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BLOCKCHAIN INNOVATION IN ACCOUNTING: CULTURAL SHIFTS AND STRATEGIC PERCEPTIONS IN AUDITING PRACTICE

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ABSTRACT

The innovation strategy of blockchain technology, which is considered a digital ledger with undisputable data, is assumed to propose significant assistances over the accounting system, also may eventually replace it. Blockchain makes accounting easier and offers real-time audit and recording. Nevertheless, because this is a novel tool, there are several difficulties. Although blockchain is a topic of much discussion, many are unaware of its actual benefits. The aim of this research is to determine the advantages and challenges associated with the use of innovative strategy of blockchain technology in auditing and accounting from the auditors' perceptions. A five-point Likert scale questionnaire was used to conduct an opinion poll. Employing the non-parametric Kruskal-Wallis test and descriptive statistics, the researcher examined a sample of 183 auditors from a population of 512 auditors to collect data. The study's findings indicate that more openness between accounting's internal and external users is the only advantage that all respondents had a unanimous perspective. Nonetheless, there were notable differences in respondents' opinions regarding the remaining benefits. The study further interprets auditors' perceptions not merely as individual attitudes but as reflections of broader institutional culture, shaping resistance or acceptance of blockchain within the auditing profession in Jordan.

KEYWORDS: Auditing, Accounting, Blockchain, Cultural Sift, Jordan.

1. INTRODUCTION

Consensus algorithms are used to record and validate transaction details and amounts, including date, location, anonymized participants, and encrypted signatures, in innovation strategy Blockchain Technology (BT), which is a spread transactional database, similar to a general ledger or registry. BT is an accounting method that facilitates the transfer of ownership of assets and the preservation of accurate financial data. This technology primarily involves measurement, analysis, and dissemination of financial data (Abdennadher et al., 2022). The innovation strategy of the blockchain has been considered as one of the most significant technological trends since the internet (Abu Afifa et al., 2024). The potential benefits of BT in accounting include the efficiency, speed, traceability, transparency, decentralization, security, immutability (Adelowotan & Coetsee, 2021). It also significantly changed the nature of accounting and traditional bookkeeping. The benefits of implementing BT in accounting are outlined below.

While blockchain stops fraud and unlawful activity, distributed and decentralization ledger systems refer towards a process in that no authority is in charge of every single transaction occurring throughout the system. Security indicates that information is private and crucial, and blockchain has the power to drastically alter how people see their vital data. Blockchain ledgers' immutability ensures that the data are preserved and untouched over time. The following are some potential applications of blockchain in auditing and accounting. First, continuous accounting may take advantage of the BT. Blockchain ledgers may be used to audit and store data that may be shared rapidly with the appropriate parties, such as business associates, creditors, and the government, to offer continuous assurance (Agustini & Mustakini, 2025). Second, we provide transaction histories and traces. These are required for assurance and auditing reasons to verify company costs, earnings, liabilities, assets, transactions, and other things. Third, without the need for human involvement, BT could record, verify, and authorize accounting corporation transactions in real-time. Fourthly, when all conditions outlined in the agreements are satisfied, start, and carry out smart contracts or transactions in conjunction with the payment of accounts receivable (Akter et al., 2024).

The many advantages of BT, independent of auditing and accounting procedures, include complete and transparent transactions very quickly; wholly users in a blockchain had accessibility and transparency over transactions; enabled non-reversible transactions; simple to obtain the complete financial reports; less time-consuming; secure record of proof; decreased fraudulent activity; improved transparency within external and internal users; and simple and straightforward. The main difficulties with BT, especially in relation to auditing and accounting, are that it may become slow if there is a network fault, that it might be physically attacked or fail to cut off the pear-to-pear network, that it is a cheap system that uses a lot of power, that it is difficult to falsify information (Al Najjar et al., 2024).

Beyond its technical promise, blockchain adoption in accounting and auditing also represents a cultural and institutional transformation (Alawadhi & Alrefai, 2024). Traditional audit practices have long relied on professional norms of trust, hierarchical control, and regulatory oversight (Al-Wreikat et al., 2023). Blockchain challenges these conventions by shifting verification from human-centered judgment toward decentralized, automated consensus. This disruption suggests that blockchain adoption is not merely a technological upgrade but a reform of the governance culture that underpins auditing and accounting systems. Furthermore, in order to fill the gap in the prior studies, the present research on BT's properties has mainly focused on secondary data, with developed countries being the primary focus. This study aims to explore the advantages and difficulties innovation strategy of implementing BT in auditing and accounting in developing countries like Jordan, as there are few studies on this topic. Based on the aforementioned discussion, the purpose of this study is to determine the challenges and benefits associated with the use of BT in auditing and accounting from the auditors' perceptions. The rest of this study is organized as follows. Section 2 discusses the relevant literature and hypothesis building. Section 3 describes the research technique. Section 4 includes an analysis and discussion of the study's findings. Section 5 gives the conclusions and recommendations.

2. REVIEW OF LITERATURE

2.1. Technology of Blockchain

Blockchain is a decentralized digital database composed of blocks that represent transactions between participants. Blockchain is defined as a public ledger or a distributed database of records of all completed and shared digital events or transactions (Agustini & Mustakini, 2025). Blockchain provides enormous potential benefits for several businesses and lacks central control (Al-Zaqeba et al., 2022). Technology is independent of

external parties. After being unveiled to the public in 2008, blockchain gained traction in usage over the next few years, owing to its effectiveness and great degree of security. This great degree of security stems from the fact that modifications to a blockchain require the consent of most participants to operations in blocks that follow in the chain and that blockchains employ complex mathematics and cutting-edge software technologies that are generally difficult to hack (Biancone et al., 2025). Because of its ability to streamline the verification process and accelerate the overall transaction process, BT is both intriguing and enticing (Adelowotan & Coetsee, 2021).

Globally, there are two main types of blockchain accounting private blockchains, which are more exclusive and sophisticated forms of accounting that require permission from an outside party to join groups, and public blockchains, in which everyone can access the network and participate in transactions without requiring a network. Businesses and Companies in a certain sector may establish private blockchains, which may require verification (Carrasco & Romi, 2022). For instance, given that the construction sector handles sensitive data, Chou et al. (2021) proposed that private blockchain networks may provide reliable solutions for enterprise software in this sector. Among the many widely used applications of BT is in digital currencies, namely Bitcoin, a publicly accessible blockchain platform. Because blockchain is not limited to Bitcoin, Chowdhury et al. (2023) reviews articles and proceedings to record the wide variety of uses it has in reality. While not the origin of blockchain, Bitcoin has undoubtedly sparked its development to the point where it is now widely used. Compared with Bitcoin, BT is an even more intriguing and significant invention (Alkhwaldi et al., 2024). Similar to how Bitcoin is a tool that runs on the blockchain, Hyperledger has been using the blockchain since early 2015.

All distributed ledgers constructed using BT are supported by Hyperledger, an enterprise-based ledger built on BT (Akter et al., 2024). Created for enterprise-level applications that utilize blockchain technology, Hyperledger offers user-management solutions that guarantee user confidence and data security. The two main objectives of the Hyperledger project are to support BT and advance and change international business transactions are the two main objectives of the Hyperledger project (Al Najjar et al., 2024). Three distinct paths of advancement in BT can be distinguished Blockchain 1.0, Blockchain 2.0, and Blockchain 3.0 (Alawadhi & Alrefai, 2024). The majority of citizens might consider blockchain 1.0 to be the most popular stream, as it was the first one created. This mainly consists of cryptocurrencies, such as Bitcoin in capital markets; other cases are Ethereum, Litecoin, Pi, Dog, and Bitcoin. Distribution ledger contracts, as well as additional foundational technology, for example smart contracts and various further procedures, are included in Blockchain 2.0. The term "future of the blockchain" refers to what blockchain 3.0 could do for society as a whole. This technology has a wide range of effects on human existence. Beyond 1.0 and 2.0, blockchain 3.0 encompasses applications including online electronic voting, smart cities, eGovernment, digital identity, and more (Bakarich et al., 2020). It is important to distinguish between blockchain 1.0, 3.0, and beyond to comprehend the type of cybersecurity problems that these technologies will encounter.

2.2. *Auditing and Technology of Blockchain*

The auditing process is quickening due to industrial automation and other technological advancements. External auditors examine accounting records during an audit as part of their shareholders in so as to verify adherence to budgeting standards and provide enough confidence about their accuracy and dependability (Baiod & Hussain, 2024). Financial system audits may be expensive, time-consuming, and challenging; they usually call for human process checks, the collection of paper evidence, and the validation of external sources (Desplebin et al., 2025). Duplicate records and tedious activities may become less necessary with blockchain technology. If blockchain is to be used as an accounting platform, it must be able to be audited, and professionals must come up with ways to do so. In their paper, Al-Zaqeba et al. (2022) explain key components of the technology of distributed ledger and offer a process for auditing it. The components are listed as follows First, as long as they don't work together to break the chain, the system works as most collaborative stations own the bulk of the processing power and are able to calculate the hash more quickly than any other group. Furthermore, it takes the longest to compute the hash to date since the most extensive chain (block of activities) contains the most recently event and needs the highest computing power to generate (Fang et al., 2023). Third, computers are used to finish the proof of work using a pool of CPUs from a network of peer-to-peer servers. Fourth, the evidence of the task must be repeated in order to change the record, that is, the hashed sequence of transactions. Fifth, a hash algorithm is meant to produce proof of work. Sixth, fresh transactions are timestamped and hashed into

an ongoing chain. Seventh, there is no need for a trustworthy third party because the network is peer-to-peer. In this instance, auditors would run into issues with data security, transaction transparency, and data dependability while examining how the blockchain system functions. The effectiveness concept, according to which auditors must plan and conduct appropriate audit operations in order to get enough proof of the occurrence of material misstatements, is connected to data reliability (Fortin & Pimentel, 2024).

Reliable evidence is one that the auditor can trust and comprehend. Very typically, dependable proof is gathered and validated by outside parties utilizing records like as bills, auditor states, and notifications, among other things (Arianpoor & Borhani, 2025). Information about a company on the blockchain is sourced from external sources to a certain degree (O. F. Atayah & M. M. Alshater, 2021). Auditors require proof of appropriate management for the group of peers and the aforementioned blockchain before they can validate blockchain evidence (Appelbaum et al., 2022). Consequently, all blockchain-derived evidence will be valued and regarded as reliable for corporate audits. Data security ensures that information hasn't been illegally stolen or unlawfully manipulated. The blockchain system may offer proof of its security as it uses an unchangeable transaction trace between chain nodes (Cao et al., 2025). Thirdly, integrating a blockchain into the architecture enhances accessibility to information through the provision of evidence of the block sequence and shedding light on the process by which each block was produced in the "chopping system" described by Fullana and Ruiz (2021) in the essential elements.

During engagement, the auditor needs a lot of audit evidence. The material discussed thus far includes the data that the audit team used to reach their final judgment about the engagement and offer their auditing opinion (Gilmour et al., 2025). To reach this conclusion, a variety of techniques were used, including the examination of physical assets, the examination of analytical techniques, re-calculation, re-performance, confirmation, questioning, observation, and documentation (Göktürk et al., 2024). By using blockchain-related techniques instead of traditional ones, these procedures become more effective on a blockchain, which is an ecosystem that continuously gathers information. While a typical auditor requires bank letters of confirmation, a blockchain auditor only has to link the data streams inside the blockchain to examine account balances (Guo et al., 2025). The blockchain's receivable accounts also use these documentation sources. An auditor's burdensome task throughout this process has already been reduced. Examining documents or records would be a second example. According to Hakami et al. (2024), audit departments frequently gather a variety of samples and confirm or trace them back to their original sources.

With BT, a blockchain audit may assess the complete enterprise resource planning dataset. The auditor can examine the documentation pertaining to the peer network configuration that powers the Technology of Distributed Ledger procedure, demonstrating the functionality of Appelbaum's initial piece. Blockchain shows that Reviews could become easier for the designated teams of involvement to a customer utilizing distributed ledger technology (Gietzmann & Grossetti, 2021). It has been demonstrated that blockchain settlements offer great evidence for first-level auditing since the evidence is clear, comprehensive, reliable, and hard to falsify. Future auditors and blockchains, however, are causing some worry. Since blockchain origins are not related to the technical problem, they need to be continuously studied (Chowdhury et al., 2023). Auditors should also ensure that peers are not working together to weaken the chain. When conducting their examination, auditors ought to take this risk into account (Desplebin et al., 2025). Given all the audit-related factors, BT continues to revolutionize businesses, and its integration into auditing practices is likely to occur gradually rather than all at once, upsetting the sector. All things considered, BT challenges conventional accounting techniques like auditing, making accounting more precise, transparent, and traceable. This is due to the fact that typical point-in-time forensic retrospection is rendered useless and wasteful when a fully integrated system is used (Gans & Hałaburda, 2024). For individuals in the auditing sector, this opens up new chances since auditing activities will need more thorough auditing activities. Considering all we've spoken about, it's safe to say that BT will eventually drastically change the role of the conventional auditor.

Importantly, auditing should not only be seen as a technical procedure but also as a cultural practice tied to trust, authority, and institutional governance (Guo et al., 2025). The introduction of blockchain unsettles this foundation by redistributing trust from auditors and regulators to distributed technological protocols (Alkhwaldi et al., 2024). Such a shift raises critical questions about professional authority, the social legitimacy of auditors, and the broader governance structures within which accounting operates. Hence, blockchain adoption embodies both

technological and cultural change.

2.3. Accounting and Technology of Blockchain

With the emergence of software capable of creating many types of information and maintaining transaction records, dramatic changes have been observed in the accounting field. Early in its development, software was only used for restricted or centralized accounting systems but eventually evolved into a centralized system that used the Internet (Alsalmi et al., 2023). Blockchain accounting was presented as a way to contribution experts in addition maintain secure direction tracking in "blocks" as BT advanced. BT permits us toward record transactions and also authenticate them without the requirement for an involvement or intermediary, and it is entirely reliant on automated systems (Göktürk et al., 2024). By doing so, middlemen are removed, faults caused by them are eliminated, and commissions and other secondary transactions with third parties are no longer necessary. Furthermore, all transactions are visible to the public and validated by thousands of servers and computers simultaneously (Gietzmann & Grossetti, 2021). Furthermore, the accounting-related algorithms of blockchain allow the cooperative development of a digital ecosystem through features and abilities that surpass those of the current system, namely conventional ledgers (Gilmour et al., 2025). This indicates that real-time accounting procedures benefit from and are positively impacted by BT.

Revolutionary shifts in several sectors and industries are expected to occur in the global economy (Gomaa et al., 2023). Owing towards the wide Internet set-up, which is broadly existing, BT of accounting remains forecast to rise. It might significantly change the accounting and financial practices that are used by financial firms, energy, industrial, healthcare, and public institutions (Autore et al., 2024). There are many connections among commerce which work sideways the business's value chain in addition to amongst rivals. In light of this, firms are driven to increase business and operational reliance. Among the most significant are a secure and stable environment for finance and accounting, process openness, minimal risk, resistance to outside threats, improved and thorough accountability, and, above all, efficiency. As 2016 was a notable year of enormous investment in this area, accomplishing almost $1 billion, market experts projected a more significant growth in the usefulness of blockchain accounting in the next five years (Appelbaum & Nehmer, 2020). Financial service companies that focus on technology businesses are the main drivers of the exponential expansion of BT (Arianpoor & Borhani, 2025). The primary reason for this increase is the dependable and real-time updates that BT makes possible for decentralized public ledgers. Consequently, businesses may examine the complete transaction history in this ledger, providing prompt, trustworthy, dependable updates, which reduces human error that arises when combining intricate data from several sources.

On the adverse side of this novel blockchain accounting, cyberattacks mean that the company network is constantly at a prominent level. Today, the ability of several massive corporations worldwide towards secure themselves in contrast to exterior hazards controls their upcoming and financial accomplishment. Most of such attacks aim to get confidential information about financial resources including transactions without authorization in which any person or business may be involved (Baiod & Hussain, 2024). To make blockchain accounting more protective, the dangerous scenario calls for worldwide engagement of the organizations and stakeholders concerned with joining forces and exchange experiences (Bakarich et al., 2020). Innovative technologies have daily influence on accounting businesses. Businesses must begin making adjustments in order to adhere to these changes. Among the most important technologies used to transform the accounting sector is blockchain (Gomaa et al., 2023). Firms and accountants' requirement in the direction of make some determination towards integrate this into their daily operations. BT uses the technology of distributed ledgers and hash chaining to store and authenticate information in a decentralized manner, without the need for authoritative intermediates. This ensured that the data were trustworthy, safe, transparent, and impervious to tampering. Therefore, there is a strong chance that BT will increase market players' trust in one another (Alsalmi et al., 2023).

The most significant improvements to accounting will be made possible by enabling blockchain to be used for this purpose, as it will make financial data more immutable, permanent, secure, and transparent (Al-Wreikat et al., 2023). Users of firm financial information desire and require this to carry out their daily responsibilities and be successful in their careers. As previously mentioned, accountants work to guarantee that all the financial data they provide to the client are accurate and correct. Hence, an independent third-party accounting firm audits the data generated and monitored by accounting departments within the business (Biancone et al.,

2025). BT achieves many of the objectives that other auditors and accountants look for to have a productive year in terms of data and reporting. While there is a guarantee of the accuracy of the information verified following an audit, it is never quite certain that everything is perfect and error-free (Busari & Aminu, 2021). Therefore, audits are graded according to varying degrees of risk after completion based on the independent auditor's assessment. With the premise of confirmed correct data, the procedure that blockchain enables for business departments of finance could help corporations adopt these aims to win public trust.

2.4. Prior Studies and Gap in Literature in Blockchain

Gans and Hałaburda (2024) mentioned the way the databases of BT replicate as well as maintain data on every device which link to the network, as opposed to traditional databases, which save all of their information on a single server. A BT is a distributed digital ledger which offers globally security and accessibility in multiple locations. Now, Bitcoin and other cryptocurrencies are the primary applications of this technology. In the past few years, BT accounting processes have been anticipated to come to an end. Furthermore, as stated by Osama F Atayah and Muneer M Alshater (2021), the Bitcoin currency was primarily anticipated through an anonymous one or individuals under the false name Satoshi Nakamoto. The creative system behind Bitcoin's BT succeeds businesses through a decentralized ledger, besides usages cryptoanalysis to authenticate them. In addition, according to Fullana and Ruiz (2021), blockchain presents a chance rather than a danger, also it is very probable that BT will be involved in the subsequent auditing and accounting services. They provided an indication of some of the commercially accessible products that made an effort to incorporate BT.Although software development is still in its infancy and BT is still fairly new, they list several goods that are today on the marketplace attempting to use BT.

A review of the aforementioned research revealed that the majority of research has been conducted on BT's properties of BT. The advantages and difficulties of implementing BT in auditing and accounting have not been studied, since most academics have focused on secondary data. Additionally, while developed countries have the necessary infrastructure and technology, most research has concentrated on these countries. Thus, it might be worthwhile to investigate the opinions of different responders about the advantages and difficulties of implementing BT in auditing and accounting in developing countries such as Jordan. As there are few studies related to this topic in Jordan, this study will be the basis for future studies in this field in Jordan.

2.5. Hypothesis

2.5.1. Challenge of Blockchain Technology Regarding Auditing and Accounting

While benefits of blockchain are well-defined, there is a need to identify also its challenges to auditing and accounting profession. Several studies corroborated that while blockchain has the potential to revolutionize the industry, it also entails adoption challenges, regulatory uncertainty, as well as new skill set demands (Appelbaum et al., 2022). For instance, Appelbaum and Nehmer (2020) concluded that the integration of blockchain technology into traditional auditing processes requires auditors to acquire new technical expertise and experience in new software programs, something that can be viewed as a step backward for individuals with limited technological knowledge.

Also, the advent of blockchain can revolutionize conventional audit processes. In a paper by Fortin and Pimentel (2024), it was found that while blockchain has the promise of heightened transparency, its complexity would be a menace to conventional auditor jobs since they may lack the ability to handle the innovation of the technology. This would especially be true for younger auditors or those who have not familiarized themselves with blockchain technology as they may see the technology as an encroachment into customary audit practices. Therefore, we can foresee that questionnaires, particularly less experienced or less skilled ones in technology-accounting, will discover blockchain as a barrier. The barriers may be experienced because of the fact that existing systems are hard to incorporate with blockchain technology, in addition to because of the cost of re-equipping staff and new technical equipment. Based on the above discussion, the study developed the following hypothesis.

H1: Blockchain Technology provides a challenge for auditing and accounting, based on the qualification of the respondents' perception of auditors.

2.5.2. Blockchain Technology Benefits for Auditing and Accounting

BT has garnered much attention in its potential to change the process of auditing and accounting significantly with increased transparency, security,

and real-time information sharing (Autore et al., 2024). Research conducted in the past has proven that the decentralized ledger of blockchain technology would result in more accurate financial information, reduced frauds, and faster audit processes due to improved unalterable records (Busari & Aminu, 2021). Furthermore, Cao et al. (2025) showed that the application of blockchain to accounting systems enhanced accuracy and audit efficiency, thus allowing auditors to detect anomalies at a quicker rate and spend less time on manual verification. Furthermore, previous research has suggested that interviewees who have more experience in auditing and accounting, i.e., senior accountants or certified auditors, would be more likely to recognize the technology benefits of blockchain since they have more experience with the flaws of traditional accounting methods (Fang et al., 2023). Accordingly, we expect more-competent professionals to see blockchain as a desirable technology, particularly with regard to it being simpler to audit and less reliant on the use of human judgment when reporting financial information. Based on the above discussion, the study developed the following hypothesis.

H2: Blockchain Technology provides benefits for auditing and accounting, based on the qualification of the respondents' perception of auditors.

3. DATA AND METHODS

The research's core data came from an opinion survey conducted using a structured closed-ended survey. Descriptive statistical methods were used to examine closed-ended questions. Jordanian-certified public accountants (auditors) were selected as the population for the current study with a total of No. (512) and based on Sekaran and Bougie (2016), the sample should be (217). Therefore, previous studies such as those by Chou et al. (2021) have measured the BT. The measurements and questionnaire items used in this study were modified from earlier studies by scholars. Since the sample size, respondents, and variables employed in this study were similar to those in other research projects, these studies were cited.

The research employed a five-point Likert scale to assess respondents' answers to the questions. This scale has been used for several reasons. Chavali et al. (2024) recommends using a five-point Likert scale because it enables respondents to express uncertainty or provide a definitive response. However, studies have shown that an appointing scale with more alternatives improves the accuracy and reliability of responses. Carrasco and Romi (2022) elucidated some of the benefits of a five-point Likert scale, including its simplicity, ease of creation, and participant readability. Lastly, compared to other measures, such as seven- or ten-point scales, a five-point Likert scale is utilized more frequently. The adopted responses were 1= Strongly Disagree, 2= disagree, 3= undecided, 4= agree, and 5= Strongly Agree.

This study relied on the questionnaire as a basic tool for the study, and no other methods were used such as collecting real data, because the blockchain system has not been applied in most companies and because there is no previous research in Jordan to the best of the researcher's knowledge, and therefore this study is considered a basis for collecting data and information from auditors in order to rely on it in future studies. The survey was distributed using WhatsApp and via email. The author separated our questionnaire was divided into two sections. The first section consisted of the demographic section, which included inquiries about qualifications, gender, and age. The survey was distributed using WhatsApp and via email.

The author separated our questionnaire was divided into two sections. The first section consisted of the demographic section, which included inquiries about qualifications, age, and gender. In the second section, the author questioned participants about the benefits and challenges of employing this technology, as well as the sources they utilize to increase their understanding of it. The population of the study contain 512 auditors and is based on Sekaran and Bougie (2016) if the population is 500 the sample should be 217. The authors received 205 questionnaires, twenty-two of them excluded because the respondents did not know anything about BT. The valid questionnaires 183 completed surveys, with an 80% response rate. Further, the current study employed the demographic statistics regarding gender, age, and qualification. Also, the descriptive Analysis used to calculate the mean and the standard deviation for each question of the instrument. And finally, the Kruskal-Wallis H Test was used in this study to test the hypothesis.

4. ANALYSIS AND RESULTS OF THE STUDY

The analysis was conducted using statistical techniques such as the Kruskal-Wallis H test, Smirnov and Shapiro-Wilk tests, coefficient of variance, standard deviation, and mean. Additionally, the non-parametric Kruskal-Wallis test was used to determine if the data set was normally distributed after applying for the Kolmogorov-Smirnov and Shapiro-Wilk tests. In both cases, the importance level was ≤ 0.05, that indicated the data were distributed not normally.

4.1. Demographic Description of the Research Respondents

Demographic descriptions of the 183 valid questionnaires are shown in table 1. The respondents' economic and social profiles, including their qualification, gender, and age, were examined in the current study. Out of the 183 responses given in this survey as shown in table 1, the majority of the significant information is that 89% of them know what the term BT means, while the remaining respondents are unaware of it. The majority of respondents were male. The majority of respondents (97.2%) were in the 45 and older age bracket. The majority of respondents (84.1%) had a bachelor's degree, 12% had a master's degree, and 56% had a doctorate.

Table 1: Demographic Description of the Research Respondents.

Elements	Category	Frequency	Ratio
Do you know what the term "BT" means?	Yes	183	89.2%
	No	22	10.8%
	Total	205	100%
Gender	Male	178	97.2%
	Female	5	2.8%
	Total	183	100%
Age	Below 35 years	20	10.9%
	35-45 years	57	31.1%
	45 and above	106	58%
	Total	183	100%
Qualification	Bach-Degree	154	84.1%
	Master's degree	22	12%
	Ph.D.	7	3.9%
	Total	183	100%

4.2. Descriptive Analysis

Since the result of the mathematical average obtained across all questionnaire statements was higher than three, it was determined that most respondents' opinions about the benefits of BT in auditing and accounting are in agreement with this research. Responses were gathered using Google Forms. Furthermore, the questions listed in Table 2 and Table 3 were based on the rank of the respondents from the lowest to highest rank based on the outcomes of the mean.

Table 2: Descriptive Analysis of the Auditors' Perceptions about the Challenges of Adopting BT in Auditing and Accounting.

Question No.	Questions	Mean	Std. Dev.	Coeft. of Variance
1	BT Doesn't work with firms that finish operations on various times and various days.	3.91	1.068	27.33
2	Does there exist a large risk of losing data while using blockchain accounting.	4.00	1.040	25.99
3	Information about transactions and traders is made public, and privacy could not be guaranteed.	4.01	0.966	24.06
4	Mistakes can accumulate and worsen over time without anybody knowing.	4.03	1.065	26.45
5	creating policy guidelines to support the future use of technology in auditing and accounting.	4.03	0.930	23.09
6	BT will not be capable to handle private data unless the issue is resolved.	4.05	1.012	24.97
7	Falsification is quite difficult to accomplish.	4.12	0.885	21.47
8	Computerized auditing and accounting demand a high skill set of training.	4.15	0.865	20.86
9	Document transactions using the Scientific System's guiding principles.	4.17	0.760	18.21
10	BT uses a lot of power.	4.20	1.065	25.37
11	BT Acquire a low-cost system	4.23	1.110	26.26
12	If there is a materialistic strike or other fault that stops the peer-to-peer network, a blockchain can split.	4.24	0.898	21.18
13	Blockchain may experience delays if there is a network malfunction.	4.25	0.871	20.49
14	Is it challenging to change transaction data afterwards	4.27	0.935	21.19

The replies to every question exhibited little variance, as indicated by the coefficient of variation and standard deviation. With a coefficient of variation of 23.65 percent, " BT does not work with firms that finish operations on various times and various days" has the highest value. The coefficient of variation for "Document transactions using the Scientific System's guiding principles" has the lowest value, 15.04 percent. The overall mean score for this question indicates that the respondents generally agreed, with very little difference in their replies. The coefficient of variation often lies in the region

between these extreme values. The priorities for various perceived challenges of BT conventional auditing and accounting procedures are indicated by the information provided in table 3. According to the survey, "Is it challenging to change transaction data afterwards " was given importance by the respondents. "Blockchain may experience delays if there is a network malfunction" receives second priority over the whole accounting process, and this does not assist them in finishing the auditing and accounting process. The respondents ranked "If there is a materialistic strike or other fault that stops the peer-to-peer network, a blockchain can split" as their third highest priority, which does not assist them in their struggle to maintain financial accounts properly. Following that, they prioritized "BT Acquire a low-cost system," "BT uses a lot of power," and "Computerized auditing and accounting demand a high skill set of training. Here, the author concludes that the respondents' most significant comments on the difficulties in adopting BT are there exists a large risk of losing data while using blockchain accounting", "Information about transactions and traders is made public, and privacy cannot be guaranteed", " and creating policy guidelines to support the future use of technology in auditing and accounting". They also stated that there is a high likelihood of fraud and mistakes, BT compliance is difficult, and that occasional technical issues with cloud-based storage cause submission processes to be delayed.

Table 3: Descriptive Analysis of the Auditors' Perceptions about the Benefits of Adopting BT in Auditing and Accounting.

Question No.	Questions	Mean	Std. Dev.	Coeft. of Variance
1	BT help to Eliminate duplicate spending.	3.96	0.936	23.65
2	BT make non-reversible transactions possible.	4.23	0.815	19.28
3	Enable transactions directly without the requirement for trustworthy third parties.	4.27	0.859	20.14
4	BT is appropriate for both large and small firms.	4.29	0.802	18.67
5	using blockchain accounting, fewer employees are needed.	4.36	0.671	15.38
6	Account reconciliation and auditing are feasible.	4.37	0.712	16.29
7	It's easy to obtain a company's complete financial statements.	4.41	0.807	18.28
8	Reducing the possibility of errors and fraud	4.41	0.807	18.28
9	Makes ownership of assets and the presence of responsibilities clear.	4.43	0.791	17.88
10	The expense of maintaining accounting records has decreased with blockchain	4.45	0.741	16.63
11	Requires less effort and time than manual accounting.	4.51	0.891	19.77
12	A safe and accurate document proving the transaction occurred.	4.53	0.684	15.10
13	Decreases fraudulent activities in the accounting of the firm.	4.55	0.684	15.04
14	More transparency for accounting users, both external and internal.	4.56	0.740	16.22
15	BT is clear-cut and easy to use.	4.57	0.841	18.39

The replies to every question exhibited little variance, as indicated by the coefficient of variation and standard deviation. With a coefficient of variation of 23.65 percent, "BT help to Eliminate duplicate spending" has the highest value. The coefficient of variation for "Decreases fraudulent activities in the accounting of the firm" has the lowest value at 15.04 percent. The overall mean score for this question indicates that the respondents generally agreed, with very little difference in their replies. The coefficient of variation often lies in the region between these extreme values. The respondents in table 2 prioritized the many perceived benefits of BT over traditional auditing and accounting procedures. The author may conclude from the survey that the respondents gave "BT is clear-cut and easy to use." priority. Further, more transparency for accounting users, both external and internal, is given second priority over BT since it facilitates the completion of the entire auditing and accounting procedure. The respondents ranked "decreases fraudulent activities in the accounting of the firm" as having the third highest priority, since it facilitates their ability to effectively keep financial accounts. Following their decision to prioritize "A safe and accurate document proving the transaction occurred," "requires less effort and time than manual accounting," among other things. Based on this, it can be concluded that among the most significant benefits mentioned by respondents are less time-consuming, the expense of maintaining accounting records has decreased with blockchain, making ownership of assets and the presence of responsibilities clear, reducing the possibility of errors and fraud, and that BT compliance is difficult due to occasional technological compliance issues that create submission delays.

4.3. Testing the Hypothesis of the Study

The perspectives of the auditors surveyed are examined in this section according to their

qualifications. In addition, there are three qualification categories. The findings, which were examined using the Kruskal-Wallis H test, are shown in tables 4 and 5.

4.3.1. Perception of the Auditors Regarding Blockchain Technology Provide a Challenges for Auditing and Accounting

The findings of H1 show that respondents' opinion on the question "BT uses a lot of power" varied significantly across qualification groups (see Table 4). In particular, the Kruskal-Wallis H test findings indicate that for one of the fourteen questions, respondents' perspectives differed significantly based on their qualifications, indicating that, unlike other adoption-related issues, respondents' opinions regarding BT's power consumption appear to be influenced by qualifications. It is noteworthy, however, that for the majority of questions, respondents' perspectives did not differ significantly across qualification groups, indicating that, generally, respondents' qualifications had little effect on their opinions regarding several adoption-related factors, indicating that other variables may be more important in forming these viewpoints.

Table 4: Findings from the Kruskal-Wallis H Test for Qualifications Level: Respondents' Perspectives on the Challenges Posed by BT for Auditing and Accounting.

Benefits	Kruskal- Wallis H Test	
	P-Value	Chi-Square
BT uses a lot of power.	0.037*	5.916
*Level of the sig. 5%.		

4.3.2. Perception of the Auditors Regarding Blockchain Technology Provide a Benefits for Auditing and Accounting

The findings of H2 show that respondents' perspectives on "more transparency for accounting users, both external and internal, varied significantly depending on their qualification group (see Table 5). The findings of the Kruskal Wallis H Test show that for one out of every fifteen questions, respondents' perspectives from various qualification groups deviate significantly. Therefore, it can be concluded that respondents' perspectives on different conveniences were not significantly influenced by qualification.

Table 5: Findings from the Kruskal-Wallis H Test for Qualifications Level: Respondents' Perspectives on the Benefits Posed by BT for Auditing and Accounting.

Benefits	Kruskal- Wallis H Test	
	P Value	Chi-Square
More transparency for accounting users, both external and internal.	0.018*	6.119
*Level of the sig. 5%.		

Across all qualification categories, respondents' opinions on "more transparency for accounting users, both external and internal," differed considerably, according to the data. The association among respondents' credentials and their opinions on different facets of transparency was investigated using the Kruskal-Wallis H Test. The findings indicate that there were notable variations in viewpoints within qualifying groups for one item out of every fifteen. In the majority of instances, nonetheless, respondents' opinions did not significantly differ according to their credentials. This implies that although some questions caused significant variations across the qualification groups, credentials had a little overall impact on respondents' opinions on accounting transparency. Consequently, we may draw the conclusion that respondents' sentiments toward the particular conveniences included in this study may not be much impacted by credentials. These variations in perception highlight that attitudes toward blockchain are embedded within professional culture. Acceptance or skepticism among auditors' functions less as isolated individual preferences and more as institutional signals that shape how quickly or slowly the profession adapts. Thus, auditors' perceptions operate as cultural drivers that can either resist or accelerate societal change in accounting governance.

5. CONCLUSION

This study aimed to determine the challenges and benefits of the innovation strategy of applying BT to auditing and accounting from the auditors' perceptions. The findings showed that postgraduates and graduates understood the principles and practical applications of technology. The components of control against corruption and fraud, information

security, control, and trust were identified by the respondents as the benefits of technology. The sample claims that investing in blockchain in the auditing and accounting fields has many obstacles, one of which is a lack of knowledge about the technology. Digital tools are becoming a prominent concern in the corporate world agenda. Some of these innovations, blockchain, are gaining popularity as a significant field in which firms make investments quickly because of their potential use in many corporate processes. Innovation and technology drive continue to develop besides affect the accounting and auditing processes.

This innovative tool has the potential to improve financial transactions' fairness, security, transparency, and efficiency of accounting procedures and documentation. The need for additional usage cases in auditing and accounting, regulatory restrictions, cultural opposition, ignorance, and so on stands out as some of its primary obstacles. Finally, further studies on auditing and accounting should focus on validating the advantages and difficulties of these fields, paying particular attention to the domains of financial transactions, asset transfers, and audits. A blockchain can be a valuable digitally distributed digital ledger for a firm's financial records because its data are unchangeable and never erased. Blockchain security, authenticity, and clarity make the auditor's job easier besides guarantee that the audit is completed on period. Therefore, by taking the required actions to enable the preparation of the relevant legislation and infrastructure of professional firms in line with the modification, it might be essential to implement new standards and regulations suitable for BT.

5.1. Implications

In respect to the theoretical and methodological contributions and implication This study adds to the Blockchain Technology (BT) accounting and auditing theory by extending knowledge of its impact in a context that has not yet received much attention in the current literature—i.e., developing economies such as Jordan. The current literature has relied on secondary data and has been focused on developed economies, and therefore there is limited knowledge regarding the impact of BT on auditing and accounting in developing economies. The current research bridges this gap by examining the perceptions of Jordanian auditors regarding the pros and cons of BT. The study also offers an innovative methodological contribution through applying a questionnaire in collecting first-hand evidence from auditors, eliciting new findings on their viewpoints of BT promise. With two hypotheses, namely Blockchain has benefits (H1) and Blockchain has drawbacks (H2), being tested here, this research offers an equable discussion about the determinants of auditors' acceptance along with the deployment of BT within professional practice. This research approach is applying empirical information to the theoretical discussions regarding the application of blockchain in auditing and accounting.

Overall, the study suggests that auditor perceptions should be understood as institutional positions rather than isolated viewpoints. As gatekeepers of financial trust, auditors' collective attitudes influence how professional culture responds to technological disruption. In this sense, perceptions act as drivers of societal change, shaping whether blockchain becomes normalized as part of institutional governance or resisted as a threat to established auditing practices. Practically, the research results present insightful information to policymakers, regulators, and enterprises in auditing and accounting industries of developing countries. An understanding of the strengths and weaknesses of Blockchain Technology from the auditor's point of view can guide policy design and strategy for future implementation of the technology. For instance, if the auditors are witnessing potential benefits in terms of efficiency, transparency, and security, then efforts can be made to overcome the envisioned challenges such as technological readiness, training, and legislation.

Beyond the immediate professional context, the findings have broader implications. First, they can inform policy design for digital auditing standards, where regulators may integrate blockchain protocols into national accounting frameworks to ensure transparency and accountability. Second, they highlight the need to revise education curricula in accounting and auditing, preparing future professionals with technical expertise in blockchain systems and with awareness of their institutional impact. Third, the results underscore the importance of building cultural readiness for decentralized technologies, as successful adoption requires not only technical capacity but also the willingness of organizations and professionals to embrace new forms of trust and governance. Further, empirical relevance also encompasses auditor training and capacity building for developing nations as the outcome of the study could be employed to inform the focused programs for the identified gap in knowledge and skills by the respondents. This study also suggests the need for tailored solutions regarding the application of blockchain technology to auditing processes with regard to the benefits and challenges facing auditors in developing nations. These findings indicate that

blockchain adoption is likely to extend beyond technical efficiency into institutional and cultural reform. By decentralizing control and altering how trust is produced in financial records, blockchain redefines the cultural foundations of auditing practice. For developing contexts such as Jordan, this implies not only technological readiness but also cultural adaptation to new forms of governance and accountability.

5.2. Limitations

The current study faced some limitations and restrictions, as this study focused on discovering the challenges and benefits of adopting Innovation strategy of the blockchain technology in auditing and accounting, through using a questionnaire survey, and unfortunately, the current study did not take into consideration any empirical data. For the future studies, the researchers recommend to study the benefits of adopting the blockchain technology on tax audit. Also, the future studies may study the benefits of adopting the blockchain technology in preparing the financial statement and the level of commitment the firms have in applying the international financial reporting standard.

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