



Impact Smart Applications To Enhance The Transparency and Accuracy Of Financial Auditing

Saddam Catea Hashim

Department Of Accounting And Financial Control, College Of Business Economics, Al-Nahrain University, Jadriya, Baghdad, Iraq.

Korespondensi Penulis: sadam1980@nahrainuniv.edu.iq*

Abstract. *The research aimed to analyze the impact of employing artificial intelligence and blockchain technologies in enhancing transparency and accuracy in financial audits. WeeThe research sought to understand how these technologies contribute to improving...ActivitiesAuditing by reducing human errors and enhancing confidence in financial statements.throughData was collected usingQuestionnaire from the research sample, and analysisResults through the statistical programSPSS v 26 and AMOS v 26,The most important conclusions of the research were that applicationsSmart provides the ability to quickly analyze large amounts of financial data, which improves the quality of auditing and decision-makingFinance. WowMRecommendations are a necessityStrengthening cooperation between regulatory authorities and banks to ensure the application of international auditing standards in light of the use of modern technology,The research contributes toAnalysis of the role of intelligent applicationsOhIn improving the accuracy and transparency of financial auditing using advanced technologies.whatHussein audits and detection of financial errorsWhich enhancesConfidence in financial reports by reducing errors and increasing accuracy using smart technology.*

Keywords: *Artificial intelligence, Block chain, Financial auditing*

Abstrak. *Penelitian ini bertujuan untuk menganalisis dampak penggunaan kecerdasan buatan dan teknologi blockchain dalam meningkatkan transparansi dan akurasi dalam audit keuangan. WeePenelitian ini berusaha untuk memahami bagaimana teknologi ini berkontribusi terhadap peningkatan...AktivitasAudit dengan mengurangi kesalahan manusia dan meningkatkan kepercayaan dalam laporan keuangan .melaluiData dikumpulkan menggunakanKuesioner dari sampel penelitian, dan hasil analisis melalui program statistikSPSS v 26 dan AMOS v 26,Kesimpulan terpenting dari penelitian ini adalah bahwa aplikasiSmart memberikan kemampuan untuk menganalisis data keuangan dalam jumlah besar dengan cepat, yang meningkatkan kualitas audit dan pengambilan keputusanKeuangan. WowMRekomendasi adalah suatu keharusanMemperkuat kerja sama antara otoritas pengatur dan bank untuk memastikan penerapan standar audit internasional sehubungan dengan penggunaan teknologi modern,Penelitian ini berkontribusi padaAnalisis peran aplikasi cerdasOhDalam meningkatkan akurasi dan transparansi audit keuangan menggunakan teknologi canggih.apaHussein audit dan deteksi kesalahan keuanganYang meningkatkan Keyakinan dalam laporan keuangan dengan mengurangi kesalahan dan meningkatkan akurasi menggunakan teknologi pintar.*

Kata Kunci: *Kecerdasan Buatan, Blockchain, Audit Keuangan*

1. INTRODUCTION

The sector witnessedtoThere has been great development thanks to modern technologies such as artificial intelligence and blockchain, which are among the most important tools that can bring about a fundamental change in financial auditing processes. In light of the increasing need for accurate and transparent financial reports, there is a need to study the impact of these technologies on the quality and accuracy of audit operations.And aimsThe research aims to provide a comprehensive vision on the role of artificial intelligence and blockchain in improving the quality of financial auditing.

The first axis: research methodology

a. Research problem

The research problem revolves around the extent to which artificial intelligence and blockchain applications impact auditing processes, and whether these technologies are able to enhance the transparency and accuracy of financial data. By answering the research question is, is...Can these technologies reduce human errors and increase confidence in financial audit results?

b. Research objective

This research aims to explore the impact of artificial intelligence and blockchain applications on improving transparency and accuracy in financial audits. and Identify the benefits and challenges associated with adopting these technologies in the financial field, and provide recommendations on how to enhance the effectiveness of audits using these modern tools.

c. Hypothetical at Search

This research assumes following:

- a. There is a statistically significant relationship between the use of artificial intelligence and blockchain applications and enhancing the transparency and accuracy of financial auditing.
- b. There is a statistically significant impact relationship between the use of artificial intelligence and blockchain applications and enhancing the transparency and accuracy of financial auditing.

d. The importance of research

The importance of research lies in statement The increasing role of artificial intelligence and blockchain technologies in the financial sector. With the increasing challenges in financial data management and the need for accurate and transparent reporting, this research provides insights into how financial audit procedures can be improved using these technologies, enhancing confidence in financial statements among investors and stakeholders.

Firstly. definition, importance, Artificial intelligence and blockchain

a. Definition of artificial intelligence(AI):

Artificial Intelligence is a field of computer science that seeks to create systems capable of performing tasks that would normally require human intelligence. This includes learning from data, pattern recognition, decision making, and natural language processing. These systems are designed to operate independently and help solve complex problems in a variety of fields such as medicine, industry, and economics(Russell & Norvig, 2016).

b. Blockchain(Block chain):

Blockchain is a distributed ledger technology that records transactions in a secure, transparent, and immutable way. It is based on a chain of blocks, where each block contains transaction data and is linked to the previous block, providing an immutable historical record. Blockchain is mainly used in digital currencies such as Bitcoin, but it also extends to other areas such as smart contracts and supply chain management(Nakamoto, 2008).

c. The importance of artificial intelligence and blockchain:

- a. Improving efficiency: Artificial intelligence helps automate repetitive and complex tasks, leading to increased effectiveness and reduced human errors in various sectors.(Brynjolfsson & McAfee, 2014).
- b. Data analysis: AI is able to quickly process and analyze massive amounts of data, which helps in making appropriate decisions based on comprehensive and accurate data analysis (Goodfellow, Bengio, & Courville, 2016).
- c. Innovation: Contributes to creating new solutions to complex problems, which enhances technological progress in areas such as medicine, industry, and financial services.(Russell & Norvig, 2016).

d. The importance of blockchain(Blockchain):

- a. Enhancing transparency: Thanks to its immutable record, blockchain technology ensures high transparency in recording transactions, reducing the chances of fraud and manipulation.(Pilkington, 2016).
- b. .Security: Blockchain relies on cryptography and consensus mechanisms, making it one of the most secure technologies for storing and exchanging sensitive information(Nakamoto, 2008).
- c. Reducing costs: By reducing the need for intermediaries in financial transactions and contracts, Blockchain contributes to reducing operational costs and increasing the efficiency of financial operations (Tapscott & Tapscott, 2016).

secondly.A comparison between artificial intelligence and blockchain technologies in the field of economics

Below is a comparison between the above applications:

Table 1.A comparison between artificial intelligence and blockchain technologies in the field of economics

| Blockchain(Block chain) | artificial intelligence(AI) | Item |
|---|---|---------------------------|
| sheDistributed ledger technologyBy registeringYTransactions are secure, transparent and immutable(Nakamoto, 2008). | It is a technology that enables systems to mimic human intelligence to perform tasks such as analysis, forecasting, and decision making(Russell & Norvig, 2016). | Definition |
| It is used to create digital currencies, implement smart contracts, and enhance transparency in financial supply chains(Tapscott & Tapscott, 2016). | usedAI in economic forecasting, market analysis, financial automation, and investment advice (Brynjolfsson & McAfee, 2014). | Economic applications |
| TProvide a way to record and store economic data in an tamper-proof manner, supporting transparency of transactions(Nakamoto, 2008). | He excels at analyzing large amounts of data to extract economic patterns and trends, enabling data-driven decisions to be made(Goodfellow, Bengio, & Courville, 2016). | Data analysis |
| TuProvide high transparency and strong security thanks to encryption and consensus mechanisms that prevent data tampering(Pilkington, 2016). | Security depends onAI contains complex algorithms for learning and analysis, but may be vulnerable to cyber attacks if data is not adequately protected (Russell & Norvig, 2016). | Transparency and security |
| Come onMill is based on the principle of decentralization, eliminating the need for central intermediaries in economic transactions(Tapscott & Tapscott, 2016). | It often worksAI through centralized platforms managed by large companies or organizations (Goodfellow, Bengio, & Courville, 2016). | Decentralization |
| It couldTReduce costs by reducing reliance on intermediaries and enhancing the speed and transparency of transactions(Nakamoto, 2008). | canAI improves efficiency and reduces operational costs through automation and optimization of financial processes (Brynjolfsson & McAfee, 2014). | Efficiency and cost |
| Challenges include widespread blockchain adoption, scalability issues, and the need for advanced infrastructure(Pilkington, 2016) | requiresAI requires huge and accurate data to train models, and may face challenges in interpreting results and the complexity of algorithms (Russell & Norvig, 2016). | Challenges |

Third turn Intelligence Artificial Block chain In enhancing the qualitative characteristics of accounting information in financial statements

This issue can be looked at from several angles:

1. Big Data Analysis: Artificial Intelligence can analyze large amounts of financial data quickly and accurately, reducing human error and enhancing the accuracy of financial reporting. M canCheckUtilizing artificial intelligence to detect abnormal patterns and verify the integrity of numbers in financial statements(Russell & Norvig, 2016).
2. Automation of financial processes: Using artificial intelligence to automate financial statement preparation processes ensures that accounting procedures are applied consistently and accurately, which contributes to reducing errors and improving the efficiency of accounting work.(Brynjolfsson & McAfee, 2014).

3. **Tamper-proof record:** Blockchain provides an tamper-proof record of financial transactions, ensuring that all recorded financial transactions are transparent and reliable. This enhances the credibility of the financial statements and reduces the risk of data manipulation(Nakamoto, 2008).
4. **Smart Contracts:** Blockchain can improve the preparation of financial statements through smart contracts that automatically execute transactions when certain conditions are met, ensuring the timeliness and accuracy of the data included in financial reports.(Tapscott & Tapscott, 2016).We see among the advantages of these applications that the techniquesArtificial intelligence and blockchain contribute to improving the accuracy and transparency of financial statements, reducing human errors, and enhancing confidence in financial reportsAs for its challengesApplying these techniques requires investment in infrastructure, training of staff, and ensuring compliance with international accounting standards.

Fourth.The use of artificial intelligence and blockchain technologies in theDrains

1. **Financial risk management:** Artificial intelligence can improve risk management processes in banks by analyzing financial data and predicting future trends. Using machine learning algorithms, banks can identify unusual patterns that may indicate financial risks such as non-performing loans or market volatility.(Goodfellow, Bengio, & Courville, 2016).
2. **Fraud detection:**Artificial intelligence can help detect financial fraud by analyzing large amounts of transactions and identifying suspicious activities. This helps banks reduce losses resulting from financial fraud and improve financial security(Russell & Norvig, 2016).
3. **Customer service and improving the banking experience:**The use of virtual assistants powered by artificial intelligence can improve customer experience in banks. These tools can respond to customer inquiries in real time, provide personalized recommendations, and improve the efficiency of banking operations(Brynjolfsson & McAfee, 2014).
4. **Improve transaction transparency**Blockchain technology can enhance the transparency of financial transactions in banks by providing a shared and immutable record of transactions. This helps reduce the chances of financial manipulation and increases trust between banks and their customers(Nakamoto, 2008).
5. **Smart contracts**Iraqi banks can use blockchain-based smart contracts to automatically execute transactions when certain conditions are met. This reduces the need for

intermediaries, which reduces costs and increases the efficiency of financial operations (Tapscott & Tapscott, 2016).

6. Cross-border money transfer Blockchain can improve cross-border money transfers, a vital process for Iraqi banks in dealing with international clients. Using blockchain, the time and costs associated with transferring money can be reduced, in addition to increasing the security and transparency of these operations (Pilkington, 2016).

Fifth. Difficulties in implementing artificial intelligence and blockchain technology:

1. Technological infrastructure : Applying artificial intelligence and blockchain technologies requires advanced technological infrastructure, which may represent a challenge for Iraqi banks that may not be adequately equipped..
2. Regulation and compliance : Laws and regulations related to the use of artificial intelligence and blockchain are still in their early stages in Iraq, which may limit the widespread adoption of these technologies..
3. Training and skills development : There is a need to train bank employees to use these new technologies. Lack of technical knowledge and necessary skills can be an obstacle to effective implementation.

Sixth. Compatibility standards Audit International with the Smart applications

The International auditing standards (ISAs) are a set of guidelines and practices issued by the International Federation of Accountants (IFAC), with the aim of standardizing audit procedures and ensuring the quality of financial audits on a global level. These standards focus on defining the auditor's responsibilities, assessing risks, and detecting material misstatements in the financial statements, whether resulting from error or fraud. Below are the international auditing standards that the auditor adheres to when using modern techniques:

ISA 315 -1. Identify and assess risks of material misstatement:

Requires standard ISA 315 Auditors understand the internal and external environment For banks To identify and evaluate risks of material misstatement. Artificial intelligence technologies help auditors analyze complex big data quickly and accurately, enabling them to identify financial risks more effectively. For example, AI can use machine learning to detect unusual patterns that may indicate risks of material misstatement (Goodfellow, Bengio, & Courville, 2016).

ISA 240 –2.Auditor responsibilities related to fraud in financial auditing:

Standard states ISA 240 states that auditors must be aware of the risks of fraud during an audit. Artificial intelligence provides advanced analytical tools that can analyze financial transactions and detect unusual behaviors that may indicate fraud. This enhances auditors' ability to detect fraud early (Russell & Norvig, 2016).

ISA 500–3.Audit evidence: with YRISA 500 requires auditors to obtain sufficient and appropriate audit evidence. AI technologies can quickly analyze huge amounts of financial data, helping to gather relevant evidence that can be used to confirm the validity of financial accounts (Brynjolfsson & McAfee, 2014).

ISA 230–4.Audit documentation: Standard tightens ISA 230 emphasizes the importance of proper documentation for each step in the audit process. Blockchain technology contributes to providing a tamper-proof record of financial transactions, allowing automatic and accurate documentation of each transaction. This record can provide strong evidence for financial audits and meet stringent documentation requirements (Nakamoto, 2008).

ISA 330 - Auditor's response to assessed risks5: standard ISA 330 requires auditors to design and perform appropriate audit procedures in response to the assessed risks. Blockchain can help reduce these risks by providing distributed, secure records of transactions that cannot be tampered with, enhancing confidence in the validity of financial data (Tapscott & Tapscott, 2016).

ISA 610 –6.Using the work of internal auditors:Blockchain technology can support internal and external auditors by providing a centralized and secure database for transactions. This technology allows for easy access to and verification of data, making it easier for auditors to use the work of others in their audit (Pilkington, 2016).

The third axis - practical procedures for the research sample:

1. introduction : In this section we will explain the method and tools used using the statistical program. Costat from During the presentation of the statistical description results.
2. Study methods and tools Study methods and tools: This research deals with the most important tools and methods used in the study that were relied upon in implementing the practical study and include (the study community and sample, the study tools used, the tools used in collecting data, the validity and reliability of the questionnaire).
3. Study community and sample Community and study sample Sample size: The questionnaire targeted employees of Ashur International Bank and Iraqi Gulf Bank. The questionnaire was distributed to:50/All questionnaires were valid for transcription and statistical analysis.

4. Study tools Study tools: Statistical tools used The statistical tools used The program was used Excel In order to collect the data obtained through the questionnaire lists, the data was unloaded into the Costat program, where a set of statistical methods were relied upon as follows:

Use frequencies and percentages to describe the demographic characteristics of the study sample.

a. Use arithmetic means and standard deviations.

Standard deviation It is the average of the deviations of values from the arithmetic mean. In other words, the further the value is from the mean, the greater the standard deviation, and vice versa, the closer the value is to the mean, the smaller the standard deviation.

b. Reliability coefficient Cronbach's alpha.

Questionnaire where The questionnaire consists of two parts: :

Section One: It relates to the personal information of the study sample (gender, age, educational qualification).

Section Two : Related for impact Applications Smart on Enhance transparency And accuracy Auditing Financial, and it contains (20)phrase. To answer the statements of the second part of the questionnaire, the “five-point Likert” scale was used, whereby respondents were asked to give their degree of agreement with each statement included in the scale according to the following table:

Table 2.Degrees of agreement according to the five-point Likert scale

| 5 | 4 | 3 | 2 | 1 |
|------------------|----------|----------|------------|-------------------|
| I strongly agree | I agree | neutral | I disagree | strongly disagree |

Source: Prepared by the researcher

Where value (1) is given to the answer of strongly disagree, value (2) is given to the answer of disagreement, value (3) expresses neutrality, value (4) is given to agree, and value (5) is given to strongly agree. The range of the arithmetic mean is determined by calculating the range (5-1=4), then we divide it by the largest value in the scale to get the cell length (4/5=0.8), then we add this value to the lowest value in the scale, which is (1), to determine the minimum for this cell, and thus the cell length became as shown in the following table:

Table 3. Levels of approval of the paragraphs, dimensions and axes of the research

| | | | | | |
|-------------------|--------------|--------------|--------------|--------------------|------------------|
| greater than 4.20 | 3.40 to 4.19 | 2.60 to 3.39 | 1.80 to 2.59 | Less than 1.80 | Arithmetic mean |
| I strongly agree | I agree | neutral | noI agree | noI strongly agree | Direction |
| Highvery | High | middle | weak | weakvery | Evaluation score |

Questionnaire reliability:

The stability of the questionnaire statements was examined through the Cronbach's alpha scale to calculate stability, where the stability of the scale means that it is free from error resulting from poor or lack of understanding of the questions, or the sample members' reliance on random answers that do not reflect the situation to be measured, and make the tool give different results if it is reused. It was noted that the stability coefficient was (0.845), and this percentage is considered to be highly statistically significant and meets the purposes of the research. The validity index was calculated by calculating the square root of the reliability coefficient. On this basis, the overall validity index became (0.92), which is a high reliability coefficient. Accordingly, the questionnaire became highly valid.

Table 4. Questionnaire stability according to Cronbach's alpha coefficient

| | |
|---------------------------|-----------------------------|
| Commercial Bank Employees | Research sample |
| 0.845 | Cronach's alpha coefficient |

Source: Prepared by the researcher based on dataCostat

From the table, we note that the Cronbach's alpha coefficient reached 84%, which is considered a highly statistically significant percentage with a good level of confidence and stability that meets the purposes of the study. This means that there is a high degree of stability in the questionnaire results and that they do not change significantly if it is redistributed to the sample members several times.

2. RESEARCH RESULTS AND DISCUSSION

After determining the study method and tools, the results of the applied study will be presented and statistically analyzed, and the results will be discussed and interpreted.

Presentation of study results

The results of the study will be presented based on the information collected, summarized and processed through the above-mentioned statistical programs.

a. Show results related to demographics

First: Displaying age-related results

Table 5. The study sample is distributed according to age in the administration under study.

| percentage% | Repetition | the age |
|-------------|------------|-------------------|
| 22 | 11 | 20-25 years |
| 22 | 6 | 26-30 years |
| 18 | 9 | 31-35 years |
| 20 | 10 | 40-36 years |
| 24 | 12 | 41-45 years |
| 4 | 2 | 46 years and over |
| 100 | 50 | the total |

Source: Prepared by the researcher based on the outputs of Costat

From the previous table, it is clear to us that the percentage of workers aged between (20-45) years old reached 96% , of the total number of employees.

b. Secondly Show results related to academic qualification

Table 6. The study sample is distributed according to the academic qualification in the administration under study.

| percentage% | Repetition | Academic qualification |
|-------------|------------|-------------------------------|
| 20 | 10 | diploma |
| 26 | 13 | Bachelor's |
| 30 | 15 | Master's degree or equivalent |
| 24 | 12 | PhD or equivalent |
| 100 | 50 | the total |

Source: Prepared by the researcher based on the outputs of Costat

From the previous table, we can see the distribution of percentages according to academic qualifications, as we find that workers who hold a bachelor's degree represent 80% of total employees.

c. Third: Displaying the results related to specialty Scientific

Table 7. Distribution of the study sample according to the specialty Scientific in management research

| percentage% | Repetition | AFor scientific specialization |
|-------------|------------|----------------------------------|
| 14 | 7 | accounting |
| 28 | 14 | Accounting and Auditing |
| 22 | 11 | Accounting and financial control |
| 12 | 6 | Legal accounting |
| 8 | 4 | business management |
| 16 | 8 | Other |
| 100 | 50 | the total |

Source: Prepared by the researcher based on the outputs of Costat

d. Fourth Show related results By job title

Table 8. The study sample is distributed according to: Job Title In the management under investigation

| percentage% | Repetition | A For scientific specialization |
|-------------|------------|---------------------------------|
| 12 | 6 | Accountant |
| 4 | 2 | Assistant Accountant |
| 8 | 4 | Accountant |
| 12 | 6 | Senior Accountant |
| 10 | 5 | Assistant Account Manager |
| 4 | 2 | Account Manager |
| 6 | 3 | Senior Account Manager |
| 6 | 3 | Financial Manager |
| 6 | 3 | Proofreader |
| 4 | 2 | Assistant Auditor |
| 4 | 2 | Auditor |
| 4 | 2 | Senior Auditor |
| 6 | 3 | Assistant Audit Manager |
| 4 | 2 | Audit Manager |
| 6 | 3 | Senior Audit Manager |
| 4 | 2 | Audit expert |
| 100 | 50 | the total |

Source: Prepared by the researcher based on the outputs of Costat

e. Display related results On the first assumption (There is relationship same indication Statistics between Use Applications Intelligence Artificial And the block chin And enhance transparency And accuracy Auditing Financial)

The arithmetic means, standard deviations, and overall mean values were calculated, as shown in the following tables:

Table 9. Arithmetic means and standard deviations of the workers' answers.

| Arithmetic mean | Standard deviation | Phrase | M |
|-----------------|--------------------|--|----|
| 4.22 | 0.9957 | Helps Use Applications Intelligence Artificial in reduction Errors Humanity in Operations Auditing Financial. | 01 |
| 4.04 | 1.1773 | enhances The block chin from transparency Operations Finance from during registration Data In a way not Acceptable To edit. | 02 |
| 4.06 | 1.1502 | Contribute Techniques Intelligence Artificial in to improve accuracy Analysis Financial. | 03 |
| 3.9 | 1.3132 | He provides The block chin record Trusted To And acceptable To verify For all Operations Finance. | 04 |
| 3.98 | 1.1692 | Helps Merge between Intelligence Artificial And the block chin in presentation Audit financial more transparency And accuracy. | 05 |

| | | | |
|------|--------|--|----|
| 3.8 | 1.2454 | Contributes Use Intelligence Artificial in discovery Manipulation Financial quickly greater. | 06 |
| 3.82 | 1.2887 | enhances The block chin from credibility Data Finance the introduction For review | 07 |
| 4.26 | 0.9435 | Contribute Applications Intelligence Artificial in Enhance Capabilities Auditing Automated And prediction At risk. | 08 |

Source: Prepared by the researcher based on the outputs of Costat

We note from the previous table that the arithmetic mean value for the first paragraph (4.22) is located in the period (greater than 4.20) According to the response scores specified in Table (2), indicating the degree of agreement for the first statement, with a standard deviation (0.9957) About the average value of the answers. and The arithmetic mean value of the second paragraph (4.04) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the second statement, with a standard deviation (1.1773) About the average value of the answers. and The arithmetic mean value of the paragraph Third (4.06) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the third statement, with a standard deviation (1.1502) About the average value of the answers. and The arithmetic mean value of the paragraph Fourth (3.9) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the fourth statement, with a standard deviation of (1.3132) About the average value of the answers. and The arithmetic mean value of the paragraph Fifth (3.98) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the fifth statement, with a standard deviation of (1.1692) About the average value of the answers. and The arithmetic mean value of the paragraph Sixth (3.8) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the sixth statement, with a standard deviation of (1.2454) About the average value of the answers. and The arithmetic mean value of the paragraph Seventh (3.82) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating a high degree of agreement with the seventh statement, with a standard deviation of (1.2887)

About the average value of the answers. and The arithmetic mean value of the paragraph Eighth (4.26) It is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the eighth statement, with a standard deviation of (0.9435) About the average value of the answers. and The arithmetic mean value of the paragraph Ninth (3.96) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the ninth statement, with a standard deviation of (1.261) About the average value of the answers. and The arithmetic mean value of the paragraph Ten o'clock (4.1) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of non-Agree to the tenth statement, with a standard deviation of (1.0152) About the average value of the answers. It is clear from the table (8) The study sample responses were high, as the overall average value (4.0414) is located in the period (3.40-4.19) According to the response scores specified in Table (2). The results of the statistical analysis also showed that the most positive statements are: Contribute Applications Intelligence Artificial in Enhance Capabilities Auditing Automated And prediction At risk. Which came in first place with an arithmetic average (4.26) and standard deviation (0.9435), while the phrase came Contributes Use Intelligence Artificial in discovery Manipulation Financial quickly greater. Last in the arithmetic mean (3.8) and standard deviation (1.2454)

f. Show related results By the second hypothesis (There is relationship impact indication Statistics between Use Applications Intelligence Artificial And the block chin And enhance transparency And accuracy Auditing Financial)

Table 10. Arithmetic means and standard deviations of the workers' answers.

| Arithmetic mean | Standard deviation | Phrase | M |
|-----------------|--------------------|---|----|
| 3.86 | 1.2456 | Leads Use Intelligence Artificial to to improve quality Data Finance Auditor According to To standard Auditing International number 500 Related With evidence Proof. | 01 |
| 4.1 | 1.233 | Contributes The block chin in more transparency Operations Auditing Financial With what In line with with standard Auditing International number 240 Related With responsibilities Related By fraud. | 02 |
| 4.06 | 1.1141 | Affects Intelligence Artificial In a way direct on Enhance accuracy Results Finance Auditor, According to To standard Auditing International number 315 Related Specifically And evaluation Risks Errors The essence. | 03 |
| 4.14 | 1.2779 | Reduces The block chin from probability Manipulation With data Finance, Which improve from transparency Auditing With what Compatible with standard Auditing International number 330 around Responses Auditor for risks. | 04 |
| 3.88 | 1.1364 | Contributes integration between Intelligence Artificial And the block chin in more efficiency Operations Auditing | 05 |

| | | | |
|------|--------|---|----|
| | | Financial, With what enhances Compliance To standard Auditing International number200Related With goals General For the auditor Independent. | |
| 3.94 | 1.3001 | enhances Use Intelligence Artificial from capacity Auditors on discovery Errors And fraud in Data Finance, With what In line with with standard Auditing International number240. | 06 |
| 3.98 | 1.0784 | Affects The block chin on reduction Gaps Informatics between Auditors And owners interest, Which improve from accuracy Auditing According to To standard Auditing International number700Related With formation Opinion And preparation The report around Data Finance. | 07 |
| 3.86 | 1.2779 | Contributes Intelligence Artificial in acceleration Operations Auditing Financial, Which raises from Its accuracy And its transparency According to To standard Auditing International number300Related By planning Auditing. | 08 |
| 4.24 | 1.0012 | Affects Use The block chin on Enhance credibility Data Finance the introduction For review, With what Compatible with standard Auditing International number580Related With representations Writing. | 09 |

Source: Prepared by the researcher based on the outputs of Costat

We note from the previous table that the arithmetic mean value for the first paragraph (3.86) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the first statement, with a standard deviation (1.2456) About the average value of the answers. and The arithmetic mean value of the second paragraph (4.1) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the second statement, with a standard deviation (1.233) About the average value of the answers. and The arithmetic mean value of the paragraph Third (4.06) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the third statement, with a standard deviation (1.1141) About the average value of the answers and The arithmetic mean value of the paragraph Fourth (4.14) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the fourth statement, with a standard deviation of (1.2779) About the average value of the answers and The arithmetic mean value of the paragraph Fifth (3.88) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the fifth statement, with a standard deviation of (1.1364) About the average value of the answers and The arithmetic mean value of the paragraph Sixth (3.94) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the sixth statement, with a standard deviation of (1.3001) About the average value of the answers and The arithmetic mean value of the paragraph Seventh (3.98) is located

in the period (3.40-4.19) According to the response scores specified in Table (2), indicating a high degree of agreement with the seventh statement, with a standard deviation of (1.0784) About the average value of the answers and The arithmetic mean value of the paragraph Eighth (3.86) It is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of agreement for the eighth statement, with a standard deviation of (1.2779) About the average value of the answers and The arithmetic mean value of the paragraph Ninth (4.24) is located in the period (greater than 4.20) According to the response scores specified in Table (2), indicating the degree of agreement for the ninth statement, with a standard deviation of (1.0012) About the average value of the answers and The arithmetic mean value of the paragraph Ten o'clock (3.94) is located in the period (3.40-4.19) According to the response scores specified in Table (2), indicating the degree of non Agree to the tenth statement, with a standard deviation of (1.0768) About the average value of the answers.

It is clear from the table (9) The study sample responses were high, as the overall average value (4) is located in the period (3.40-4.19) According to the response scores specified in Table (2). The results of the statistical analysis also showed that the most positive statements are: Affects Use The block chin on Enhance credibility Data Finance the introduction For review, With what Compatible with standard Auditing International number 580 Related With representations Writing. Which came in first place with an arithmetic average (4.24) and standard deviation (1.0012), while the phrase came Leads Use Intelligence Artificial to improve quality Data Finance Auditor According to To standard Auditing International number 500 Related With evidence Proof. "Last in the arithmetic mean (3.86) and standard deviation (1.2456)

Table 11. Arithmetic means and standard deviations of answers staff.

| Arithm etic mean | Standa rd deviati on | stron gly disag ree | I disag ree | neutr al | I strongl y agree | I agree | | Phrase | M |
|------------------------|-------------------------------|------------------------------|-------------------|-------------|-------------------------|------------|----------------|--|----|
| 4.22 | 0.9957 | 1 | 3 | 5 | 16 | 25 | repeti tion | Helps Use Applications Intelligence Artificial in reduction Errors Humanity in Operations Auditing Financial. | 01 |
| | | 2 | 6 | 10 | 32 | 50 | % | | |
| 4.04 | 1.1773 | 3 | 4 | 3 | 18 | 22 | repeti tion | enhances The block chin from transparency Operations Finance from during registration Data In a way not Acceptable To edit. | 02 |
| | | 6 | 8 | 6 | 36 | 44 | % | | |
| 4.06 | 1.1502 | 3 | 2 | 7 | 15 | 23 | repeti tion | Contribute Techniques Intelligence Artificial in to improve accuracy Analysis Financial. | 03 |
| | | 6 | 4 | 14 | 30 | 46 | % | | |
| 3.9 | 1.3132 | 5 | 4 | 3 | 17 | 21 | repeti tion | He provides The block chin record Trusted To And acceptable To verify For all Operations Finance. | 04 |
| | | 10 | 8 | 6 | 34 | 42 | % | | |

| | | | | | | | | | |
|------|--------|----|----|----|----|----|----------------|--|----|
| 3.98 | 1.1692 | 2 | 5 | 7 | 14 | 22 | repeti tion | Helps Merge between Intelligence Artificial And the block chin in presentation Audit financial more transparency And accuracy. | 05 |
| | | 4 | 10 | 14 | 28 | 44 | % | | |
| 3.8 | 1.2454 | 4 | 2 | 14 | 10 | 20 | repeti tion | Contributes Use Intelligence Artificial in discovery Manipulation Financial quickly greater. | 06 |
| | | 8 | 4 | 28 | 20 | 40 | % | | |
| 3.82 | 1.2887 | 5 | 4 | 4 | 19 | 18 | repeti tion | enhances The block chin from credibility Data Finance the introduction For review | 07 |
| | | 10 | 8 | 8 | 38 | 36 | % | | |
| 4.26 | 0.9435 | 1 | 2 | 5 | 17 | 25 | repeti tion | Contribute Applications Intelligence Artificial in Enhance Capabilities Auditing Automated And prediction At risk. | 08 |
| | | 2 | 4 | 10 | 34 | 50 | % | | |
| 3.96 | 1.261 | 4 | 3 | 7 | 13 | 23 | repeti tion | Helps The block chin in to provide register Audit transparent maybe For all Parties Access To him. | 09 |
| | | 8 | 6 | 14 | 26 | 46 | % | | |
| 4.1 | 1.0152 | 2 | 1 | 8 | 18 | 21 | repeti tion | Affects Use Intelligence Artificial And the block chin on to improve accuracy Reports Finance. | 10 |
| | | 4 | 2 | 16 | 36 | 42 | % | | |
| 3.86 | 1.2456 | 4 | 3 | 9 | 14 | 20 | repeti tion | Leads Use Intelligence Artificial to to improve quality Data Finance Auditor According to To standard Auditing International number500Related With evidence Proof. | 11 |
| | | 8 | 6 | 18 | 28 | 40 | % | | |
| 4.1 | 1.233 | 4 | 2 | 5 | 13 | 26 | repeti tion | Contributes The block chin in more transparency Operations Auditing Financial With what In line with with standard Auditing International number240Related With responsibilities Related By fraud. | 12 |
| | | 8 | 4 | 10 | 26 | 52 | % | | |
| 4.06 | 1.1141 | 2 | 3 | 8 | 14 | 23 | repeti tion | Affects Intelligence Artificial In a way direct on Enhance accuracy Results Finance Auditor, According to To standard Auditing International number315Related Specifically And evaluation Risks Errors The essence. | 13 |
| | | 4 | 6 | 16 | 28 | 46 | % | | |
| 4.14 | 1.2779 | 4 | 3 | 4 | 10 | 29 | repeti tion | Reduces The block chin from probability Manipulation With data Finance, Which improve from transparency Auditing With what Compatible with standard Auditing International number330around Responses Auditor for risks. | 14 |
| | | 8 | 6 | 8 | 20 | 58 | % | | |
| 3.88 | 1.1364 | 1 | 6 | 11 | 12 | 20 | repeti tion | Contributes integration between Intelligence Artificial And the block chin in more efficiency Operations Auditing Financial, With what enhances Compliance To standard Auditing International number200Related With goals General For the auditor Independent. | 15 |
| | | 2 | 12 | 22 | 24 | 40 | % | | |
| 3.94 | 1.3001 | 4 | 4 | 7 | 11 | 24 | repeti tion | enhances Use Intelligence Artificial from capacity Auditors on discovery Errors And fraud in Data Finance, With what In line with with standard Auditing International number240. | 16 |
| | | 8 | 8 | 14 | 22 | 48 | % | | |
| 3.98 | 1.0784 | 3 | 1 | 8 | 20 | 18 | repeti tion | Affects The block chin on reduction Gaps Informatics between Auditors | 17 |

| | | | | | | | | | |
|--------------|----------------|------------------|---|----|----|----|------------|---|----|
| | | 6 | 2 | 16 | 40 | 36 | % | And owners interest, Which improve from accuracy Auditing According to To standard Auditing International number700Related With formation Opinion And preparation The report around Data Finance. | |
| 3.86 | 1.2779 | 5 | 2 | 8 | 15 | 20 | repetition | Contributes Intelligence Artificial in acceleration Operations Auditing Financial, Which raises from Its accuracy And its transparency According to To standard Auditing International number300Related By planning Auditing. | 18 |
| | | 10 | 4 | 16 | 30 | 40 | % | | |
| 4.24 | 1.0012 | 2 | 1 | 5 | 17 | 25 | repetition | Affects Use The block chin on Enhance credibility Data Finance the introduction For review, With what Compatible with standard Auditing International number580Related With representations Writing. | 19 |
| | | 4 | 2 | 10 | 34 | 50 | % | | |
| 3.94 | 1.0768 | 2 | 3 | 9 | 18 | 18 | repetition | Contributes Use Intelligence Artificial And the block chin in to improve Reliability General For results Auditing Financial, According to To standard Auditing International number520Related With procedures Analysis. | 20 |
| | | 4 | 6 | 18 | 36 | 36 | % | | |
| 4.007 | 1.16718 | the total | | | | | | | |

From the previous table, it is clear to us that the general arithmetic mean is (4.007), which indicates the degree of agreement in the workers' answers, and a standard deviation of (1.16718), which indicates that the answers are not widely dispersed around the value of the general arithmetic mean.

3. CONCLUSION AND RECOMMENDATIONS

Conclusions

1. Intelligent applications, such as artificial intelligence and blockchain, enhance the accuracy of accounting data and reduce human errors in financial audits.
2. thatThe use of artificial intelligence can accelerate the detection of financial manipulation and fraud more effectively compared to traditional methods.
3. thatBlockchain technology contributes to increasing transparency by recording financial transactions in an unalterable way.
4. thatSmart applications provide the ability to quickly analyze large amounts of financial data, which improves the quality of auditing and financial decision-making.
5. That useSmart tools contribute to reducing audit costs by reducing reliance on manual processes and improving operational efficiency.

Recommendations

1. necessityExpanding the use of artificial intelligence and blockchain technologies in financial audits to improve the accuracy and transparency of financial reports.
2. Urge toDeveloping specialized training programs for financial auditors to enhance their skills in dealing with smart applications.
3. Strengthening cooperation between regulatory authorities and banks to ensure the application of international auditing standards in light of the use of modern technology.
4. necessityEncouraging more research on the impact of smart applications on various aspects of financial auditing, to develop effective strategies for their use.

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