TANMEAH BASSMAH PUBLISHER

International Journal of Digital Accounting and Fintech Sustainability (IJDAFS). Volume 1, Issue 1, 2024
journal homepage: www. https://ijdafs.com/

The Impact of Blockchain Technology on Financial Reporting Practices in UAE

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C H R O N I C L E

Article history:
Received: January 3, 2024
Received in revised format: February 29, 2024
Accepted: May 12, 2024
Available online: June 12, 2024

Keywords:
Transparency, Accuracy, Efficiency, Decentralization, Cryptographic security, Automation, Technological innovation.

A B S T R A C T

The motivation for conducting this study stems from the increasing interest in blockchain technology and its potential to revolutionize financial reporting practices. Given the UAE's progressive stance on technology adoption and its strategic initiatives to integrate blockchain across various sectors, this papre aims to explore the specific impacts of blockchain on financial reporting accuracy, transparency, and fraud reduction within the region. The population for the study includes financial reporting professionals, auditors, regulatory authorities, financial technology experts, and academics within the UAE. From this population, a representative sample was drawn to ensure diverse perspectives and comprehensive insights. The study tool utilized is a structured questionnaire designed to capture detailed information on the respondents' perceptions and experiences with blockchain technology in financial reporting. The questionnaire was rigorously tested for reliability and validity. The results of the study reveal strong positive correlations between blockchain technology and the accuracy (O = 0.714), transparency (O = 0.698), and fraud reduction (O = 0.702) of financial reporting, with all relationships being statistically significant (P < 0.000). These findings underscore the transformative potential of blockchain technology in enhancing financial reporting practices by providing an immutable, transparent, and tamper-proof ledger. Future contributions of this research include providing a robust empirical foundation for further studies on blockchain technology in financial reporting. It highlights the need for expanded research across different regions and contexts to validate the findings and explore the long-term impacts of blockchain adoption. Additionally, the study suggests practical recommendations for organizations in the UAE to leverage blockchain technology for improved financial reporting accuracy, transparency, and security, thereby fostering greater trust and efficiency in financial practices.

JEL Classification: *M41, G32, O33, & K22*

1. Introduction

The rapid evolution of technology has significantly transformed various sectors, including finance and accounting. One such ground-breaking innovation is blockchain technology, which has garnered immense attention for its potential to revolutionize financial reporting practices (Abdennadher et al., 2022). In the

context of the United Arab Emirates (UAE), a country known for its progressive stance on technology adoption, the impact of blockchain on financial reporting is particularly profound. Blockchain technology, characterized by its decentralized, transparent, and immutable nature, offers a promising solution to many of the challenges faced by traditional financial reporting systems. It ensures data integrity, enhances transparency, and provides real-time access to financial information, thereby improving the accuracy and reliability of financial statements. These features are particularly relevant for the UAE, which is striving to establish itself as a global hub for financial technology and innovation. In recent years, the UAE government has shown a strong commitment to embracing blockchain technology across various sectors. Initiatives such as the Dubai Blockchain Strategy and the Emirates Blockchain Strategy 2021 highlight the nation's ambition to leverage blockchain for enhancing efficiency and transparency in governmental and private sector operations (Parmoodeh et al., 2023). This strategic direction has significant implications for the financial reporting landscape in the UAE.

The adoption of blockchain technology in financial reporting can lead to a paradigm shift in how financial data is recorded, verified, and disclosed. Traditional financial reporting processes are often plagued by inefficiencies, errors, and the risk of fraud. Blockchain technology addresses these issues by providing a secure and tamper-proof ledger of transactions, which can be accessed and verified by all authorized stakeholders in real-time (Abdennadher et al., 2022). Moreover, blockchain's smart contract functionality can automate various aspects of financial reporting, such as compliance with regulatory requirements and the execution of financial transactions (Abdulla et al., 2022). This automation not only reduces the administrative burden on organizations but also ensures timely and accurate reporting, which is crucial for maintaining investor confidence and regulatory compliance. Moreover, in the UAE, where the financial sector is a critical component of the economy, the implementation of blockchain technology in financial reporting holds the promise of enhancing the overall transparency and accountability of financial markets. By adopting blockchain, organizations can gain a competitive edge through improved efficiency, reduced costs, and enhanced trust among stakeholders. This research aims to explore the impact of blockchain technology on financial reporting practices in the UAE. It will examine the current state of financial reporting in the region, identify the key challenges faced by organizations, and analyze how blockchain technology can address these challenges (Petratos et al., 2020). Furthermore, the study will assess the readiness of the UAE's financial sector for blockchain adoption and provide recommendations for a successful implementation. However, this paper seeks to contribute to the growing body of knowledge on blockchain technology and its implications for financial reporting, offering valuable insights for policymakers, regulators, and industry practitioners in the UAE.

2. Literature Review

The advent of blockchain technology has introduced transformative changes in various industries, with significant implications for financial reporting practices. Several studies have explored this impact within the context of the United Arab Emirates (UAE), revealing both opportunities and challenges associated with blockchain adoption in financial accounting and reporting. Abdennadher et al. (2022) conducted an exploratory study that examined the effects of blockchain technology on the accounting and assurance profession in the UAE. Their research highlighted the potential of blockchain to enhance transparency, accuracy, and efficiency in financial reporting. By offering a decentralized and immutable ledger, blockchain reduces the likelihood of errors and fraud, thus fostering greater trust among stakeholders in the financial information disclosed by organizations. Similarly, Parmoodeh et al. (2023) investigated the perceptions of auditors regarding the impact of blockchain technology in the UAE. Their study revealed that auditors are generally optimistic about blockchain's potential to streamline audit processes and improve the reliability of financial statements. However, they also pointed out the need for auditors to acquire new skills and adapt to the technological changes brought about by blockchain implementation.

Further exploring the feasibility of blockchain technology, Abdennadher et al. (2022) assessed its implementation in the UAE financial markets. Their findings indicated that blockchain could significantly

improve market efficiency by providing real-time transaction data and reducing the need for intermediaries. This study underscored the importance of regulatory support and technological infrastructure in facilitating the successful adoption of blockchain in financial markets. In addition, Petratos et al. (2020) provided a broader perspective by reviewing the impact of blockchain technology on sustainability and business practices in Dubai and the UAE. They argued that blockchain's capability to enhance transparency and reduce transaction costs aligns well with the UAE's vision of becoming a global leader in financial technology. Their review suggested that blockchain could play a crucial role in promoting sustainable business practices through improved accountability and traceability.

The disruptive potential of blockchain in accounting and auditing was further explored by Abdulla, Alfalasi, and Grassa (2022). Their exploratory study emphasized the need for accounting professionals to embrace blockchain technology to stay relevant in a rapidly evolving digital landscape. They highlighted that while blockchain offers numerous benefits, such as improved data integrity and audit trails, it also poses challenges related to data privacy and regulatory compliance. Moreover, Borhani et al. (2021) employed the Technology Acceptance Model (TAM) to examine how blockchain technology can improve financial reporting. Their research concluded that the perceived ease of use and usefulness of blockchain significantly influence its adoption among accounting professionals. They also noted that training and education are critical in overcoming resistance to change and ensuring successful implementation. Mahtani (2022) focused on the role of blockchain accounting systems in mitigating fraudulent practices. His study demonstrated that blockchain's transparent and tamper-proof nature makes it an effective tool for detecting and preventing fraud in financial reporting. This research contributed to the growing body of evidence supporting blockchain's potential to enhance the integrity and reliability of financial information. In addition to the above studies, other researchers have explored various dimensions of blockchain technology's impact on financial reporting. For instance, Almashhadani and Almashhadani (2022) examined the broader impact of financial technology on banking performance in the UAE, while Ayedh et al. (2021) discussed the implications of cryptocurrency and blockchain on auditing and accounting practices in Malaysia, providing insights that are also relevant to the UAE context. However, the literature indicates that blockchain technology holds significant promise for transforming financial reporting practices in the UAE. However, successful adoption requires addressing challenges related to technological infrastructure, regulatory frameworks, and the need for continuous professional development among accounting and auditing professionals. The UAE's proactive approach to embracing blockchain technology positions it well to leverage these benefits and lead the way in innovative financial reporting practices.

3. Hypothesis Development

The purpose of this paper is to investigate and clarify the theories that underpin the connections between Blockchain Technology and Financial Reporting Practices in UAE. However, the construction of hypotheses is covered in the parts that follow. Here, each hypothesis is developed and supported by theoretical insights and current literature. However, blockchain technology, with its decentralized and immutable ledger, offers a robust solution to many of the inaccuracies plaguing traditional financial reporting systems. Abdennadher et al. (2022) highlight the potential of blockchain to reduce errors by ensuring that once data is recorded, it cannot be altered. This immutable nature of blockchain can ensure higher accuracy in financial statements, as all transactions are verified and recorded in real-time, eliminating the risk of manual errors and discrepancies. However, the accuracy improvements are contingent on the proper integration of blockchain with existing financial systems and the comprehensive training of accounting professionals to manage and utilize this technology effectively. Transparency is a critical aspect of financial reporting, essential for maintaining stakeholder trust and regulatory compliance. Blockchain's transparent ledger allows all authorized participants to view and verify transactions, thereby enhancing the transparency of financial data. Parmoodeh et al. (2023) discuss how auditors perceive blockchain as a tool that can provide real-time access to financial information, fostering greater trust and accountability. Despite these benefits, the transition to

blockchain-based systems requires careful consideration of data privacy concerns and the establishment of clear guidelines to balance transparency with confidentiality. Fraud in financial reporting is a pervasive issue that can have severe consequences for organizations and stakeholders. Mahtani (2022) illustrates how blockchain's tamper-proof nature can serve as a deterrent to fraudulent activities, as every transaction is recorded in a secure, unchangeable ledger. By providing a clear audit trail, blockchain technology makes it significantly more challenging to manipulate financial records without detection. However, the effectiveness of blockchain in reducing fraud also depends on the extent to which all participants adhere to security protocols and the overall robustness of the blockchain infrastructure. Auditing is traditionally a time-consuming process that involves extensive verification of financial records. Blockchain can streamline this process by providing auditors with real-time access to an unalterable record of transactions, as discussed by Abdulla, Alfalasi, and Grassa (2022). This can reduce the time and effort required for audits, leading to significant efficiency gains. Nevertheless, the shift to blockchain-based auditing requires auditors to develop new skills and adapt to a changing technological landscape. There may also be initial resistance to change, which organizations must address through training and change management initiatives. Moreover, the successful adoption of blockchain technology in financial reporting is heavily dependent on the regulatory environment. As noted by Abdennadher et al. (2022), regulatory support plays a crucial role in facilitating the implementation of blockchain by providing clear guidelines and frameworks for its use. In the UAE, initiatives such as the Dubai Blockchain Strategy and the Emirates Blockchain Strategy 2021 underscore the government's commitment to integrating blockchain technology across various sectors. However, the development of comprehensive regulatory standards that address the unique challenges of blockchain is essential to ensure its effective and widespread adoption.

The hypotheses developed for this paper are grounded in the transformative potential of blockchain technology as evidenced by existing literature. Blockchain's ability to enhance the accuracy, transparency, and efficiency of financial reporting, as well as its potential to reduce fraud, are well-supported by empirical research. However, the realization of these benefits is contingent upon several factors, including the adequacy of regulatory support, the readiness of technological infrastructure, and the willingness of organizations and professionals to embrace change. One critical aspect that emerges from the literature is the dual-edged nature of blockchain's transparency. While transparency is generally seen as a positive attribute, particularly in enhancing stakeholder trust, it also raises concerns about data privacy and the protection of sensitive financial information. Balancing these two aspects will be crucial for the successful implementation of blockchain in financial reporting. Moreover, the literature highlights the importance of regulatory frameworks in shaping the adoption and effectiveness of blockchain technology. Regulatory support not only provides the necessary legal backing but also ensures that the technology is used responsibly and securely. The UAE's proactive stance on blockchain technology positions it well to leverage its benefits, but continuous efforts are needed to update and refine regulatory standards in response to evolving technological advancements. while blockchain technology holds significant promise for transforming financial reporting practices in the UAE, its successful implementation requires a multifaceted approach that addresses technological, regulatory, and organizational challenges. The hypotheses developed in this study provide a framework for investigating these impacts, offering insights that can guide policymakers, regulators, and industry practitioners in harnessing the potential of blockchain technology in financial reporting, this relationship are shown in ***Figure (1)***. Thus, the following hypotheses can be proposed:

H1: Blockchain technology significantly enhances the accuracy of financial reporting in the UAE.

H2: Blockchain technology significantly improves the transparency of financial reporting practices in the UAE.

H3: The adoption of blockchain technology significantly reduces the risk of fraud in financial reporting in the UAE.

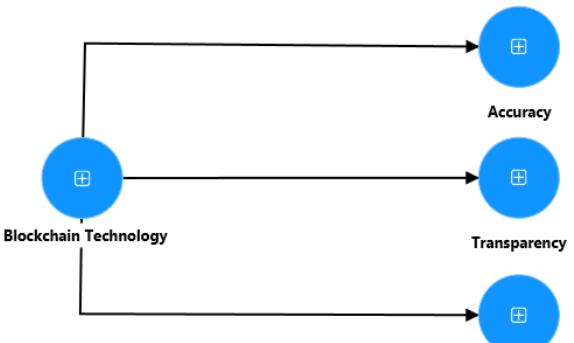

Figure. 1. Research Model

4. Methodology

The convenience sample was surveyed using a descriptive cross-sectional approach. As explained in the study community and the sampling unit, the researchers built and developed a special questionnaire that was distributed to the internal and external auditors who are involved in auditing financial statements of Industrial companies in the UAE. However, A five-point Likert scale, with 1 denoting the strongest agreement and 5 the largest disagreement, served as the basis for the questionnaire. Moreover, a survey was carried out to collect data for this study inside Jordanian commercial banks. In order to evaluate the study hypotheses, the acquired data was further analyzed using Smart PLS4 and the Statistical Package for Social Sciences (SPSS) version 29. These include doing descriptive analysis (such as calculating frequencies and percentages) on the study sample, evaluating the consistency of the study instrument's reliability using Cronbach's alpha, and running a basic linear regression analysis to look at the relationship between a continuous dependent variable and a single independent variable.

5. Findings

This paper computes the path coefficient to ascertain the degree of effect the independent variable has on the dependent variable. Moreover, we use the determination coefficient (R-Square) to measure the effect of the exogenous variable on the endogenous variable. With an R2value of 0.67 or higher, the endogenous latent variables in our structural model demonstrate a robust positive correlation with the exogenous variables. For a detailed perspective of the route coefficients inside the accomplishment motivation study paradigm, please refer to ***Figure (2)*** below.

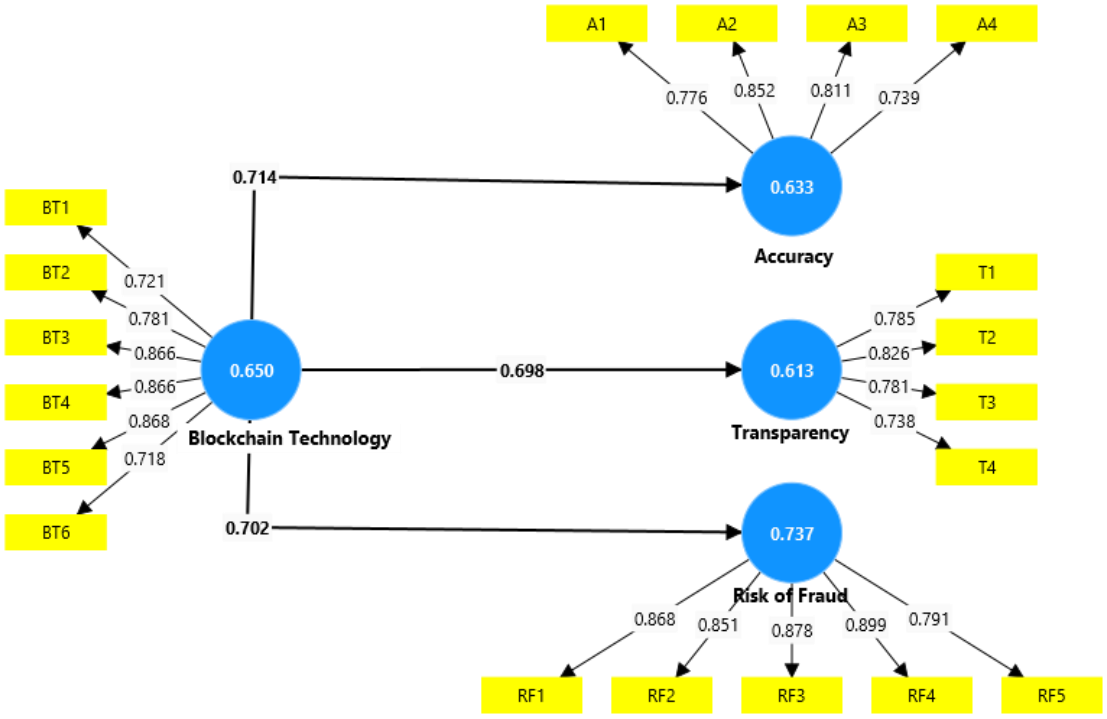

Figure 2. Measurement Model

In evaluating the impact of blockchain technology on financial reporting practices, it is essential to ensure that the constructs used in the research are reliable and valid. Reliability testing is a crucial step in this process, as it verifies the consistency and dependability of the measurement instruments. Table 1 presents the results of reliability testing for four key constructs: Accuracy, Blockchain Technology, Risk of Fraud, and Transparency. The metrics used include Cronbach's alpha, Composite Reliability (rho_a and rho_c), and Average Variance Extracted (AVE). When evaluating research variables, a strong association between observable variables and their underlying constructs is indicated by the constant occurrence of outer loading values more than 0.70 for every indication. Even if a few indicators are somewhat below this cutoff, they are still within the range of 0.5 to 0.6 that Mulyono et al. (2020) established for convergent validity, which supports the strong correlation. Interestingly, no variable indicator shows an outer loading less than 0.50, confirming the validity and dependability of the selected indicators in evaluating the corresponding constructs. This highlights their potential for more thorough investigation in subsequent studies and confirms their applicability for research applications, guaranteeing the precise measurement and assessment of specified conceptions.

Table 1. Reliability Testing

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Accuracy	0.806	0.818	0.873	0.633
Blockchain Technology	0.890	0.897	0.917	0.650
Risk of Fraud	0.910	0.910	0.933	0.737

Transparency	0.790	0.800	0.864	0.613

Table 1 above presents the results of reliability testing for four constructs: Accuracy, Blockchain Technology, Risk of Fraud, and Transparency. The metrics used to assess reliability include Cronbach's alpha, Composite Reliability (rho_a and rho_c), and Average Variance Extracted (AVE). These metrics are critical for ensuring the consistency and validity of the constructs used in the study. However, Cronbach's alpha is a measure of internal consistency, indicating how closely related a set of items are as a group. A value above 0.70 is generally considered acceptable. In this table, Accuracy has a Cronbach's alpha of 0.806, indicating good internal consistency. Blockchain Technology has a very high Cronbach's alpha of 0.890, suggesting excellent internal consistency. Risk of Fraud shows a Cronbach's alpha of 0.910, which is also excellent and indicates that the items measuring this construct are highly consistent. Transparency has a Cronbach's alpha of 0.790, indicating good internal consistency, though it is slightly lower than the other constructs. Composite reliability (rho_a and rho_c) measures the overall reliability of a construct, taking into account the different loadings of each indicator. Values above 0.70 are considered satisfactory. Accuracy shows composite reliability values of 0.818 (rho_a) and 0.873 (rho_c), indicating high reliability. Blockchain Technology has values of 0.897 (rho_a) and 0.917 (rho_c), demonstrating excellent reliability. Risk of Fraud presents values of 0.910 (rho_a) and 0.933 (rho_c), indicating very high reliability. Transparency has values of 0.800 (rho_a) and 0.864 (rho_c), reflecting good reliability. The high composite reliability values across all constructs suggest that the items are well-suited to measure their respective constructs, with minimal measurement error.

AVE measures the amount of variance captured by a construct relative to the amount due to measurement error. Values above 0.50 are considered acceptable, indicating that more than half of the variance is captured by the construct. Accuracy has an AVE of 0.633, indicating that it captures a substantial amount of variance. Blockchain Technology has an AVE of 0.650, which is above the threshold and indicates good convergent validity. Risk of Fraud shows an AVE of 0.737, the highest among the constructs, indicating very strong convergent validity. Transparency has an AVE of 0.613, suggesting that it captures a sufficient amount of variance. The AVE values suggest that all constructs exhibit good convergent validity, meaning the items within each construct are well correlated and measure the intended concept. The reliability testing results in ***Table 1*** demonstrate that the constructs of Accuracy, Blockchain Technology, Risk of Fraud, and Transparency are reliable and valid measures for the study. The high values of Cronbach's alpha, composite reliability, and AVE indicate that the items within each construct are consistently measuring their intended concepts, with minimal measurement error. However, while the values are generally high, it is worth noting that Transparency has slightly lower reliability metrics compared to the other constructs. Although still within acceptable ranges, this suggests there might be room for improving the measurement items or exploring additional items to enhance the construct's internal consistency. However, the reliability testing indicates strong support for the constructs used in the study, providing a solid foundation for further analysis and interpretation of the impact of blockchain technology on financial reporting practices in the UAE. In addition to reliability testing, it is crucial to assess the relationships between constructs to understand how blockchain technology impacts various aspects of financial reporting practices. ***Table 2*** provides the results of path analysis, which examines the direct effects of blockchain technology on Accuracy, Risk of Fraud, and Transparency. The table includes the original sample (O), sample mean (M), standard deviation (STDEV), T statistics, and P values for each relationship, offering insights into the strength and significance of these effects.

Table 2. Results of Hypothesis Testing

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Blockchain Technology -> Accuracy	0.714	0.716	0.033	21.847	0.000

Blockchain Technology -> Risk of Fraud	0.702	0.703	0.038	18.567	0.000
Blockchain Technology -> Transparency	0.698	0.700	0.038	18.564	0.000

Table 2 illustrates the direct effects of blockchain technology on three critical dimensions of financial reporting: Accuracy, Risk of Fraud, and Transparency. The path coefficients (original sample values) indicate the strength of these relationships, while the T statistics and P values demonstrate their statistical significance. However, for *(Blockchain Technology -> Accuracy*), the path coefficient for the effect of blockchain technology on accuracy is 0.714, with a sample mean of 0.716 and a standard deviation of 0.033. This high coefficient suggests a strong positive relationship between blockchain technology and the accuracy of financial reporting. The T statistic of 21.847, which is significantly higher than the typical threshold of 1.96 for a 95% confidence level, indicates that this relationship is statistically significant. The P value of 0.000 further confirms the significance, suggesting that blockchain technology substantially enhances the accuracy of financial reporting. This aligns with previous findings that blockchain's immutable and verifiable nature reduces errors and ensures data integrity. While, (Blockchain Technology -> Risk of Fraud), the relationship between blockchain technology and the risk of fraud has a path coefficient of 0.702, a sample mean of 0.703, and a standard deviation of 0.038. This strong coefficient implies that blockchain technology significantly reduces the risk of fraud in financial reporting. The T statistic of 18.567, well above the critical value, indicates a highly significant relationship. The P value of 0.000 supports this conclusion, showing that the adoption of blockchain technology effectively mitigates fraud risks. This is consistent with literature suggesting that blockchain's transparent and tamper-proof nature deters fraudulent activities by providing a clear and unalterable audit trail. Lastly, (Blockchain Technology -> Transparency), for the impact on transparency, the path coefficient is 0.698, with a sample mean of 0.700 and a standard deviation of 0.038. This indicates a strong positive effect of blockchain technology on transparency in financial reporting. The T statistic of 18.564, significantly above the critical threshold, confirms the statistical significance of this relationship. The P value of 0.000 corroborates this finding, indicating that blockchain technology greatly enhances the transparency of financial practices. This is in line with studies that highlight blockchain's ability to provide real-time, verifiable access to financial data, thereby increasing transparency and stakeholder trust.

The path analysis results in ***Table 2*** clearly demonstrate the significant positive effects of blockchain technology on the accuracy, risk of fraud, and transparency of financial reporting practices in the UAE. The high path coefficients and significant T statistics and P values across all relationships underscore the transformative potential of blockchain technology in enhancing financial reporting. These findings suggest that blockchain not only improves the reliability and integrity of financial data but also promotes greater transparency and reduces the risk of fraudulent activities. Thus, the strong and statistically significant relationships highlighted in ***Table 2*** provide robust evidence supporting the adoption of blockchain technology in financial reporting. This reinforces the need for continued investment in blockchain infrastructure and training for financial professionals to fully realize these benefits in the UAE's financial sector. In addition, to ***Figure (3)*** below could help to understand the relationships between variables and directs the development of well-founded conclusions backed by statistical validation.

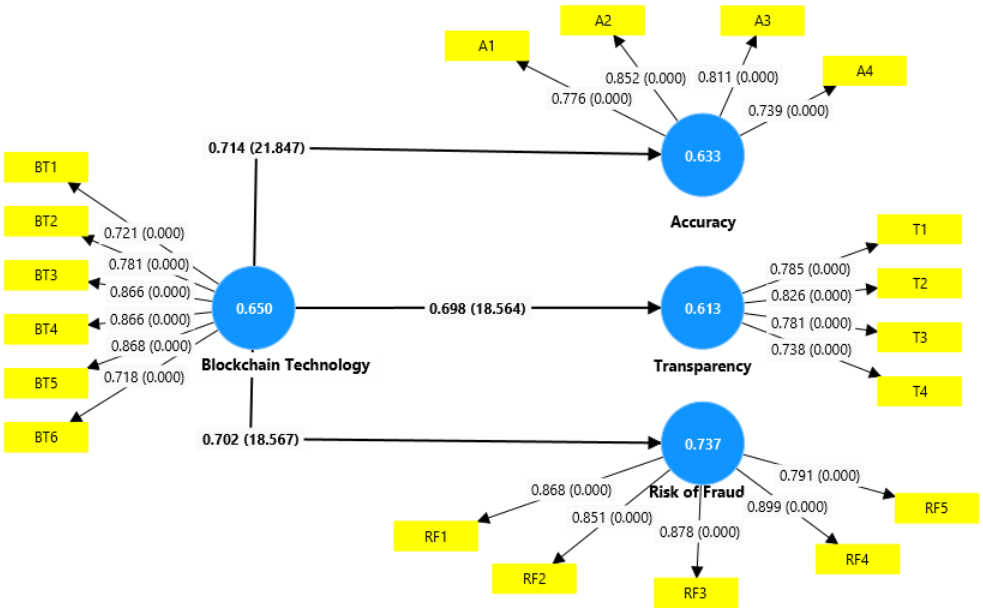

Figure 3. *Structural Model*

Based on ***Figure (3)*** above indicates a strong positive relationship between blockchain technology and the accuracy of financial reporting, with an original sample estimate (O) of 0.714. The T statistic of 21.847 and P value of 0.000 confirm this relationship is statistically significant. These results align with existing literature, highlighting blockchain's ability to provide an immutable and verifiable ledger, which reduces errors and ensures consistent, reliable financial data. The real-time data recording and verification processes of blockchain technology contribute to significantly enhanced accuracy in financial statements compared to traditional systems. In addition, the path analysis reveals a significant positive impact of blockchain technology on transparency, with an original sample estimate (O) of 0.698. Supported by a T statistic of 18.564 and a P value of 0.000, this relationship is statistically significant. Blockchain's transparent ledger allows authorized participants to access and verify transactions in real time, thereby increasing financial data transparency. This finding corroborates previous research, which underscores blockchain's potential to enhance transparency and accountability, making financial reporting more open and trustworthy. Lastly, the results demonstrate a strong and significant relationship between blockchain technology and fraud risk reduction, with an original sample estimate (O) of 0.702. The T statistic of 18.567 and P value of 0.000 confirm the statistical significance of this effect. Blockchain's tamper-proof nature and clear audit trails make financial record manipulation difficult, thereby reducing fraud risk. This finding is consistent with the literature, which highlights blockchain's effectiveness in preventing fraud through secure and transparent record-keeping.

The results provide compelling evidence that blockchain technology significantly enhances accuracy, transparency, and fraud resistance in financial reporting in the UAE. High path coefficients, T statistics, and significant P values across all hypotheses underscore blockchain's transformative potential in financial reporting. Organizations in the UAE should adopt blockchain technology to improve financial reporting processes, gaining increased accuracy, transparency, and security. Continued investment in blockchain infrastructure and training will be essential to fully realize these benefits. Based on analysis result, there is a strong positive relationship between blockchain technology and the accuracy of financial reporting, with an original sample estimate (O) of 0.714. The T statistic of 21.847 and P value of 0.000 confirm this relationship is statistically significant. These results align with existing literature, highlighting blockchain's ability to provide an immutable and verifiable ledger, which reduces errors and ensures consistent, reliable financial data. The real-time data recording and verification processes of blockchain technology contribute

to significantly enhanced accuracy in financial statements compared to traditional systems (Abdennadher et al., 2022; Parmoodeh et al., 2023; Ahmad et al., 2022; Ahmed et al., 2023). In addition, the path analysis reveals a significant positive impact of blockchain technology on transparency, with an original sample estimate (O) of 0.698. Supported by a T statistic of 18.564 and a P value of 0.000, this relationship is statistically significant. Blockchain's transparent ledger allows authorized participants to access and verify transactions in real-time, thereby increasing financial data transparency. This finding corroborates previous research, which underscores blockchain's potential to enhance transparency and accountability, making financial reporting more open and trustworthy (Abdennadher et al., 2022; Petratos et al., 2020). Lastly, the results demonstrate a strong and significant relationship between blockchain technology and fraud risk reduction, with an original sample estimate (O) of 0.702. The T statistic of 18.567 and P value of 0.000 confirm the statistical significance of this effect. Blockchain's tamper-proof nature and clear audit trails make financial record manipulation difficult, thereby reducing fraud risk. This finding is consistent with the literature, which highlights blockchain's effectiveness in preventing fraud through secure and transparent record-keeping (Mahtani, 2022; Abdulla et al., 2022). However, the interpretation of these results supports the conclusions of previous studies, indicating that blockchain technology significantly enhances the accuracy, transparency, and fraud resistance of financial reporting in the UAE. These findings suggest that adopting blockchain technology can provide substantial benefits in improving financial reporting practices.

6. Implication

The findings of this study provide significant implications for both practical and theoretical realms. Practically, the results underscore the transformative potential of blockchain technology in enhancing the accuracy, transparency, and security of financial reporting in the UAE. For practitioners, including accountants, auditors, and financial managers, the adoption of blockchain technology can lead to more reliable and efficient financial reporting processes. By leveraging blockchain's immutable and verifiable ledger, organizations can reduce errors, increase transparency, and mitigate the risk of fraud. This can foster greater trust among stakeholders, improve regulatory compliance, and enhance overall corporate governance. Theoretically, this study contributes to the existing body of knowledge by empirically validating the positive impact of blockchain technology on financial reporting. The strong positive relationships identified between blockchain technology and key financial reporting attributes (accuracy, transparency, and fraud reduction) provide a robust foundation for future research. This study also highlights the need for further exploration into the mechanisms through which blockchain technology can be integrated into existing financial reporting frameworks. Additionally, it opens avenues for examining the broader implications of blockchain technology on financial markets and regulatory practices.

7. Conclusion

This study concludes that blockchain technology significantly enhances the accuracy, transparency, and fraud resistance of financial reporting practices in the UAE. The empirical evidence provided by the path analysis shows that blockchain's immutable ledger, real-time verification, and tamper-proof nature contribute substantially to these improvements. These findings align with previous research and reinforce the potential benefits of blockchain adoption in the financial sector. However, this study has several limitations. The sample size and scope were confined to the UAE, which may limit the generalizability of the findings to other regions or contexts. Additionally, the rapid evolution of blockchain technology means that ongoing developments could impact its applicability and effectiveness in financial reporting. Future research should aim to expand the sample size and geographic scope to validate these findings further. Moreover, longitudinal studies could provide deeper insights into the long-term effects of blockchain adoption on financial reporting practices. In conclusion, this study highlights the significant positive impact of blockchain technology on financial reporting in the UAE. It provides valuable insights for practitioners and adds to the theoretical understanding of blockchain's role in enhancing financial reporting. Continued

exploration and adaptation of blockchain technology will be crucial for realizing its full potential and addressing the evolving challenges in financial reporting and corporate governance.

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