, perceived usefulness may be influenced by an auditor's belief that use of technology can improve audit quality, reduce time spent on manual tasks, and allow for more comprehensive testing (Al-Ateeq et al., 2022; Pedrosa et al., 2020). Meanwhile, perceived ease of use may depend on the complexity of the CAATs, the availability of user-friendly software, and the level of training provided to auditors (Susanto et al., 2023).

Theory of Planned Behavior (TPB)

The Theory of Planned Behavior, introduced by Ajzen (1991), extends the understanding of technology adoption by incorporating subjective norms and perceived behavioral control. Subjective norms refer to the social pressure an individual feels to perform or not perform a particular behavior. In the auditing profession, subjective norms might include the influence of peers, management, and regulatory bodies that encourage or discourage the use of CAATs (Doganay, 2019). It primarily refers to the user's perception that the encouragement and acceptance of the social environment might have an effect on how they decide to embrace a new audit technology system.

Perceived behavioral control, similar to PEOU in TAM, refers to the individual's belief in their ability to successfully adopt and use the technology (Ajzen, 1991). For auditors, this could be influenced by factors such as the availability of resources, organizational support, and personal competence with CAATs (Handoko & Suryadharma, 2020). Thus, enhancing perceived behavioral control can lead to increased intentions to adopt CAATs, thereby improving auditing efficiency and effectiveness.

FACTORS INFLUENCING AUDITORS' ADOPTION OF CAATs

Perceived Usefulness

Auditors who believe that CAATs can improve audit quality and efficiency are more likely to adopt them. CAATs offer the ability to analyse entire datasets rather than relying on sample-based testing, increasing the accuracy and scope of audits (Pedrosa et al., 2020). Furthermore, CAATs can help identify trends, anomalies, and fraud in real-time, which enhances audit effectiveness.

However, auditors may not perceive CAATs as useful if they are comfortable with traditional methods or if they work in environments where the benefits of CAATs are not apparent (Al Omari et al., 2025; ; Vitali & Giuliani, 2024). If they have not experienced the tangible benefits of CAATs firsthand or if these benefits are not evident in their specific work environments, they may view these tools as unnecessary or overly complex. This highlights the importance of increasing awareness and education around the capabilities of CAATs (Kumari et al., 2024). When auditors see clear examples of how these tools can improve their work, such as through case studies or demonstrations, they are more likely to recognize their value. Therefore, increasing awareness of the tangible benefits of CAATs is crucial for driving adoption.

Perceived Ease of Use

The complexity of CAATs can be a barrier to adoption. If auditors find the software difficult to use, they may resist adopting it, even if they recognize its usefulness. The usability of CAAT tools, the accessibility of user-friendly software, the availability of training, and the quality of support provided by the organization are important in shaping auditors' perceptions of ease of use (Susanto et al., 2023).

Thus, it is important to consider how the design of CAATs impacts auditors' perceptions of ease of use. If the software is straightforward and fits well into their existing workflows, auditors are much more likely to adopt it without hesitation. Moreover, providing thorough training can make a significant difference. When auditors feel equipped with the right skills and knowledge, they not only become more confident in using these tools but also more enthusiastic about integrating them into their work. This means that simplifying the user interface and providing extensive training on how to use CAATs can reduce the perceived complexity and increase the likelihood of adoption (Mustika et al., 2023; Pedrosa et al., 2020). By doing so, they can help ensure that auditors feel comfortable and capable, which leads to a smoother adoption process and better outcomes in their auditing practices.

Subjective Norms

Subjective norms play a significant part in influencing auditors' intentions to adopt CAATs. The influence of colleagues, supervisors, and professional standards can substantially impact whether auditors feel encouraged or hesitant to adopt these technologies. In some organizations, the culture actively promotes the use of CAATs, making them a standard part of the auditing process. In contrast, other environments may still favor traditional methods, which can create resistance to change (Al Omari et al., 2025).

When auditors work in a supportive culture that encourages experimentation with new technologies, they are more likely to explore and adopt CAATs. For example, if team leaders advocate for CAATs and share their positive experiences, it can inspire others to follow suit. On the other hand, if auditors feel that their peers or supervisors prefer traditional methods, they may be less inclined to try out CAATs.

Professional organizations and regulatory bodies also play a role by setting standards and expectations for technology use in audits (Vitali & Giuliani, 2024). They can influence how auditors perceive the importance of adopting CAATs. If regulators mandate or recommend the adoption of CAATs, it not only highlights their value but also creates a sense of urgency for auditors to adapt. Creating a positive environment around CAATs is essential for increasing adoption rates.

Perceived Behavioral Control

Auditors' confidence in their ability to use CAATs is another factor in determining whether they will adopt these technologies. This confidence, often referred to as perceived behavioral control, is shaped by several elements, including access to training, availability of resources, and support from management (Handoko & Suryadharma, 2020). When organizations prioritize continuous professional development and ensure that auditors have the tools and assistance they need, they are more likely to see higher rates of CAATs adoption among their audit staff (Wijerathna, 2024). Hence, organizations that invest in continuous professional development, provide easy access to technology, and offer technical support are more likely to see higher rates of CAAT adoption among their auditors. Conversely, auditors who lack the necessary skills or face resource constraints may feel overwhelmed by the prospect of adopting new technology (Vitali & Giuliani, 2024), which can lead to increased anxiety and reluctance to change their established practices.

CHALLENGES AND OPPORTUNITIES

Challenges

While CAATs offer numerous benefits, there are several challenges that auditors and organizations may face in adopting them. These include the initial cost of software acquisition, the need for ongoing training, and the potential resistance to change among staff accustomed to traditional auditing methods (Al Omari et al., 2025; Vitali & Giuliani, 2024). The initial investment in CAATs can be significant, which may deter some organizations from making the switch, especially if they are unsure about the return on investment. Additionally, ongoing training is

essential to ensure that auditors are comfortable and proficient in using these tools effectively. Without proper training, even the best technology can become underutilized or misused.

Furthermore, auditors may be concerned about data security and privacy issues, particularly when dealing with sensitive client information. As organizations increasingly rely on digital tools and cloud storage for their data, ensuring robust cybersecurity measures is essential for mitigating these concerns (Fortinet, 2023). Data breaches can lead to severe legal repercussions and damage to an organization's reputation. Thus, auditors must also consider how to protect sensitive information from unauthorized access. Implementing strong access controls and data encryption can help safeguard client data from potential threats (Khan, 2024). By prioritizing data security measures alongside the adoption of CAATs, organizations can not only enhance their auditing processes but also build trust with their clients by demonstrating a commitment to protecting their information.

Opportunities

Despite these challenges, the adoption of Computer-Assisted Audit Techniques (CAATs) presents significant opportunities for auditors and the auditing profession as a whole. The ability to analyze large datasets can lead to more thorough and accurate audits, reducing the risk of errors and fraud. CAATs can also improve the efficiency of audit processes, allowing auditors to focus on higher-level analysis and judgment rather than time-consuming manual tasks (Atta et al., 2024). For example, by automating data extraction and analysis, auditors can quickly identify anomalies and trends that might indicate potential issues, enabling them to address concerns proactively.

Moreover, as regulatory bodies and clients increasingly demand more sophisticated auditing techniques, auditors who are proficient in using CAATs will have a competitive advantage in the marketplace. This proficiency not only enhances their skill set but also positions them as valuable assets within their organizations (Vitali & Giuliani, 2024). With the growing emphasis on data-driven decision-making in business, auditors equipped with CAATs are better prepared to meet these demands and provide deeper insights into financial health and operational efficiency.

Additionally, the integration of CAATs into auditing practices can lead to improved compliance with regulatory standards. As organizations face stricter regulations regarding data integrity and reporting accuracy, the use of CAATs can help ensure that audits are conducted more effectively and transparently (Abeysiri Munasinghege, & Perumbuli Mudalige, 2024). By leveraging technology to enhance audit quality, firms can build trust with clients and stakeholders, ultimately strengthening their reputation in the industry.

CONCLUSION

The adoption of CAATs is an essential step for auditors to remain relevant in an increasingly digital and data-driven world. By understanding the factors that influence auditors' intention to adopt CAATs, such as perceived usefulness, perceived ease of use, subjective norms, and perceived behavioral control, organizations can take steps to encourage greater use of these technologies. Through addressing these factors and actively promoting the benefits of CAATs, organizations able to enhance their auditing processes and also ensure that their auditors are well-equipped to meet the evolving demands of clients and regulatory bodies in today's fast-paced landscape.

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