

Evaluation of Familiarity with Financial Investigation Approaches and Emerging Audit Innovations Among Practitioners: An Exploratory Inquiry

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ABSTRACT

The increasing complexity of financial systems, coupled with the proliferation of corporate fraud and technological disruption, has significantly elevated the importance of forensic accounting and advanced auditing technologies. This study investigates the level of familiarity among accounting practitioners with financial investigation techniques and emerging audit innovations. Grounded in an exploratory research framework, the study synthesizes theoretical perspectives and empirical findings from existing literature to assess awareness, adoption, and practical challenges associated with modern auditing tools and forensic methodologies.

The research integrates insights from forensic accounting theory, technological auditing frameworks, and corporate governance mechanisms to construct a multidimensional understanding of practitioner competency. It critically evaluates the role of artificial intelligence, data analytics, and automated auditing systems in enhancing fraud detection efficiency and audit quality. Drawing upon prior studies, including those examining forensic accounting effectiveness (Alshurafat et al., 2021; Nursansiwati, 2023), technological audit transformation (Eulerich et al., 2023; Fedykl et al., 2022), and financial irregularities in emerging economies (Roy, 2016; Pandey & Vinjamuri, 2022), the study identifies key determinants influencing practitioner awareness and capability.

The findings indicate a moderate level of conceptual awareness but a significant gap in practical implementation and technical proficiency. While practitioners acknowledge the importance of forensic accounting techniques, their adoption remains constrained by limited training, technological barriers, and organizational resistance. Additionally, the integration of emerging technologies such as AI-driven audit tools is uneven, reflecting disparities in institutional readiness and regulatory support.

The study contributes to academic discourse by bridging the gap between theoretical advancements and practical application in forensic accounting and auditing. It also provides actionable insights for policymakers, educational institutions, and professional bodies to enhance training frameworks and promote technology-driven audit practices. Ultimately, the research underscores the necessity of continuous professional development and institutional transformation to align practitioner competencies with evolving financial investigation and auditing paradigms.

KEYWORDS

Forensic Accounting, Audit Technology, Financial Fraud Detection, Practitioner Awareness, Artificial Intelligence in Auditing, Corporate Governance, Data Analytics, Financial Irregularities, Audit Innovation.

INTRODUCTION

The global financial ecosystem has undergone substantial transformation over the past two decades, driven by technological innovation, regulatory evolution, and increasing economic interconnectivity. These changes have simultaneously expanded opportunities for growth and intensified the risks associated with financial misconduct. Corporate fraud, financial manipulation, and irregular reporting practices have become increasingly sophisticated, necessitating advanced mechanisms for detection and prevention. In this context, forensic accounting and emerging audit technologies have emerged as critical tools in strengthening financial transparency and accountability.

Forensic accounting represents a specialized domain within accounting that integrates investigative techniques, auditing skills, and legal knowledge to detect and prevent financial fraud. Its importance has grown significantly in response to high-profile corporate scandals and systemic financial irregularities (Sharma, 2015). Concurrently, advancements in audit technologies—including artificial intelligence, machine learning, and data analytics—have revolutionized traditional auditing practices by enabling real-time analysis, anomaly detection, and predictive risk assessment (Fedykl et al., 2022).

Despite these advancements, a critical challenge persists: the gap between technological innovation and practitioner readiness. While theoretical frameworks and technological tools have advanced rapidly, the extent to which accounting practitioners are familiar with and capable of applying these tools remains uncertain. This gap is particularly pronounced in emerging economies, where institutional constraints, limited access to training, and regulatory complexities hinder the adoption of advanced auditing practices (Desai & Jangid, 2023).

The present study addresses this gap by evaluating the level of familiarity among practitioners with financial investigation approaches and emerging audit innovations. It seeks to understand not only the degree of awareness but also the depth of practical knowledge and application. This is essential because awareness without competence does not translate into effective fraud detection or audit quality enhancement.

The relevance of this research is further underscored by the increasing integration of technology into auditing processes. Studies have demonstrated that technology-based audit techniques significantly improve audit efficiency and accuracy (Eulerich et al., 2023). However, their effectiveness depends largely on the user's ability to interpret outputs, configure systems, and integrate findings into decision-making processes. Therefore, practitioner competence becomes a central determinant of audit effectiveness.

From a theoretical perspective, this study draws upon multiple frameworks, including forensic accounting theory, corporate governance models, and technology adoption theories. Forensic accounting theory emphasizes the role of investigative techniques in uncovering financial misconduct (Nursansiw, 2023), while corporate governance frameworks highlight the importance of transparency and accountability in financial reporting (Dada et al., 2023). Technology adoption theories, on the other hand, provide insights into the factors influencing the acceptance and utilization of new auditing tools.

The objectives of this research are threefold. First, it aims to assess the level of awareness among practitioners regarding forensic accounting techniques and advanced auditing technologies. Second, it seeks to evaluate the extent of practical application and identify barriers to adoption. Third, it intends to provide recommendations for enhancing practitioner competence and promoting the integration of innovative audit practices.

The scope of the study is confined to an exploratory analysis based on existing literature, focusing on key themes such as fraud detection, audit technology, and practitioner competency. While it does not involve primary data

collection, it provides a comprehensive synthesis of empirical and theoretical insights, offering a robust foundation for future empirical research.

In terms of significance, this study contributes to both academic and practical domains. Academically, it advances the understanding of the interplay between forensic accounting and audit technology. Practically, it offers valuable insights for policymakers, professional bodies, and educational institutions in designing training programs and regulatory frameworks that enhance practitioner readiness.

Ultimately, the study underscores the need for a paradigm shift in accounting education and professional development. As financial systems continue to evolve, practitioners must adapt by acquiring new skills and embracing technological innovations. Failure to do so may result in increased vulnerability to financial fraud and diminished audit effectiveness.

LITERATURE REVIEW

The literature on forensic accounting and audit innovation has expanded significantly, reflecting the growing importance of these domains in addressing financial misconduct and enhancing audit quality. This section synthesizes key contributions from the provided references, focusing on three primary themes: forensic accounting effectiveness, technological advancements in auditing, and financial irregularities in practice.

Forensic accounting has been widely recognized as a critical tool in fraud detection and prevention. Alshurafat et al. (2021) highlight its dual role in strengthening financial integrity and contributing to socio-economic development. Their study emphasizes the strengths of forensic accounting in identifying complex fraud schemes while also acknowledging limitations related to resource constraints and lack of expertise. Similarly, Nursansiwi (2023) underscores the importance of forensic accounting techniques in detecting financial fraud, particularly in environments characterized by weak regulatory frameworks.

The role of forensic accounting in corporate governance has also been extensively examined. Dada et al. (2023) demonstrate that the application of forensic accounting techniques enhances financial performance by improving transparency and accountability. This aligns with Carroll's (1999) conceptualization of corporate social responsibility, which emphasizes ethical practices and stakeholder accountability. In the context of emerging economies, Desai and Jangid (2023) provide insights into the challenges and opportunities associated with forensic accounting adoption, highlighting the need for regulatory support and professional training.

Technological advancements have significantly transformed auditing practices, introducing new tools and methodologies that enhance efficiency and accuracy. Eulerich et al. (2023) provide empirical evidence on the impact of technology-based audit techniques, demonstrating improvements in audit outcomes and task performance. Similarly, Fedykl et al. (2022) explore the role of artificial intelligence in auditing, concluding that AI enhances audit quality by enabling advanced data analysis and anomaly detection.

However, the adoption of these technologies is not without challenges. Thottoli et al. (2022) identify several barriers, including high implementation costs, lack of technical expertise, and resistance to change. These challenges are particularly pronounced in traditional auditing environments, where practitioners may be reluctant to adopt new technologies due to uncertainty and perceived complexity.

The literature also highlights the prevalence of financial irregularities and the need for robust detection mechanisms. Roy (2016) examines financial reporting irregularities in public sector units, revealing systemic issues related to governance and accountability. Similarly, Pandey and Vinjamuri (2022) analyze challenges in the banking sector, emphasizing the role of forensic accounting in addressing fraud and irregularities.

Studies focusing on fraud detection strategies provide additional insights into the effectiveness of forensic accounting. Singal et al. (2019) analyze fraud detection and prevention strategies, highlighting the importance of integrating forensic techniques with traditional auditing practices. Sayeed et al. (2021) further emphasize the role of forensic accounting in combating financial crime, noting its ability to uncover hidden patterns and anomalies.

From a global perspective, Ozili (2025) provides a comprehensive review of forensic accounting research, identifying key trends and research gaps. The study highlights the need for interdisciplinary approaches that integrate accounting, technology, and behavioral sciences. Similarly, Badiyani and Rohit (2023) emphasize the importance of continuous research and innovation in forensic accounting to address emerging challenges.

Despite the extensive literature, several gaps remain. First, there is limited research on practitioner awareness and competency, particularly in the context of emerging audit technologies. Second, existing studies often focus on either forensic accounting or audit technology, with limited integration of the two domains. Third, there is a lack of empirical evidence on the practical challenges faced by practitioners in adopting these techniques.

This study addresses these gaps by providing a comprehensive evaluation of practitioner familiarity with both financial investigation approaches and emerging audit innovations. By integrating insights from multiple domains, it offers a holistic understanding of the challenges and opportunities associated with modern auditing practices.

METHOD

1 Conceptual Foundations of Forensic Accounting

Forensic accounting is fundamentally rooted in the integration of accounting, auditing, and investigative skills aimed at detecting and preventing financial fraud. Unlike traditional accounting, which focuses on financial reporting and compliance, forensic accounting emphasizes investigative analysis and legal applicability. It involves the systematic examination of financial records to identify anomalies, inconsistencies, and evidence of fraudulent activity.

The theoretical foundation of forensic accounting is closely aligned with agency theory, which highlights conflicts of interest between stakeholders and management. Financial fraud often arises from such conflicts, necessitating mechanisms for monitoring and control. Forensic accounting serves as a critical tool in mitigating these conflicts by enhancing transparency and accountability.

Practically, forensic accounting techniques include data mining, financial ratio analysis, and transaction tracing. These techniques enable practitioners to identify patterns indicative of fraud, such as unusual transactions or discrepancies in financial statements. For example, in a hypothetical scenario involving corporate embezzlement, forensic accountants may analyze transaction logs to trace unauthorized fund transfers and identify responsible individuals.

However, the effectiveness of forensic accounting depends on the practitioner's expertise and the availability of technological tools. As financial systems become more complex, traditional techniques may be insufficient, necessitating the integration of advanced technologies.

2 Evolution of Audit Technologies

The evolution of auditing has transitioned from manual verification processes to highly sophisticated, technology-driven systems. Traditional auditing methods relied heavily on sampling techniques and

retrospective analysis, which limited the scope and accuracy of fraud detection. However, the emergence of digital technologies has fundamentally redefined auditing practices by enabling comprehensive data analysis, automation, and real-time monitoring.

Technological auditing is grounded in information systems theory, which emphasizes the role of digital infrastructure in enhancing organizational decision-making. The integration of audit technologies such as Computer-Assisted Audit Techniques (CAATs), data analytics platforms, and artificial intelligence tools has significantly improved the efficiency and reliability of audit processes (Eulerich et al., 2023). These tools allow auditors to analyze entire datasets rather than relying on samples, thereby reducing the risk of undetected anomalies.

Artificial intelligence, in particular, has emerged as a transformative force in auditing. AI systems can process vast volumes of structured and unstructured data, identify patterns, and generate predictive insights (Fedykl et al., 2022). For instance, machine learning algorithms can detect unusual transaction patterns indicative of fraud, while natural language processing tools can analyze textual data such as contracts and emails.

Despite these advancements, the adoption of audit technologies is uneven across organizations. Factors such as cost, technical complexity, and resistance to change continue to hinder widespread implementation (Thottoli et al., 2022). Moreover, the effectiveness of these technologies depends on the user's ability to interpret outputs and integrate them into audit decision-making processes.

3 Integration of Forensic Accounting and Audit Innovation

The convergence of forensic accounting and audit technology represents a paradigm shift in financial investigation practices. This integration enables a more comprehensive and proactive approach to fraud detection, combining investigative techniques with advanced analytical tools.

From a functional perspective, the integration involves the use of technology to enhance forensic accounting processes. For example, data analytics tools can be used to identify suspicious transactions, while forensic techniques can be applied to investigate and validate findings. This synergy enhances both the efficiency and accuracy of fraud detection.

Theoretical frameworks such as the resource-based view (Barney, 1991) provide insights into the strategic importance of integrating forensic accounting and audit technology. Organizations that effectively leverage these capabilities can achieve a competitive advantage by enhancing financial transparency and reducing the risk of fraud.

However, integration also presents challenges. Practitioners must possess both technical and investigative skills, which requires comprehensive training and continuous professional development. Additionally, organizations must invest in technological infrastructure and establish supportive governance frameworks.

4 Practitioner Awareness and Competency

Practitioner awareness and competency are critical determinants of the effectiveness of forensic accounting and audit technologies. Awareness refers to the understanding of available techniques and tools, while competency involves the ability to apply them effectively in practice.

The literature indicates that while practitioners generally recognize the importance of forensic accounting, their level of technical proficiency varies significantly (Desai & Jangid, 2023). This disparity can be attributed to differences in education, training, and organizational support.

Competency development is influenced by several factors, including access to training programs, professional

experience, and exposure to technological tools. For example, practitioners who receive specialized training in data analytics and AI are more likely to effectively utilize these tools in auditing processes.

A hypothetical example illustrates this point: an auditor equipped with AI-based tools may identify anomalies in financial data but may lack the investigative skills to interpret these anomalies. Conversely, a forensic accountant may possess investigative expertise but lack familiarity with advanced technologies. Therefore, a balanced skill set is essential for effective practice.

5 Barriers to Adoption of Advanced Techniques

The adoption of forensic accounting techniques and audit technologies is influenced by multiple barriers, which can be categorized into organizational, technological, and regulatory factors.

Organizational barriers include resistance to change, lack of management support, and limited financial resources. Many organizations are hesitant to invest in new technologies due to perceived risks and uncertainties. Additionally, the absence of a supportive organizational culture can hinder the adoption of innovative practices.

Technological barriers involve issues related to system complexity, integration challenges, and data security concerns. Advanced audit technologies often require significant technical expertise, which may not be readily available within organizations (Thottoli et al., 2022).

Regulatory barriers also play a significant role. Inadequate regulatory frameworks and lack of standardization can create uncertainty and discourage adoption. For example, the absence of clear guidelines on the use of AI in auditing may lead to hesitation among practitioners.

6 Conceptual Framework for Enhancing Practitioner Familiarity

Based on the synthesis of literature, a conceptual framework can be proposed to enhance practitioner familiarity with forensic accounting and audit technologies. The framework consists of three key components: knowledge acquisition, skill development, and institutional support.

Knowledge acquisition involves formal education and training programs that provide practitioners with a foundational understanding of forensic accounting and audit technologies. Skill development focuses on practical training and hands-on experience, enabling practitioners to apply theoretical knowledge in real-world scenarios.

Institutional support includes organizational policies, regulatory frameworks, and professional standards that facilitate the adoption of innovative practices. For example, professional bodies can play a crucial role in promoting continuous learning and certification programs.

The framework emphasizes the need for a holistic approach that integrates education, practice, and policy to enhance practitioner competency and readiness.

RESULTS

The exploratory analysis reveals several critical insights into the level of familiarity among practitioners with financial investigation approaches and emerging audit innovations. The findings indicate that while there is a general awareness of forensic accounting concepts, the depth of understanding and practical application remains limited.

First, practitioners demonstrate moderate familiarity with traditional forensic accounting techniques such as

financial statement analysis and fraud detection methods. This is consistent with prior studies highlighting the growing recognition of forensic accounting as an essential tool in combating financial fraud (Alshurafat et al., 2021; Nursansiw, 2023). However, awareness does not necessarily translate into competency, as many practitioners lack the necessary skills to apply these techniques effectively.

Second, the adoption of advanced audit technologies is uneven. While some practitioners are familiar with data analytics tools, the use of artificial intelligence and machine learning remains relatively limited. This aligns with findings from Fedykl et al. (2022), which suggest that the integration of AI in auditing is still in its early stages. Similarly, Eulerich et al. (2023) emphasize that technological adoption is influenced by organizational readiness and practitioner expertise.

Third, significant barriers to adoption are identified. These include lack of training, high implementation costs, and resistance to change. Practitioners often perceive advanced technologies as complex and difficult to implement, leading to reluctance in adoption (Thottoli et al., 2022). Additionally, limited regulatory guidance further exacerbates these challenges.

Fourth, the findings highlight a gap between theoretical knowledge and practical application. While practitioners are aware of the benefits of forensic accounting and audit technologies, they often lack hands-on experience. This gap is particularly evident in emerging economies, where access to training and resources is limited (Desai & Jangid, 2023).

Finally, the analysis indicates that practitioner competency is influenced by multiple factors, including education, professional experience, and organizational support. Practitioners with access to continuous training and technological resources demonstrate higher levels of familiarity and competency.

Overall, the findings suggest that enhancing practitioner familiarity requires a comprehensive approach that addresses both knowledge and skill gaps, as well as organizational and regulatory barriers.

DISCUSSION

The findings of this study provide important insights into the challenges and opportunities associated with the adoption of forensic accounting and audit technologies. From a theoretical perspective, the results support the notion that technological innovation alone is insufficient to improve audit effectiveness. Instead, practitioner competency plays a critical role in determining the success of these innovations.

The observed gap between awareness and application highlights the limitations of current training and education systems. While practitioners are exposed to theoretical concepts, they often lack practical experience in applying advanced techniques. This finding is consistent with the literature, which emphasizes the need for experiential learning and skill development (Badiyani & Rohit, 2023).

The uneven adoption of audit technologies also reflects broader organizational and institutional challenges. Resistance to change, lack of resources, and inadequate regulatory frameworks create barriers that hinder innovation. These challenges are particularly pronounced in emerging economies, where institutional support is limited (Pandey & Vinjamuri, 2022).

From a practical perspective, the study underscores the importance of integrating forensic accounting and audit technologies. The synergy between these domains enhances fraud detection capabilities and improves audit quality. However, achieving this integration requires a multidisciplinary approach that combines accounting expertise with technological proficiency.

The findings also have implications for policymakers and professional bodies. There is a need for standardized guidelines and regulatory frameworks that support the adoption of advanced auditing practices. Additionally, professional organizations should play a proactive role in promoting continuous learning and certification programs.

However, the study also has limitations. As an exploratory analysis based on existing literature, it does not include primary data, which may limit the generalizability of findings. Future research should incorporate empirical studies to validate and extend the findings.

In comparison with existing literature, the study contributes by providing a comprehensive evaluation of practitioner familiarity, integrating insights from forensic accounting and audit technology domains. It highlights the need for a holistic approach that addresses both technical and organizational factors.

CONCLUSION

This study provides a comprehensive evaluation of practitioner familiarity with financial investigation approaches and emerging audit innovations. It highlights the growing importance of forensic accounting and audit technologies in addressing financial fraud and enhancing audit quality.

The findings reveal that while practitioners are generally aware of these concepts, there is a significant gap in practical application and technical competency. Barriers such as lack of training, technological complexity, and organizational resistance hinder the adoption of advanced techniques.

The study contributes to academic and practical discourse by emphasizing the need for a holistic approach to competency development. It underscores the importance of integrating education, technology, and policy to enhance practitioner readiness.

Future research should focus on empirical validation and explore strategies for overcoming adoption barriers. Additionally, there is a need for interdisciplinary approaches that integrate accounting, technology, and behavioral sciences.

Ultimately, the study highlights that the effectiveness of forensic accounting and audit technologies depends not only on their availability but also on the ability of practitioners to utilize them effectively.

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