



## RESEARCH ARTICLE

## The Impact of Digital Transformation through Implementing Blockchain Technology on Enhancing the Accounting Profession in Jordan: A Multimethodology Study

Nehad Ibrahim Ineizeh<sup>1\*</sup>, Obada Jebreen Hussein<sup>2</sup>, Ibrahim Nehad Ineizeh<sup>3</sup>, Murad Ali Ahmad Al-Zaqeba<sup>4</sup>, Fadi Mahmoud AbuDiak<sup>5</sup>

<sup>1</sup>University Sains Islam Malaysia (USIM)

<sup>2</sup>Teesside University, UK

<sup>3</sup>Independent Researcher

<sup>4</sup>Universiti Sains Islam Malaysia (USIM)

<sup>5</sup>Palestine Technical University, Kadoorie

ARTICLE INFO	ABSTRACT
Received: Oct 18, 2024 Accepted: Dec 4, 2024	This research examines how adopting blockchain technology may facilitate the digital shift and enhance the calibre of accounting professionals in Jordan. Using a sample of 150 accounting professionals from various industries in Jordan, the researcher used a multi methodology technique. According to information, Jordan ranks in the top 25% for the topic of blockchain technology as a component of the digital transformation processes that would improve the calibre of the accounting field. This demonstrates how the research sample's estimations are consistent with their beliefs that integrating blockchain technology into accounting systems will enhance accountants' abilities. Furthermore, evidence suggests that applying blockchain technology improves the calibre of the accounting profession in Jordan. Statistics also show that using blockchain technology improves the calibre of the accounting field in Jordan.
<b>Keywords</b>	
Accounting Profession Jordan	
Digital Transformation	
Blockchain technology	
<b>*Corresponding Author:</b> n.ineizeh@usim.edu.my	

### INTRODUCTION

The modern era is seeing a quick growth in technological advances in information systems across several industry areas. This swift growth sparks an upsurge in digital shifts, which calls for a thorough reassessment of company procedures. The marketplace is quickly changing from its previous form to the digital one thanks to broadband connections and associated technological innovations, including large-scale data, blockchain, cloud computing, and artificial intelligence (Chernyakov & Chernyakova, 2018). One of the innovations created in the commercial world is blockchain technology, which serves as a distributed and shared ledger and enables the keeping of track of monetary activities and confirmation by the parties involved without requiring a middleman (Al Obaidy et al., 2024; Aloqaily & Al-Zaqeba, 2024). Due to its numerous advantages, especially accounting record dependability and reference, blockchain technology is one of the most significant tools in e-commerce. Over the past ten years, blockchain technology has seen a sharp surge in

utilization. Additionally, novel characteristics and features are continuously being introduced by blockchain technology (Angelis & Ribeiro, 2019).

The blockchain history, also known as the ledger, is essentially tamper-proof, and all organizations involved in the network of blockchain connections have exact and identical paperwork. Blockchain technology offers a safe and automated way to keep track of the possession of assets (Al-Zaqeba et al., 2022). Blockchain technology transforms the accounting field by altering how facts are exchanged, gathered, disseminated, and cited. This has resulted in the creation of a new accounting infrastructure that allows accounting to analyze a large volume of data quickly and to apply international trends related to openness, authority, accountability, and disclosure (Zhang et al., 2020; Aloqaily & Al-Zaqeba, 2024). The successful application of blockchain technology is essential to the overall pattern of digitization in accounting. By providing superior alternatives to conventional accounting systems, blockchains can enhance the standard of the accounting data incorporated into the procedure for reporting finances and increase its dependability (CGMA, 2018; Al Rousan, 2024). As a component of digital transformation initiatives, blockchain technology has the potential to offer astute solutions for enhancing corporate governance efficiency, particularly regarding openness and the context of the connection between investors and the business (Almatarneh et al., 2022). As per (Manita et al., 2020), blockchain technology offers instant access to accounting data, facilitating providing accurate and dependable information to shareholders.

Therefore, the administrative units of the establishments prioritize the accessibility of accounting information that is very transparent and reliable, as the more trust an institution has in its data, the more trust it has in its financial reports. According to (Qasim & Kharbat, 2020), the primary drivers of technological change in the accounting field through utilizing blockchain technology are mitigating human mistakes and enhancing efficiency in operation.

### 1.1 Problem Statement

Only some people think that applying blockchain technology will improve the standard of accounting information, regardless of its anticipated adverse effects. These criticisms include automatic disclosure, security of data, and confidentiality, as well as concerns about the safety of firm resources and monetary information, mainly highly private information, which could hurt their standing and competitiveness in the marketplace. Because of this, we discover that the use of blockchain technology in businesses has generated much debate on how it will affect the accuracy of financial information. In light of this, the present study will attempt to address the issues as follows:

- What does it imply that the digital evolution process requires blockchain technology?
- What benefits might the accounting industry derive from implementing blockchain technology?
- How does implementing blockchain technology affect the accounting data standard in businesses?

### 1.2 Importance of the Study

These tendencies explain the significance of the study:

Many multinational organizations across several industries are adopting blockchain technology, indicating a growing interest in bringing a digital shift in the corporate setting.

Major worldwide auditing and accounting companies are focusing on creating campaigns and initiatives that help accelerate the digital transition toward applying blockchain-based technologies in the industry.

## 2. LITERATURE REVIEW

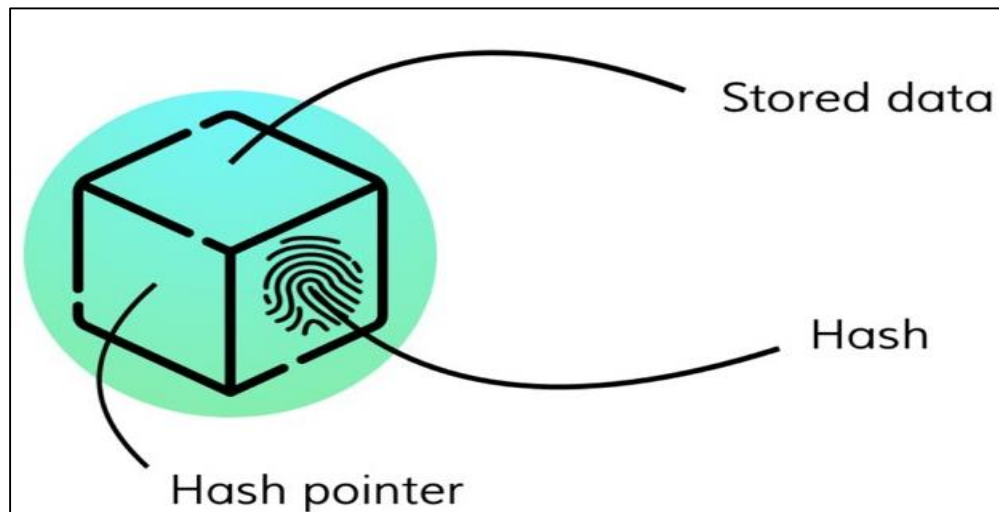
By integrating blockchain technology into accounting, market players may increase confidence and make financial data more transparent, safe, permanent, and unchangeable. This only demonstrates that this technology is the newest instrument to be added to the toolkit of the accounting profession (Ineizeh et al., 2023). With the current rate of technological advancement, it will become increasingly

important to comprehend, use, and employ blockchain technology. Blockchain technology is significant to accountants in various corporate domains, regulatory frameworks, sectors, and more, particularly in the integration and flow of data from operations to end users ([George & Patatoukas, 2021](#)).

Blockchain technology, as the Dictionary of Oxford describes, is a system stored over multiple computers linked in a network of peer-to-peer computers and restricts actions in Bitcoin and other cryptocurrencies. ([Yermack, 2017](#)) Following Oxford's lead, it was defined as the fundamental technology underlying digital currencies like Bitcoin. Meanwhile, ([Yuan & Wang, 2018](#)) expanded on this definition, describing it as a continuously growing list of records called blocks that are linked and protected through cryptography, but did not restrict it to electronic currencies exclusively.

## 2.1 Blockchain Technology Components and Mechanisms

[Figure 1](#) shows what makes up one block of data in the context of blockchain technology.



**Figure 1: The elements that make one particular blockchain block**

### 2.1.1 Stored Data

Every block contains information we wish to record and keep safe from manipulation. This data differs depending on the discipline in which it is categorized. For instance, transactions between parties containing the sender, the recipient, and the transaction amount make up the data for digital currencies that use Blockchain technology. Once entered into the block, the permanent transaction cannot be undone or altered. Everybody with a copy of the record has a copy of the transaction ([Harshini et al., 2019](#)).

### 2.1.2 Hash

It is each block's unique fingerprint. After the block is gathered, a distinct string of digits and letters is produced, known as the hash. A tiny portion of the data from the transactions that appear in the paperwork is recorded using this mathematical process. The hash performs any alteration to the block after it has been produced. Little hash modifications cause the subsequent blocks to become invalid, which breaks the chain and makes it impossible to modify the data without altering the hash. This is reflected in the technology's level of security and privacy ([Stupar et al., 2019](#)).

### 2.1.3 Hash Pointer

The word "Blockchain" describes a series of interconnected blocks that are connected by comparing the hash of one block to the next. This maintains the security of the network and the integrity of all data by preventing tampering. Except for The Block Genesis, the first block in the chain, all blocks receive the hash of the block that came before it ([Bhadoria et al., 2020](#)).

## 2.2 How does blockchain technology work?

Blockchain technology is configurable, uncontrollable, and freely available. Blockchain technology uses computerized procedures that the user must complete to undertake activities. Users must become network members by creating an account on one platform that trades digital currencies. The system adds data from the Blockchain network to a new block, which it produces in response to an exchange request. After carrying out the transaction (purchasing, selling, or swapping), these fundamental nodes distribute the block to every other node connected to the Blockchain. Afterward, these nodes confirm the procedure ([Meunier, 2018](#)).

## 2.3 Advantages of blockchain technology

Blockchain technology offers several technological benefits over typical centralized payment systems since it is built on distributed decentralization. among which the following are the most crucial:

**Encryption:** The fact that several other cryptocurrency systems have been compromised but not Blockchain technology yet highlights the need for credential safety and security procedures. A mathematical cryptographic code called a block contains the most recent transaction information on the Blockchain ([Hendawi et al., 2024](#)). Every transaction is protected on the Blockchain using public and private keys. By generating an unchangeable, end-to-end encrypted document, blockchain technology can significantly alter how sensitive and vital data—like financial data—is presented. This helps thwart fraud and unauthorized activity ([Fernandez-Carames & Fraga-Lamas, 2020](#)).

**Transparency:** All network participants with permission to view the same information simultaneously have access to a distributed ledger or historical transaction records, which blockchain technology uses to record transactions and data across various places. This gives full transparency to clients or network stakeholders. Furthermore, all transactions in blocks are time- and date-stamped to show the exact moment each transaction was created and documented ([Al-Zageba et al., 2022](#)). This makes all transactions in blocks immutable. According to ([Yiannas, 2018](#)), this feature practically removes the possibility of fraud and enables users to observe the complete history of transactions in an accurate chronological sequence.

**Real-time monitoring:** Blockchain technology records transactions almost instantly, facilitating accounting procedures by providing records of transactions in nearly real-time. It also establishes a trail of auditing that traces the asset's origin at every phase of its registration and block formation, making the sharing of source data simple, direct, and accessible ([Helo & Shamsuzzoha, 2020](#)).

## 2.4 Blockchain Technology and Accounting

Using Blockchain technology as the foundation for information systems for accounting may lead to several cutting-edge benefits. Additionally, they are listed in the following [Table 1](#):

**Table 1: Enhanced benefits of implementing Blockchain-based technology in financial information systems**

Field	Anticipated Outcomes
Administrative organization	Choices are more effectively made when data can be accessed quickly. The ability to change and adapt in response to external and internal environmental changes. Giving consumers comprehensive, trustworthy, and objective information to increase objectivity in their choices.
Economically	A decrease in the price of information acquisition and bookkeeping costs related to accounting. Saving money on software for accounting and cutting back on the amount of accountants.
Professionally	Turning on technological control to guarantee effectiveness and openness in accounting.

	Offer a plausible guarantee that there are no substantial misstatements in the statements of finances. An increase in the uses and applications of information regarding finances.
Quality	Excellent standards for taxation, regulations, command, and accounting.

Blockchain is gradually finding a path into the accounting profession, and if accepted entirely, it can transform the field altogether. The following are some ramifications of implementing the technology of blockchain in accounting:

**It will Render Auditing Unnecessary for the Blockchain:** The benefit of this is that all limitations are dispersed and encrypted since the activities are saved in distributed ledgers and are available to all those with authorization. As a result, modifying or erasing the stored data is challenging, which lessens the need for auditors or even shifts their role entirely ([Biliavska, 2019](#)).

**Powered by Blockchain Instantaneous Accounting System:** Information about transactions is stored in cryptographically safeguarded blocks, verified through mining. The system facilitates currency exchanges, derivatives of finance, and other electronic records that connect multiple peers. According to ([Inghirami, 2020](#)), this approach makes it possible to create statements of finances at any point.

**The Abilities of Accountants:** Accountants who assess the genuine economic meaning of blockchain data, establish a connection between the data and economic realities, and conduct evaluations are likely to succeed ([ICAEW, 2017](#)).

## 2.5 Comparing traditional accounting with blockchain accounting

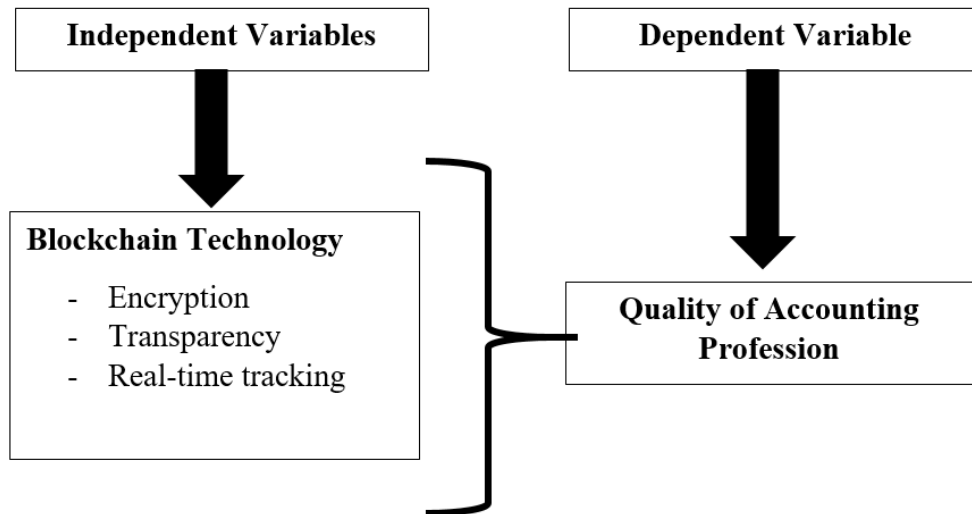
The processes, paperwork, and books of accounting that are currently used in the majority of organizations and businesses are considered to be typical accounting; the most common type of these are computerized accounting programs, while the least common type is paper accounting books ([Al-Zaqeba et al., 2022](#); [Al-Zaqeba & Basheti, 2024](#); [2024a](#)). Blockchain accounting is a new system that is constantly being developed and improved. It is an encrypted digital system for accounting built on blockchain technology. Additionally, [Table 2](#) illustrates the most notable distinctions between blockchain and conventional accounting ([Biliavska, 2019](#)).

**Table 2: A comparative analysis of blockchain accounting and conventional accounting**

Idea of Comparison	Typical Accounting	Blockchain Accounting
System	centrally handle and save operational data	Analyze and keep up with the records of transactions in the distributed ledger (decentralized).
Accounting model	Double-entry finance scheme	Accounting model of triple-entry
Data entry and editing	The accountant inputs the accounting information into the system and modifies it based on the customer's requirements.	The records cannot be altered or changed once the operations have been accepted.
Data accessibility	The core ledger is only directly accessible by auditors and accountants.	All necessary individuals (accountants, auditors, customers, authorities) can access financial information.
Security	Moderately safe.	Elevated security measures

### 3. METHODOLOGY

#### 3.1 Study Model



#### 3.2 Hypothesis

##### 3.2.1 H0

Employing blockchain technology has no beneficial effects on the caliber of the accounting profession in Jordan.

##### 3.2.2 Sub-Hypothesis

**H01:** Data encryption using blockchain technology has no beneficial effects on the caliber of the accounting profession in Jordan.

**H02:** The adoption of blockchain technology to increase openness to information has no beneficial effect on the caliber of the accounting profession in Jordan.

**H03:** Using blockchain technology to monitor information in real-time does not benefit the caliber of the accounting profession in Jordan.

#### 3.3 Study Design

The study used quantitative and qualitative analysis methodology, asking questions to a sample of 150 accounting workers in different sectors in Jordan.

##### 3.3.1 Study Tool

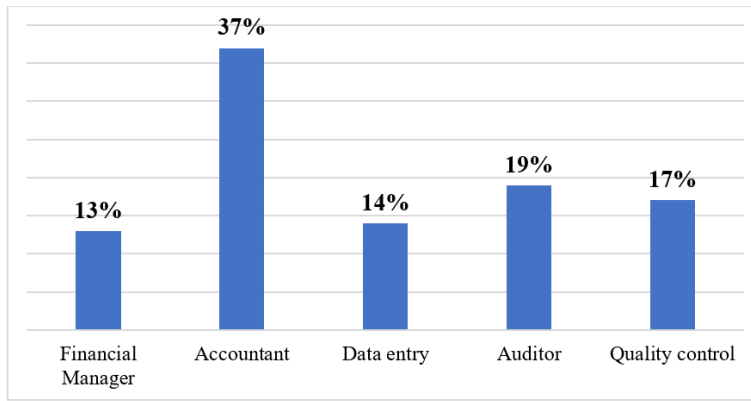
The study tool was prepared based on Blockchain standards that must be considered when designing and operating information of accounting systems to increase the caliber of the accounting profession in Jordan.

### 3.4 ANALYSIS AND DISCUSSION

A set of characteristics characterized the study sample:

#### 3.5 Title of Job

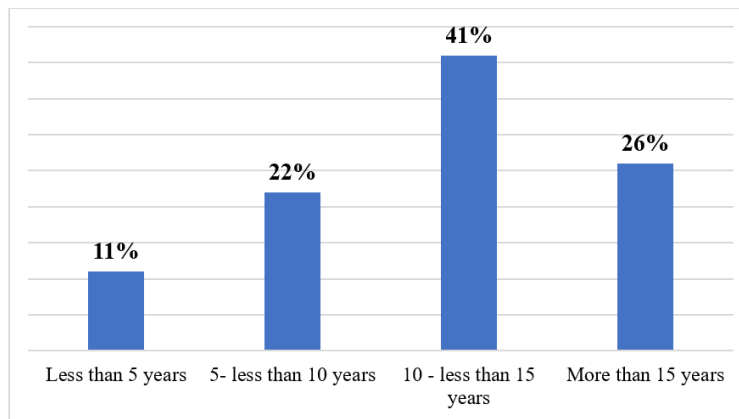
Figure 2 demonstrates how the research sample participants are distributed according to their work designations.



**Figure 2: The research sample participants were distributed according to their employment designations.**

### 3.6 Years in the Field

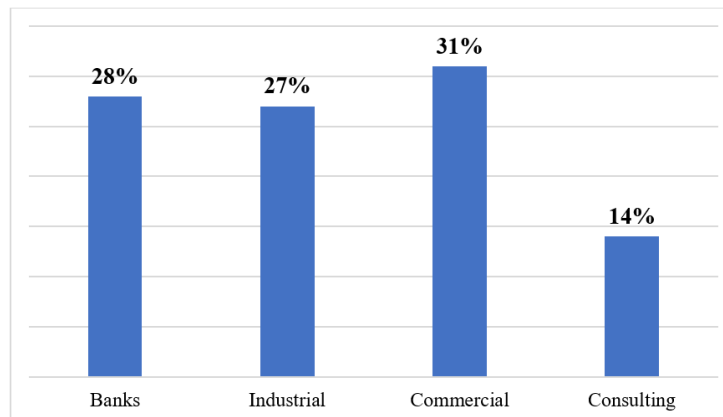
Figure 3 demonstrates the spread of research sample participants according to years of expertise.



**Figure 3: The research sample participants were distributed according to their years of expertise.**

### 3.7 Sector

Figure 4 demonstrates the dispersion of the participants of the research sample according to industry.



**Figure 4: Participants of the research sample distributed according to industry.**

### 3.8 Interviews

All research participants were interviewed one-on-one using open-ended questions, and focus groups were then held in accordance with work titles in the following order of allocation:

The initial accountant focus group, with 40 participants.

There are forty auditors in the second group of focus.

The third group of focus is comprised of forty finance managers.

All three occupations are combined into the fourth focus group (30 participants).

#### 3.8.1 Interview Questions

As indicated by Table 3, the interview questions centered on the participants' familiarity with blockchain technology to elucidate the phenomenon and assess its impact on the caliber of the accounting profession in Jordan.

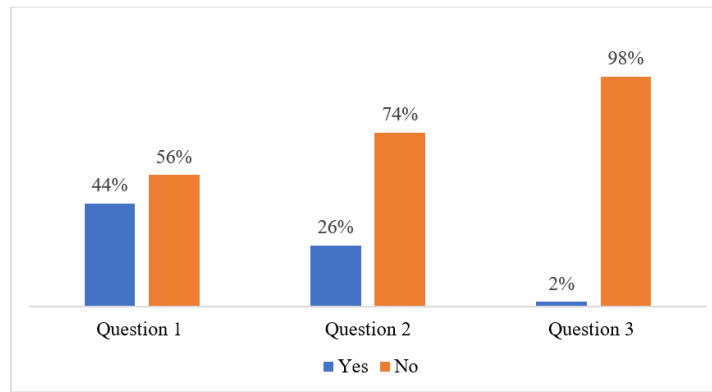
**Table 3: Questions of Interview**

No.	Question
1	Could you define blockchain technology in one sentence, yes or no?
2	Could you identify any uses for blockchain technology in the accounting and finance industries in a yes-or-no manner?
3	Can you answer yes or no to whether your organization uses blockchain technology in its accounting system?
4	<p>Talk about the following topics:            Because blockchain lowers the cost of ledger maintenance and reconciliation, it may improve the accounting field.            Blockchain might give accountants more insight into their companies' responsibilities and assets.            Successful accountants will assess the true financial interpretation of records stored on the blockchain and connect them with financial reality and valuation.            Bookkeeping and reconciliation tasks can be substituted by blockchain technology.            Blockchain technology must be further developed, uniformed, and optimized to be genuinely indispensable to the financial system.            Blockchain technology and smart contract techniques will revolutionize accounting, particularly those that deal with transactional assurance and transferring property rights.            Blockchain technology's primary characteristics and operations will need accountants to acquire new competencies.            More transactional-level accounting will be performed due to blockchain technology.            Blockchain may be used to improve many of the present accounting operations departments.            The data encryption brought about by the use of blockchain technology positively impacts the standard of the accounting profession in Jordan.            Employing blockchain technology increases data transparency, positively affecting the caliber of Jordan's accounting profession.            Real-time data monitoring through blockchain technology positively affects the caliber of the accounting profession in Jordan.</p>

### 3.9 Qualitative Analysis

Figure 5 displays the respondents' responses to the initial three (Yes or No) queries from focus groups and individual conversations.





**Figure 5: Responses provided by participants to the initial three queries (Yes or No).**

The information presented in Figure 5 indicates that of those surveyed, 44% replied "yes," and 56% responded "no," in response to the initial query, which asked if those polled knew what blockchain technology was. This indicates a nearly similar understanding of blockchain technology across the survey sample participants. On the other hand, data presented in Figure (5) indicates that of the participants, 26% gave a yes response, and 74% gave a no response when asked if they were aware of the uses of blockchain technology in the banking and accounting sector. This illustrates how little the research group of auditors, accountants, and managers of finances know about the uses of blockchain technology in the banking sector, particularly in the accounting business. In addition, data in Figure (5) reveals that of respondents' responses to the third question, which asked if their organization used the technology of blockchain in its accounting system, just 2% gave a yes response, and 98% gave a no response. That indicates that Jordanian businesses have not yet used blockchain technology in the financial industry, particularly accounting.

### 3.10 The Coding Process

There are four stages to the collecting of data, each with a distinct goal and set of data-gathering techniques. The present research's analysis of data was finished utilizing (NVivo11) to address the phrases "trustworthiness," "rigorousness," or "quality" of the data; as such, this must be done carefully and openly. Thus, applying automation to data analysis might increase the accuracy of qualitative research. [Table 4](#) summarizes the four stages of the data-gathering technique employed in this investigation.

**Table 4: Four Stages of Information Gathering**

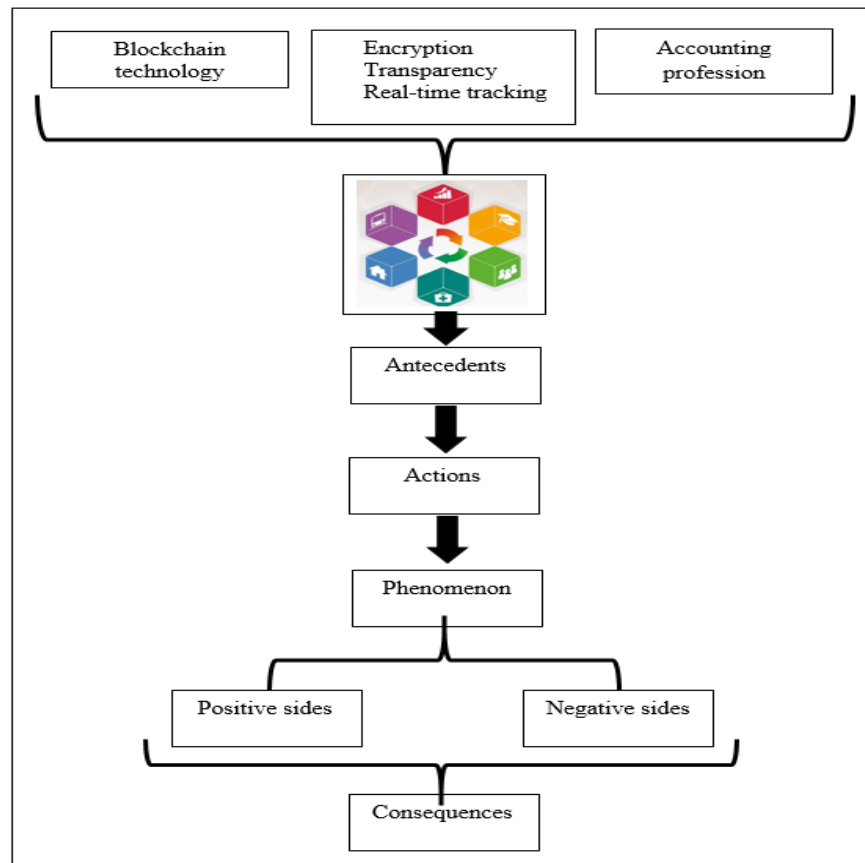
Stage	Coding	Objective	Interviews
1	Open	Sorting codes into categories to facilitate a more in-depth examination	50 people overall, including 16 in groups of focus
2	Axial	detailing codes in-depth and exchanging codes with one another to create themes	
3	Selective	constructing a paradigm model and looking at topics that connect to it	
4	Selective	Until it is saturated, examine, verify, and clarify the paradigm model.	

Additionally, [Table 5](#) displays 21 initial symbols gleaned from the question-and-answer sessions; every symbol denotes an important subject of conversation on how Blockchain technology is advancing the abilities of accountants. The same themes surfaced during the focus group and individual interviews, leading the investigator to conclude that these methods saturated the codes required for comprehending the phenomena of evaluating the impact of Blockchain technology on improving the standard of the profession of accounting in Jordan.

**Table 5: Achieved Subject Classification and Main Ideas**

Divisions	Themes
Antecedents	Ill-informed on how blockchain technology and accounting interact
	The business decides who is in charge of using blockchain technology.
	The field of accounting might benefit from blockchain technology.
	Bookkeeping is being replaced by blockchain technology.
	Jordan's accounting profession will improve as a result of blockchain technology.
	The expertise of accountants must increase.
Phenomenon: Positive sides	Developing accountants' abilities
	Developing accountants' abilities
	Improving performance effectiveness
	Cutting expenses
Phenomenon: Negative sides	Accounting professions rely on blockchain technology, which will erode accountants' expertise.
	Inadequate execution
	Impaired accounting abilities
	Rising expenses
Consequences	Increased expenses
	Lag time in technology
	More difficulties in the future
	Reduction in market share

**Study Paradigm Model**



**Figure 6: Paradigm Model**

The framework presented in [Figure 6](#) was created only with (NVivo11) due to the interconnectedness of the defined concepts. In the fourth stage of selected data analysis, these conceptual linkages are thoroughly defined according to the verification procedure.

## 4. RESULTS AND DISCUSSION

### 4.1 Paradigm Model-related analysis of content

[Table 6](#) presents the percentages and frequencies of the research specimen's replies concerning the impact of Blockchain technology on the calibre of the accounting profession in Jordan.

**Table 6: The percentages and frequencies of the respondent's answers**

Divisions	Themes	Total	
		N	%
Antecedents	Insufficient understanding of the connection between accounting and the technology of blockchain	33	15%
	The firm decides who is in charge of putting blockchain technology into practice.	21	10%
	The technology of blockchain can improve the field of accounting	40	19%
	Bookkeeping is being replaced by blockchain	29	14%
	Blockchain technology will undoubtedly contribute to raising the standard of the accounting profession in Jordan	51	25%
	The skill set of accountants will need to grow	34	16%
<b>Total</b>		<b>208</b>	<b>100%</b>
Phenomenon: Positive sides	Improving Jordan's profession of accounting standard	45	23%
	Developing the abilities of accountants	67	34%
	Improving performance effectiveness	52	27%
	Cutting expenses	33	16%
<b>Total</b>		<b>197</b>	<b>100%</b>
Phenomenon: Negative sides	Accounting professionals' abilities will deteriorate if blockchain technology is not used in the field	59	28%
	Poor execution	71	33%
	Insufficient expertise in accounting	44	21%
	Cost increases	39	18%
<b>Total</b>		<b>213</b>	<b>100%</b>
Consequences	Increased costs	41	17%
	Log in technology	55	23%
	Additional difficulties in the future	61	25%
	Reduced market share	81	35%
<b>Total</b>		<b>238</b>	<b>100%</b>

The information in the preceding table highlights the following findings by displaying the percentages and frequency of responses provided by participants to the various topics and categories about how blockchain technology is improving the caliber of professionals in accounting in Jordan:

The topic "Certainly, blockchain technology will impact on improving the standards of the accounting profession in Jordan" has the largest proportion (25%) of antecedents. This demonstrates that the research sample's estimations are consistent with their beliefs that integrating blockchain technology into accounting systems will enhance accountants' abilities.

Moreover, the topic "Blockchain innovation can improve the accounting profession" placed second in the category of antecedents with a proportion of (19%). This illustrates how the study sample's estimations reflect their expectations for using blockchain technology in accounting systems shortly as it will help accountants improve and hone their abilities.

Furthermore, the topic "The company is responsible for implementing blockchain technology" has a low proportion (10%) among the antecedents. This reflects the study sample estimates that assigned

the company's management the task of implementing blockchain technology while ignoring the personal accountability of financial managers, auditors, and accountants to demonstrate their desire to advance work processes through adopting new technologies.

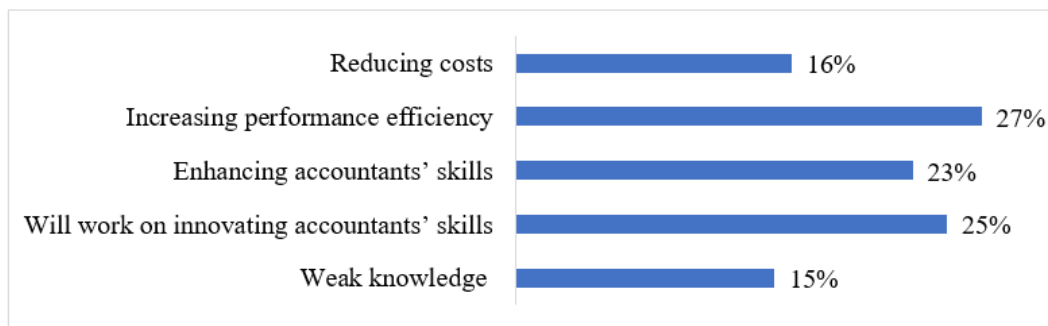
The topic "Enhancing the standards of the accounting profession in Jordan" has the largest proportion (34%), ranking it as the Phenomena: Positive aspects. This illustrates how the research estimates of the sample highlight the fact that raising the calibre of the accounting profession is one of the major benefits of integrating the technology of blockchain in accounting systems.

The subject of "inadequate efficiency" has the largest proportion (33%) inside the Phenomena: Negative aspects. This illustrates how the research sample estimates highlight that a drawback of not integrating blockchain technology into accounting systems is that performance may suffer.

The subject "reduce market share" has the largest proportion (35%), ranking it first in the repercussions category. This illustrates how the research sample's estimates highlight that losing market share is one of the drawbacks of not integrating blockchain technology into accounting systems.

#### 4.2 Phenomenological analysis of content

Figure 7 depicts the noteworthy estimations of the study sample regarding the phenomenon of evaluating the impact of Blockchain technology on improving the caliber of the accounting profession in Jordan.



**Figure 7: Amazing examples of the research sample estimations**

The information shown in Figure 7 indicates that "Increasing performance efficiency" is the most noteworthy indicator when examining how Blockchain technology might improve the caliber of the accounting profession in Jordan. (Will focus on modernizing accountants' skills) topic comes next. The topic "Improving Accountants' Skills" came next. The research sample, which included auditors, accountants, and managers of finances, was convinced and anticipated that the use of blockchain technology would advance the abilities of accountants, and our findings support that belief.

#### 4.3 Quantitative Analysis

##### 4.3.1 Testing the Study Hypotheses

The three sub-hypotheses must be tested first to test the main hypothesis (H0: Employing blockchain technology has no beneficial effects on the caliber of the accounting profession in Jordan).

##### 4.3.2 Testing the first sub-hypothesis

The quantitative data of interview questions (10, 11, and 12) are used to test the study sub-hypotheses.

##### 4.3.4 Regression results for testing the study sub-hypotheses

For each regression model, evaluate the regression results using the following parameters: R2, F-value, and p-value. The following indicators are analyzed to explain the variability of the dependent variable. R2 is the total percentage of the total variation in the value of the dependent variable, either

caused by or clarified by the variable that is dependent in the regression equation. R also measures the goodness of fit of the regression line. An R-squared (R<sup>2</sup>) coefficient of determination is reported, indicating the variability of the dependent variable as explained by the independent variable of the regression equation. The Value parameter evaluates the importance of fitting the regression model. There are two ways to use the F-number to assess the significance of a fit. (1) Compare the F value with the table value, or (2) use the significant value to compare it with the alpha value. Set to 0.05. SPSS generated the significant values in [Table 7](#) from ANOVA.

**Table 7: ANOVA test of the study sub-hypotheses**

Variable		R	df	R <sup>2</sup>	F	P
H01	Between Groups	0.420	2	0.210	0.300	0.000
	Within Groups	41.993	148	0.700		
	Total	42.413	150			
H02	Between Groups	0.240	2	0.120	0.164	0.003
	Within Groups	43.982	148	0.733		
	Total	44.222	150			
H03	Between Groups	3.829	2	1.914	3.390	0.000
	Within Groups	33.885	148	0.565		
	Total	37.714	150			

For that, the hypotheses testing resulting from the regression analysis, as explained in the previous section, could be summarized in [Table 8](#).

**Table 8: Sub-hypotheses testing resulting from the regression analysis**

HYPOTHESIS	SUPPORTED	
	Direction at P <0.05	Outcome
<b>H01:</b> There is no positive impact of data encryption by implementing blockchain technology on the standard of the accounting profession in Jordan.	P <0.05	Rejected
<b>H02:</b> There is no positive impact of the transparency of data by implementing the technology of blockchain on the standard of the profession of accounting in Jordan	P <0.05	Rejected
<b>H03:</b> There is no positive impact of the Real-time tracking of data by implementing the technology of blockchain on the standard of the profession of accounting in Jordan	P <0.05	Rejected

Therefore, this study will reject the null hypothesis (H0: There is no favorable effect of employing the technology of blockchain on the standards of the profession of accounting in Jordan) and accept the alternative hypothesis (A optimistic effect of applying the technology of blockchain on the standard of the profession of accounting in Jordan).

## 5. CONCLUSION

According to the data analysis, The subject with the greatest percentage (25%) is "Technology of blockchain as an aspect of the procedures for digital modifications that will work on improving the standards of the profession of accounting in Jordan." This demonstrates that the research sample's estimations are consistent with their beliefs that integrating blockchain technology into accounting systems will enhance accountants' abilities. With a percentage of 19%, the theme "Blockchain technology can improve the accounting profession" came in second. This indicates that the research sample's estimations match their hopes for the future of integrating blockchain technology into accounting systems since it will help accountants improve and hone their abilities (Lootah, 2024). The subject with the greatest proportion (33%), " inadequate productivity," is also considered unfavorable. This illustrates how the research sample estimates highlight that a drawback of not integrating blockchain technology into accounting systems is that productivity may suffer.

Furthermore, evidence suggests that applying blockchain technology improves the caliber of the accounting profession in Jordan.

## REFERENCES

- Almatarneh, Z., Ineizeh, N., Jarah, B., & Al-Zaqeba, M. (2022). The relationship between corporate social responsibility accounting and supply chain management. *Uncertain Supply Chain Management*, 10(4), 1421–1426. <https://m.growingscience.com/beta/uscm/5638-the-relationship-between-corporate-social-responsibility-accounting-and-supply-chain-management.html>
- Al-Zaqeba, M. A. A., Abdul Hamid, S., Ineizeh, N. I., Hussein, O. J., & Albawwat, A. H. (2022). The effect of corporate governance mechanisms on earnings management in Malaysian manufacturing companies. *Asian Economic and Financial Review*. <https://doi.org/10.55493/5002.v12i5.4490>
- Al-Zaqeba, M., Ineizeh, N., Jarah, B., Hamour, H., & Zeyad, Z. (2022). Intelligent matching: Supply chain management and financial accounting technology. *Uncertain Supply Chain Management*, 10(4), 1405–1412. <http://m.growingscience.com/beta/uscm/5636-intelligent-matching-supply-chain-management-and-financial-accounting-technology.html>
- Al-Zaqeba, M., Jarah, B., Ineizeh, N., Almatarneh, Z., & Jarrah, M. (2022). The effect of management accounting and blockchain technology characteristics on supply chains efficiency. *Uncertain Supply Chain Management*, 10(3), 973–982. <https://m.growingscience.com/beta/uscm/5465-the-effect-of-management-accounting-and-blockchain-technology-characteristics-on-supply-chains-efficiency.html>
- Angelis, J., & Ribeiro, E. (2019). Blockchain adoption: A value driver perspective. *Business Horizons*, 62(3), 307–314. <https://doi.org/10.1016/j.bushor.2018.12.001>
- Bhadoria, R.S., Arora, Y., Gautam, K. (2020). Blockchain Hands on for Developing Genesis Block. In: Kim, S., Deka, G. (eds) *Advanced Applications of Blockchain Technology. Studies in Big Data*, vol 60. Springer, Singapore. [https://doi.org/10.1007/978-981-13-8775-3\\_13](https://doi.org/10.1007/978-981-13-8775-3_13)
- Biliavska, V. (2019, September 30). *How Blockchain Is Changing Accounting | StartUs Magazine*. StartUs Magazine. <https://magazine.startus.cc/blockchain-changing-accounting/>
- CGMA, C. (2018). Blockchain augmented audit—benefits and challenges for accounting professionals. *The journal of theoretical accounting research*, 14(1), 117–137. <https://www.proquest.com/openview/17c7ebe7d78787ff024a04bd34043b6d/1?pq-origsite=gscholar&cbl=28068>
- Chernyakov, M., & Chernyakova, M. (2018). Technological risks of the digital economy. *Корпоративные финансы*, 12(4), 99–109. <https://cyberleninka.ru/article/n/technological-risks-of-the-digital-economy>
- Fernandez-Carames, T. M., & Fraga-Lamas, P. (2020). Towards post-quantum blockchain: A review on blockchain cryptography resistant to quantum computing attacks. *IEEE access*, 8, 21091–21116. <https://doi.org/10.1109/access.2020.2968985>
- George, K., & Patatoukas, P. N. (2021). The blockchain evolution and revolution of accounting. In *Information for Efficient Decision Making: Big Data, Blockchain and Relevance* (pp. 157–172). [https://www.worldscientific.com/doi/abs/10.1142/9789811220470\\_0006](https://www.worldscientific.com/doi/abs/10.1142/9789811220470_0006)
- Harshini, V. M., Danai, S., Usha, H. R., & Kounte, M. R. (2019, April). Health record management through blockchain technology. In *2019 3rd International Conference on Trends in Electronics and Informatics (ICOEI)* (pp. 1411–1415). IEEE. <https://doi.org/10.1109/icoei.2019.8862594>
- Helo, P., & A.H.M. Shamsuzzoha. (2020). Real-time supply chain—A blockchain architecture for project deliveries. *Robotics and Computer-Integrated Manufacturing*, 63, 101909–101909. <https://doi.org/10.1016/j.rcim.2019.101909>
- Hendawi, R., Ineizeh, N. I., Hussein, O. J., & Alkahtani, M. (2024). The Role of Financial Technology in Improving Performance in Jordanian Islamic Banks. *Journal of Ecohumanism*. <https://ecohumanism.co.uk/joe/ecohumanism/article/view/3493>
- ICAEW. (2018). *Blockchain and the future of accountancy ICAEW THOUGHT LEADERSHIP IT FACULT Y*. <https://www.icaew.com/-/media/corporate/files/technical/technology/thought-leadership/blockchain-and-the-future-of-accountancy.ashx>
- Ineizeh, N., Hussein, O., Alshehadeh, A., & Yamin, I. (2023). The role of the application of an accounting system in raising the efficiency of the supply chain in Jordanian hospitals. *Uncertain Supply Chain*

- Management*, 11(2), 403–410. <https://m.growingscience.com/beta/uscm/5931-the-role-of-the-application-of-an-accounting-system-in-raising-the-efficiency-of-the-supply-chain-in-jordanian-hospitals.html>
- Inghirami, I. E. (2020). Accounting information systems: the scope of blockchain accounting. In *Digital Business Transformation: Organizing, Managing and Controlling in the Information Age* (pp. 107-120). Cham: Springer International Publishing. [https://doi.org/10.1007/978-3-030-47355-6\\_8](https://doi.org/10.1007/978-3-030-47355-6_8)
- Manita, R., Elommal, N., Baudier, P., & Hikkerova, L. (2020). The digital transformation of external audit and its impact on corporate governance. *Technological Forecasting and Social Change*, 150, 119751. <https://doi.org/10.1016/j.techfore.2019.119751>
- Meunier, S. (2018). Blockchain 101: what is blockchain and how does this revolutionary technology work?. In *Transforming climate finance and green investment with Blockchains* (pp. 23-34). Academic Press. <https://doi.org/10.1016/B978-0-12-814447-3.00003-3>
- Qasim, A., & Kharbat, F. F. (2019). Blockchain Technology, Business Data Analytics, and Artificial Intelligence: Use in the Accounting Profession and Ideas for Inclusion into the Accounting Curriculum. *Journal of Emerging Technologies in Accounting*, 17(1), 107–117. <https://doi.org/10.2308/jeta-52649>
- Stupar, S., Bičo Ćar, M., & Šahić, E. (2020). Challenges of applying blockchain technology. In *New Technologies, Development and Application II 5* (pp. 355-364). Springer International Publishing. [https://doi.org/10.1007/978-3-030-18072-0\\_41](https://doi.org/10.1007/978-3-030-18072-0_41)
- Yermack, D. (2017). Corporate governance and blockchains. *Review of finance*, 21(1), 7-31. <https://doi.org/10.1093/rof/rfw074>
- Yiannas, F. (2018). A new era of food transparency powered by blockchain. *Innovations: Technology, Governance, Globalization*, 12(1-2), 46-56. <https://doi.org/10.1162/inov.a.00266>
- Yuan, Y., & Wang, F. Y. (2018). Blockchain and cryptocurrencies: Model, techniques, and applications. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, 48(9), 1421-1428. <https://doi.org/10.1109/tsmc.2018.2854904>
- All You Need to Know About Blockchain*. (2020). Lizard.global. <https://www.lizard.global/blog/all-you-need-to-know-about-blockchain>
- Zhang, Y., Xiong, F., Xie, Y., Fan, X., & Gu, H. (2020). The impact of artificial intelligence and blockchain on the accounting profession. *Ieee Access*, 8, 110461-110477. <https://doi.org/10.1109/access.2020.3000505>
- Lootah, R.E.A. (2024). The Impact of Blockchain Technology on Financial Reporting Practices in UAE. *International Journal of Digital Accounting and Fintech Sustainability*, 1 (1), 2-12. <https://tanmeah.com/wp-content/uploads/2024/07/PAPER-1-TBP-1.pdf>
- Al-Zaqeba, M. A. A., & Basheti, I. A. 2024. Measurement Problems in Interest-Free Financial Instruments. *Pak. j. life soc. Sci.*, 22(1): 5558-5575. [https://www.pjlss.edu.pk/pdf\\_files/2024\\_1/5558-5575.pdf](https://www.pjlss.edu.pk/pdf_files/2024_1/5558-5575.pdf)
- Al-Zaqeba, M. A. A., & Basheti, I. A. 2024a. Evaluating the effects of customs policy on supply chain performance. *Afr.J.Bio.Sc.*6(13)(2024).3386-3403. <https://doi.org/10.48047/AFJBS.6.13.2024.3386-3403>
- Al Rousan, S. R. (2024). Green Human Resource Management Towards Digital Transformation In Municipalities In Irbid Governorate. *International Journal of Digital Accounting and Fintech Sustainability*, 1 (1), 2-12. <https://tanmeah.com/wp-content/uploads/2024/08/PAPER-3-TBP.pdf>
- Aloqaily, A. N., & Al-Zaqeba, M. A. A. (2024, April). The Impact of Green Human Resource Management Practices on Engagement of Employee and Organizational Creativity Towards the Green Environment. In *International Conference on Business and Technology* (pp. 265-276). Cham: Springer Nature Switzerland.
- Al Obaidy, A. L. A., Ping, T. A., Ganesan, Y., & Alzaqeba, M. A. A. (2024). Defining Inheritance Risk Management as A New Concept Towards Sustainability of Family Businesses. *The Journal of Muamalat and Islamic Finance Research*, 139-161.
- Al Obaidy, A.L.A., Alshehadeh, A.R., Al-Khawaja, H.A., Basheti, I.A., Al-Zaqeba, M.A.A. 2024. Development of a new concept and definition of inheritance risk management in family businesses toward sustainability. *International Journal of Advanced and Applied Sciences*. 11(6), pp. 1–13. <https://doi.org/10.21833/ijaas.2024.06.001>