

СЕКЦИЯ: « НОВЫЕ ТРЕНДЫ И МЕТОДОЛОГИЧЕСКИЕ ПОДХОДЫ К РЕШЕНИЮ ПРОБЛЕМ КОРПОРАТИВНОГО УЧЁТА, ОТЧЁТНОСТИ, ФИНАНСОВ И НАЛОГООБЛАЖЕНИЯ В ЗЕЛЕННОЙ ЭКОНОМИКЕ»

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BLOCKCHAIN TECHNOLOGY AND ITS IMPACT ON ACCOUNTING AND AUDIT ACTIVITIES

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Abstract: *Blockchain technology is a transformative innovation impacting various industries like accounting and auditing. Research explores its integration in accounting and audit processes, examining implications. The document provides a detailed examination of blockchain technology, stressing aspects such as decentralization and transparency. The discussion revolves around the utilization of blockchain in accounting and audit, including aspects like real-time reporting and improved data integrity. The research identifies benefits and challenges of adopting blockchain in accounting and audit, including improved data accuracy and need for standardization. It also looks at challenges like integration with existing systems and skill development. The study explores the consequences of blockchain technology on the duties of accountants and auditors, as well as the vital changes in educational and professional growth. The findings contribute to knowledge on integrating emerging technologies in accounting and audit, informing decision-making processes.*

Keywords. *Blockchain, audit, triple-entry accounting, database security, distributed ledger technology, digital transformation.*

Introduction

The advent of blockchain technology represents a paradigm shift in how financial data is recorded, stored, and verified. Initially conceived as the foundational technology for digital currencies, blockchain has swiftly progressed, discovering uses in various sectors such as finance, supply chain, healthcare, and beyond. Its decentralized, transparent, and unchangeable characteristics provide significant advantages for the realms of accounting and auditing, holding the potential to transform conventional methodologies.

Within the realm of accounting, the ability of blockchain to furnish instantaneous, tamper-resistant records heightens the dependability and precision of financial reports. Through the automation of reconciliation procedures and the facilitation of real-time transaction logging, blockchain has the capacity to notably diminish inaccuracies and fraudulent activities. This openness guarantees that all

concerned parties can access identical unaltered data, cultivating trust and credibility in financial reporting.

Concerning auditing, blockchain technology brings forth the concept of ongoing auditing, wherein transactions are authenticated in real-time as opposed to periodic evaluations. This continuous validation can promptly identify inconsistencies and anomalies, thereby lessening the chances of fraud and mistakes. Additionally, smart contracts self-executing agreements with terms encoded directly can streamline auditing procedures further by automating conformity and enforcement.

Despite its promise, the integration of blockchain in accounting and auditing encounters obstacles. Challenges such as technological intricacies, regulatory ambiguities, and the necessity for substantial organizational modifications hinder widespread adoption. This study endeavors to explore the influence of blockchain technology on accounting and auditing practices, evaluating both its potential for transformation and the hindrances that need to be overcome.

By conducting a thorough examination of current literature and scrutinizing existing blockchain applications, this paper aims to offer insights into how blockchain can enrich transparency, efficacy, and confidence in the realms of accounting and auditing. The results of this investigation aim to assist professionals and policymakers in harnessing blockchain technology to establish more dependable and efficient financial environments. At the same time, in Uzbekistan, the government is taking large-scale measures to develop the digital sector of the economy, electronic document circulation systems are being introduced, electronic payments are being developed, and the regulatory legal framework in the field of electronic commerce is being improved [1].

Literature review

A comprehensive literature review on the impact of blockchain technology on accounting and audit activities reveals a growing interest in the field. Studies show that blockchain applications in auditing are on the rise, with a focus on topics such as smart contracts and data analytics. The research emphasizes the transformation of business processes due to blockchain's decentralized and traceable data access in real time [5]. Furthermore, the analysis of blockchain technology's impact on accounting, auditing, and assurance practices highlights both advantages and disadvantages, indicating a significant effect on these areas [6]. Additionally, the risks and benefits of implementing blockchain in accounting and auditing processes for fuel and energy companies are identified, offering insights for practitioners in these sectors [7]. A bibliometric analysis of scientific literature further underscores the evolving research landscape, with a recent focus on blockchain as a tool for financial and accounting information.

Blockchain technology provides a transparent and immutable record of all transactions, which can significantly improve the transparency and traceability of accounting data. This is achieved through the distributed, decentralized nature of the blockchain, where all network participants have access to the same ledger of

transactions [8]. This eliminates the need for centralized record-keeping and reduces the risk of data tampering or manipulation.

Blockchain-based accounting systems can enable real-time reporting and reconciliation of financial data. This is because transactions are recorded and verified in near-real-time, allowing for immediate updates to the accounting records [9]. This can improve the timeliness and accuracy of financial information, enabling more informed decision-making and better cash flow management.

Methodology

This investigation comprises qualitative research conducted within a library setting. Literature exploration serves a purpose beyond mere data acquisition. Strict adherence to library resources alone constrains the scope of research activities, precluding the necessity for fieldwork [10]. The qualitative analysis within library research aims to scrutinize the impact of blockchain technology on accounting and auditing practices. Secondary data serves as the primary source for this study, obtained from literature, articles, academic journals, and online sources relevant to the research topic. The secondary data extracted pertains to literature discussing the operational aspects of blockchain technology and its implications for accounting and auditing fields. Documentary method was employed for data collection in this research. This qualitative inquiry, through a literature review, strives to formulate a conceptual framework of blockchain application in accounting and auditing sectors based on pertinent academic sources. The analytical process encompassed data reduction, content analysis, and subsequent validation and confirmation of findings.

Analysis and results.

Blockchain is essentially an innovation rooted in accounting principles, specifically in relation to the transfer of ownership of assets and the methods for maintaining an accurate financial ledger. The field of accounting is commonly associated with the measurement and communication of financial data, as well as the evaluation thereof. Most professions involve ensuring legal rights and obligations concerning property or determining the optimal capital allocation strategies. Utilizing blockchain technology can provide accountants with transparency regarding ownership and liabilities, leading to significant efficiency improvements. The potential of blockchain lies in its ability to streamline accounting processes by reducing the costs associated with reconciling ledgers and record-keeping. Moreover, blockchain offers irrefutable certainty regarding asset ownership and history. By leveraging blockchain, accountants can gain clarity on available resources and organizational obligations, allowing them to allocate resources towards planning and analysis rather than mere documentation [2]. Alongside emerging technologies like artificial intelligence, blockchain is expected to automate more accounting transactions, shifting the focus of accountants towards analyzing financial implications of blockchain data in conjunction with financial assessments and reality. For instance, while blockchain may confirm the existence of individual borrowers, their recoverable value and financial worth may remain subject to debate. While blockchain records can verify ownership, verifying the condition, location, and value of assets still requires validation. By eliminating reconciliation tasks and ensuring

transaction history integrity, blockchain can enhance the security of accounting processes. This can prompt a reevaluation of aspects that are currently considered too complex or unreliable to assess, such as the valuation of company-held data.

Blockchain serves as a substitute for the function of reconciliation and bookkeeping, posing a potential threat to the role of accounting professionals in these domains. Nonetheless, it can enhance the capabilities of those focusing on value provision elsewhere, such as in due diligence for mergers and acquisitions. The decentralized consensus on critical figures allows more time for analysis and supervision, resulting in an overall expedited process.

The implementation of blockchain in external audits could lessen the necessity of verifying a company's financial status if its transactions are recorded in blockchains. This shift would significantly transform the audit process. Integration of blockchain solutions, coupled with relevant data analytics, can expedite the resolution of transactional issues encountered during audits. This, in turn, enables auditors to address more substantial concerns, including the classification and recording of transactions.

Transitioning to a financial system incorporating blockchain elements presents various opportunities for the accounting profession [3]. Accountants are recognized as experts in sound practices, applying intricate regulations, industry standards, and logical reasoning. They are poised to guide and shape the future implementation and utilization of blockchain technology. Furthermore, accountants are expected to devise solutions guided by blockchain principles. To play a pivotal role in the financial landscape, blockchain must undergo development, refinement, and standardization, a process that is likely to span several years. Despite the numerous blockchain and startup initiatives in this realm, only a few have progressed beyond the proof of concept or pilot phase.

Accounting professionals have actively engaged in research, although there are numerous other professions to pursue. The establishment of regulations and standards to govern the blockchain poses a significant challenge. Major firms and accounting bodies should leverage their expertise for this purpose. Accountants can also serve as consultants for businesses evaluating the benefits of blockchain integration. They provide guidance on assessing the costs and advantages of the new system, positioning them as key advisors for firms exploring opportunities in this new technology.

The utilization of blockchain and smart contract technology will revolutionize accounting practices related to transactional assurances and transfer of property rights. This will lead to a decreased need for reconciliation and dispute management, enhancing confidence in legal rights and obligations. Consequently, the focus will shift towards transaction accounting methods and considerations. Many existing accounting processes can be enhanced through blockchain and other modern technologies such as data analysis or AI, improving the efficiency and value of accounting tasks. As a result, the skill set required in accounting will evolve, with certain functions being reduced or eliminated while others like technology, advisory

services, and value-added activities will grow. Auditors' focus will shift towards effectively examining businesses with significant blockchain-based transactions.

Verification of the accuracy or existence of blockchain transactions with external sources is deemed unnecessary. However, emphasis remains on how these transactions are recorded and reflected in financial statements, as well as the evaluation process. Over time, more documentation may transition to the blockchain, enabling auditors and regulators to analyze transactions in real-time and ascertain their origins more accurately. Accounting professionals need not be blockchain experts, but they must be able to advise on its adoption and assess its impact on clients and businesses [4].

Conclusion.

Conceptually, the blockchain represents a shift from the point where trust from the ledger emanates from the central authority that maintains it, to where it stems from self-assurance in the mechanism that encourages record-keeping. Furthermore, the ability to execute smart contracts opens up the possibility of creating programmable ledgers, fundamentally altering the operation of all contracts. Given the resolution of technical obstacles, blockchain exhibits significant potential. Disregarding the functionality of smart contracts, widespread adoption could lead to the disintermediation of most financial systems. Intermediary blocks between entities that traditionally interact with each other have the potential to supplant central authorities such as banks, lawyers, and clearinghouses. Through direct communication and a single ledger that requires no reconciliation, organizations can save costs associated with paying ledger owners and the effort expended on reconciling with their counterparts. The elimination of uncertainty would benefit the economy by simplifying processes and fostering greater confidence in decision-making. Moreover, if necessary, tax authorities, regulators, or similar oversight bodies could be granted restricted access to the blockchain. This would enable them to observe and monitor transactions in real-time, potentially resulting in reduced expenses and enhanced efficiency in compliance and regulatory activities. Immutable records from the blockchain decrease the likelihood of financial crimes, thereby enhancing the credibility of records. Blockchain has the capacity to revolutionize the accounting profession by reducing the expenses tied to maintaining and reconciling ledgers, and by providing absolute certainty regarding historical assets and ownership. They actively engaged in the blockchain's development with a focus on risk management. It is imperative for auditors to contemplate moving towards influencing and guiding the implementation of blockchain technology. Audit firms need to shift their attention towards evaluating the effectiveness of risk management and offering advice on controls and assurances for internal management. The rapid evolution of technology presents a remarkable opportunity for auditors. In order to enhance the quality of services, auditors should consider the potential transition to continuous auditing in the long term. The utilization of Blockchain technology enables continuous auditing through real-time access to transaction records. The subsequent step involves expanding advisory services. With resources freed up from traditional evidence gathering and testing, audit firms should contemplate integrating

appropriate data analysis into the blockchain and expanding advisory services such as control design, change management, and blockchain technology.

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