Exploring Digitalization Benefits in Auditing: A Case of Malaysian Financial Institution

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Abstract

Digitalization has revolutionized the auditing function across various industries, including the global financial sector, which is experiencing rapid transformation due to innovations in big data, artificial intelligence (AI), blockchain, and other emerging technologies. These advancements provide unprecedented opportunities for internal auditing, enabling more efficient, comprehensive, and agile audit processes. This paper explores the multifaceted benefits of digitalization specifically within the context of internal auditing in the Malaysian financial sector. Adopting a qualitative case study design, this study employs semi-structured interviews with internal auditors who possess practical experience in integrating digital technologies into the auditing functions of financial institutions. The data collected was transcribed verbatim and subjected to thematic analysis, revealing several key benefits. These include enhanced data analytics capabilities, improved risk assessment and fraud detection mechanisms, and the facilitation of real-time collaboration. The findings demonstrate that the adoption of digital technologies not only streamlines audit processes but also lead to improved audit quality and productivity. The study concludes by identifying potential avenues for further exploration regarding the future of digital auditing in financial institutions, highlighting both opportunities and challenges for the continued evolution of the field.

Keywords: Digitalization, auditing, financial industry, case study

1. INTRODUCTION

Digital transformation is rapidly becoming a key future strategy for various organizations including banking and financial institutions (Fairooz, 2019; Kim, 2022). This sectors are considered as highly transaction-based industry handling large amounts of transaction data, in which transformation towards fully automation is critical and justified. As noted in the World Economic Forum, the industry need to embrace the new digital technologies and information systems (Kirillova et al., 2021).

In recent years, financial institutions have increasingly adopted digital technologies (Deldag, 2020). One key area of transformation is auditing, in which the integration of digital tools has significantly reshaped traditional audit processes. In particular, financial institutions, given the complexity and scale of their operations, are benefiting immensely from digital audits that rely on automation, artificial intelligence (AI), and advanced data analytics. Manual audits, which involve a significant amount of paperwork, data entry, and human labor, are time-consuming and prone to errors. With digital technologies, the auditing processes could be transformed into faster, more accurate audits, providing financial institutions with real-time insights into their financial status and potential risks. Hence, digitalization in auditing is revolutionizing the way financial institutions ensure regulatory compliance, manage risk, and enhance operational efficiency.

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This paper aims to delve into the specific benefits that audit digitalization brings to financial institutions. By exploring case studies and existing literature, the paper will also address the challenges that institutions face in implementing digital audit solutions and the future prospects of these technologies.

2. LITERATURE REVIEW

2.1 Conventional auditing

Auditing plays a crucial role in maintaining the financial health of institutions by ensuring that their financial records are accurate and compliant with regulatory standards. Historically, the auditing process has been a manual, paper-intensive endeavor. Auditors would physically inspect and verify financial statements, balance sheets, and other records, often involving extensive travel and significant delays in reporting. This process, while thorough, was highly inefficient and susceptible to human error.

2.2 Digital auditing in the financial sector

The emergence of digital technologies such as cloud computing, AI, robotization, machine learning, and blockchain revolutionized the conventional audit approach. Application of digital technologies that focuses on machine-led rather than human-led processes enable banks and financial institutions to overhaul their operations, upgrade the conventional system and diversify ways of extending services to clients, and even mould a more competitive business model for the financial institutions (Deldag, 2020). In the context of the financial industry, digital technologies could bring innovation through radical change to the financial value chain and creating future values by streamlining the entire auditing process (Kirillova et al., 2021; Kim et al., 2022).

In general, digital audit automates routine audit tasks, enables real-time data analysis, and remote auditing capabilities. Leveraging on these digital technologies could impact the institutions' operations by improving transactions accuracy and speeding up response time (Kirillova et al., 2021). Literature has conceptually discussed various potential benefits of digitalization for auditing in general. Firstly, integration of digital technologies such as big data analytics and electronic file folders enable automated processing and real time analysing of large volumes of data (Wan Mohamad Noor, Abd Razak, Mat Jusoh, & Hasan, 2024). This could increase efficiency and accuracy of the auditing process. Hence, auditors could focus on more complex and higher-value activities. Secondly, application of blockchain that uses ledger technology provides tampered-proof transaction records, which introduces greater transparency and easily accessible audit trail.

Further, digitalisation in auditing also escalates fraud management (Kirillova et al., 2021). For instance, adoption of AI and big data analytics in banking operations could enhance potential frauds detection (Kim et al., 2022). To explain, digital auditing enhances detection of abnormal transactions and potential of money laundering activities. Discrepancies can be flagged and addressed in real-time, thus reducing fraud risks. In other words, digital audits identify potential risks more effectively, and improve the accuracy and reliability of audit outcomes (Wan Mohamad Noor, Abd Razak, Mat Jusoh, & Hasan, 2024). Implementation of digitalization in auditing could contribute in strengthening compliance and regulatory adherence among organizations (Ernst & Young, 2018). Finally, while embarking on digitalization may required initial investment cost, the applications could potentially contribute towards cost reductions in the long run as automation replaces the conventional use of resources (PwC, 2020).

3. RESEARCH METHODOLOGY

This study uses a qualitative research approach to explore benefits of digitalization for auditing in the financial institution context. The choice of qualitative research is guided by the research questions to understand how digitalization contribute to auditing processes and tasks in the financial institution;s operations.. While benefits and challenges of digitalizarion are presented in the literature, its application within a specific industry is limited and are not yet fully understood or conclusive. Hence, qualitative methods allow researchers to explore these factors in depth, capturing the complexities and subtleties that quantitative methods might overlook. This approach enables the identification of key themes and valuable insights that can inform a more comprehensive understanding (Creswell & Creswell, 2017; Merriam & Tisdell, 2016; Creswell & Poth, 2016) of the digitalization benefits for auditing in financial institution operation. Data collection incolves semi structured inreviews with the institution's internal auditors with experiences using digitalization in performing their auditing jobs. Data analysis followed six-stages thematic analysis by Braun and Clarke (2006) leading to emergence of key benefits of digitalization within the study's context.

4. FINDINGS AND DISCUSSIONS

This findings reveal the multifaceted bnefits of digitalization in auditing within the scope of financial institution operation. Among all, digitalizations could enhance accuracy, cost reduction, and real-time data analytics. Based on the thematic analysis, benefits of digitalization are categorized into three main themes: enhanced data analytics capabilities, improved risk assessment and fraud detection mechanisms, and enabled real-time collaboration.

4.1 Enhanced Data Analytics Capabilities

Automation is one of the most immediate benefits of audit digitalization. Tasks such as data entry, document verification, and calculation of financial metrics can be automated, allowing auditors to focus on more complex and judgment-based tasks. Participant mentioned that,

"The most important key aspects for me include big data analytics for thorough data examination and AI to automate routine tasks" (P3).

Further, with digital tools, auditors can access and analyze real-time financial data, which allows for faster identification of discrepancies and anomalies. As highlighted by the participant,

"AI predictive analysis and machine learning for pattern recognition are critical components when you are implementing digitalization. In our recent audit, we have implemented AI-driven predictive analytics tool to assess risks, such as credit risk, mainly…This is interesting." (P2).

The real-time analytics not only improve the speed of audits but also their accuracy, as data is assessed in its most current form. In line with Kirillova et al. (2021) and Wan Mohamad Noor, Abd Razak, Mat Jusoh and Hasan (2024) Kim et al. (2022), the use of AI and analytics digital technologies enhance reliability of audit outcomes.

4.2 Improved Risk Assessment and Fraud Detection Mechanisms

The capabilities of analytics enables effective Predictive analytics being utilized in digital audits. By analyzing historical data and current trends, digital audit tools can predict future risks and help financial institutions take preventive actions. In the context of auditing in financuial institutions, the participant shared the experience,

"We use machine learning algorithm to analyse the transaction data across multiple accounts. And then the algorithm was able to detect unusual patterns that indicated potential money laundering activities in our financial institution" (P2).

In relation to that, among biggest advantages of audit digitalization is the ability to detect fraudulent activities more efficiently. This use of AI enhances the accuracy and efficiency of risk assessment is in line with the literature that highlights the potential of AI and big data analytics to automate routine tasks and improve the quality of audits (Kim et al., 2022; Richins et al., 2017). AI-driven audit tools can analyze large datasets and identify patterns that may indicate fraud. Hence, the use of digital tools allowed for faster identification of suspicious transactions, thus reducing the financial losses associated with fraud.

4.3 Enabled real time collaboration

Another interesting findings of digitalization benefit in auditing is its advantage of facilitating real time collaboration in performing auditing tasks.

"For me, cloud computing is important for secure and efficient data storage and collaboration; we use secure cloud-based solutions for document management and collaboration" (P3).

This analysis highlights the essential role of digitalization in auditing and sets the stage for further exploration of how these technologies can be optimally integrated to achieve even greater improvements in audit practices (Rodrigues et al., 2023).

5. CONCLUSION

This paper explores the multifaceted benefits of audit digitalization, emphasizing improvements in data analytics capabilities, risk assessment and fraud detection, as well as real time collaboration. Findings highlight how digital audit tools are transforming the audit landscape of financial institution, leading to increased accuracy, reducing fraud, more efficiennt auditing performance. Future studies may include case studies from other industries and also assess possibe challenges such as initial implementation costs, data security concerns, and resistance to technological change that hinders effective digitalization adoption by organizations.. This paper provides an overview of the current state of audit digitalization and its future implications for financial institutions.

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