Chapter 5
Influence of Blockchain on the Auditing Profession

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ABSTRACT

Blockchain technology has become indispensable in finance and IT, profoundly transforming transactional data access, storage, and reporting. It also unlocks groundbreaking applications beyond its original scope. However, regulation remains crucial for organizations. Audits are vital to ensure transparent communication of business strategies and effective governance of information technology and financial resources. This chapter explores auditing's goals, significance in organizations, blockchain's features, diverse use cases, and the regulatory and ethical challenges it poses. Furthermore, it analyzes blockchain governance and its disruptive impact on traditional auditing practices and procedures.

INTRODUCTION

Auditing is a vital part of any system. One must work tirelessly to ensure that risks are mitigated as much as possible. As time progresses, new technologies are developed, new practices are formed, and ultimately, new risks become prevalent. One major new technology in the realm of information and data storage is blockchain. This emerging financial technology has only recently come into the limelight with the Bitcoin explosion. Created by an individual or group of people known by the moniker Satoshi Nakamoto in 2009, blockchain was functionally developed and applied to facilitate data storage and transactions of the cryptocurrency known as Bitcoin, though the idea predates the application by more than a decade (ICAEW, n.d.).

Notably, this technology was meant to circumvent the necessity of a central bank. With the decentralized nature of blockchain, there are many benefits to a variety of stakeholders within many industries, including quicker and more transparent transactions, end-to-end. Unfortunately, many new ethical dilemmas can arise as well (IBM, n.d.). Both information technology and accounting experts have to analyze the implications of blockchain and develop novel methods of auditing the blockchain system. For better or for worse, one certainty is that blockchain is here to stay.

BACKGROUND OF AUDITING

What is IT Auditing?

IT auditing has become widely used by small to large companies throughout the world. Information systems audits are formal examinations that are used to evaluate if such systems are in compliance with laws and are properly regulated (ISACA, 2019). Overall, auditing helps companies to regulate and keep track of operational changes and operational requirements that must be met by the enterprise itself. An audit can help an organization evaluate procedures, operations, affirm organizational compliance with regulations, laws, can evaluate both business performance and identify potential threats and/or vulnerabilities that exist in different departments (ISACA, 2019). In essence, IT audits are essential for corporations to perform on a routine basis. The identification and measurement of specific areas within a corporation is essential to both business continuity and business performance. On the other hand, IT auditing examines different processes, IT assets, and controls in an organization's multiple levels in order to help determine the extent to which the organizations accurately adhere to the standards set forth (Gantz, p. 21). This level of distinguishment between what a standard audit offers versus an IT audit easily demonstrates the different categories of auditing that exist for the vast number of categories an organization must keep track of in order to ensure success and hedge potential threats and risks that may cause varying levels of damage.

Why is IT Auditing Important?

Information systems auditing brings great value to the success of companies. Like any other enterprise-wide evaluation, IT audits come at a price too. For example, all publicly traded companies are subject to both legal and regulatory requirements, most of which are determined through an audit (Gantz, p. 36). On the other hand, IT audits provide companies with other benefits that can help maintain business continuity and mitigate exposure to risks. As mentioned by author Stephen D. Gantz

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