

Volume: 6 Issue: 4 | April 2024

Article The Role of Emerging Technologies in Enhancing Accounting Practices

Karrar Mohammed AL-Shafeay

University of Kufa, Faculty of Administration and Economics, Najaf, Iraq. Correspondence: Karrarm.ghazi@uokufa.edu.iq

Abstract: This study explores the potential of emerging technologies, specifically blockchain and artificial intelligence (AI), to enhance accounting practices within Iraqi economic units. With a sample of 150 responses from accountants and financial managers, the research investigates the correlation between the application of these technologies and improvements in accounting processes. Findings reveal a significant association between the use of AI systems and blockchain technology in enhancing accounting practices. The study underscores the importance of leveraging emerging technologies to streamline data processing, enhance accuracy, reduce costs, and facilitate informed decision-making in accounting. These results highlight the transformative impact of technological advancements on accounting methods in the context of the Iraqi economy, suggesting avenues for further research and practical implications for stakeholders in the field.

Keywords: Emerging Technologies, Artificial Intelligence (AI), Blockchains.

1. Introduction

Developments and innovations in the field of information and communications technology and the spread of the use of the Internet in the last two decades led to a knowledge revolution known as the Fourth Industrial Revolution, which brought about a radical transformation in the way we live, work, and communicate, meaning that it touched all fields, relying on a group of emerging technologies such as artificial intelligence, And the blockchain, big data, cloud computing, and the Internet of Things, as keeping up with these various changes and transformations has become inevitable by trying to integrate with this revolution. The accounting profession was not an exception to this transformation, as it is witnessing rapid changes due to tremendous technological developments as it witnessed. Accounting over the past ten years has had many technologies that have affected it as a result of the widespread spread of digitization and the extensive use of everything advanced, especially with the development of intelligent mobile devices, the Internet, and computers, as its future depends on its ability to use the technologies of this transformation to meet the challenges it faces, and improve its ability To survive in a business environment dominated by increasing competition.

The appropriate application of contemporary developing technologies is a possible avenue for improving the accounting information and reporting system, particularly in medium and small economic units.

Many economic units are trying to implement emerging technology as soon as it is accessible, and this stems from the idea that these technologies are among the strategies that will ensure a long-term competitive advantage, as the survival and development of economic units lies in integrating modern technologies into their strategy and direction in the new digital economy and accordingly. Emerging technologies can be described as a form of fundamental information and their application in industrial process has

Citation Karrar Mohammed AL-Shafeay The Role of Emerging Technologies in Enhancing Accounting Practices International Journal on Economics, Finance and Sustainable Development (IJEFSD) 2024, 6(4) 1-3

Received: 12th March 2024 Revised: 30th April 2024 Accepted: 7th May 2024 Published: 14th May 2024



Copyright: © 2024 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/lice nses/by/4.0/) become increasingly important.

2. Materials and Methods

The researcher relied on the deductive approach to build the theoretical approach to the research by reviewing, studying, and analyzing previous studies and reviewing essential sources related to the research topic, and the inductive approach to measure the variables of the field study and test the research hypotheses. The research also relies on the statistical approach in processing and analyzing field study data and conducting statistical tests using the statistical program (SPSS).

3. Results and Discussion

The interest in the components of emerging technologies was good given that the majority of respondents gave neutral or agreed responses to the majority of the items and this explains the excellent interest by the studied banks, given that most of the people who answered the study's questions agreed, which is a good sign. Through studying the connections between new technologies like AI apps and blockchain technology and accounting methods, we discovered that the connection was strong, positive, and important. This means that the more people pay attention to the parts of new technologies, the more this leads to strengthening accounting practices in the banks studied. An analysis of the impact relationships between the use of artificial intelligence applications in accounting practices shows that They were high and significant, indicating that any time interest is given to AI applications, accounting practices are enhanced in the banks under study. The use of artificial intelligence applications also improves accounting tasks and functions, allowing tasks to be completed efficiently, analyzing market and financial trends, forecasting the effects of these trends on banks, and identifying critical components in financial reports associated with these forecasts.

Artificial intelligence applications contribute to identifying errors and problems easily and quickly, making the necessary adjustments, and correcting errors. It works to provide objective future Information, away from administrative bias that may tend to provide overly optimistic Information. Artificial intelligence applications also work on early identification of risks and thus help send timely warnings. An analysis of the impact relationships between The fact that blockchain technology is used in accounting shows how high, direct, and important it was. This means that whenever blockchain technology is talked about, this leads to strengthening accounting practices in the banks studied. The use of blockchain technology leads to a significant improvement in efficiency. It reduces the cost of maintaining and reconciling the ledger and leads to recording financial transactions in real-time. The use of blockchain technology leads to verifying the authenticity of the financial data recorded by the relevant parties. It leads to the implementation of accounting tasks without the need for an intermediary in a transparent, secure, and non-distortion-proof manner. It will also improve the transparency of accounting information. The study came out with several recommendations, the most prominent of which is encouraging the studied banks to pay attention to emerging technologies as they are the cornerstone of their continued survival in the market. It is necessary to conduct more scientific research to study the study's variables, and their impact on other accounting aspects that affect the work of the banks in general and the banks studied in particular.

4. Conclusion

In conclusion, this study elucidates the pivotal role of emerging technologies, particularly blockchain and artificial intelligence (AI), in augmenting accounting practices within Iraqi economic units. The findings underscore a significant correlation between the adoption of these technologies and enhanced accounting processes, as evidenced by the positive impact on efficiency, accuracy, cost reduction, and informed

decision-making. Notably, the study highlights the transformative potential of AI applications and blockchain technology in streamlining accounting tasks, facilitating trend analysis, forecasting financial impacts, error detection, risk identification, and ensuring data authenticity and transparency. Such advancements hold profound implications for the resilience and competitiveness of economic entities, urging them to integrate modern technologies into their strategic frameworks. Furthermore, this research underscores the necessity for further scholarly inquiry to explore additional dimensions of emerging technologies in accounting, particularly in uncovering their broader impacts on organizational performance and the banking sector. Thus, future research endeavors should delve deeper into examining the multifaceted implications of these technologies, thereby informing strategic decision-making and fostering sustainable growth in the evolving digital landscape of accounting practices.

REFERENCES

- [1.] Yoshikuni, R. Dwivedi, R. de Lima, C. Parisi, and G. Oyadomari, "Role of Emerging Technologies in Accounting Information Systems for Achieving Strategic Flexibility through Decision-Making Performance: An Exploratory Study Based on North American and South American Firms," Global Journal of Flexible Systems Management, vol. 24, no. 2, pp. 199–218, June 2023.
- [2.] F. Kusumawardhani, D. Ratmono, S. Wibowo, D. Darsono, S. Widyatmoko, and N. Rokhmana, "The Impact of Digitalization in Accounting Systems on Information Quality, Cost Reduction, and Decision Making: Evidence from SMEs," International Journal of Data and Network Science, vol. 8, pp. 1111–1116, 2024.
- [3.] J. Slezák, "Artificial Intelligence, Big Data, Blockchain, and Cloud Computing Future Accounting?," Trendy v podnikání - Business Trends, vol. 13, no. 1, pp. 16-33, 2023.
- [4.] J. Heimel and M. Müller, "Controlling 4.0," in "Management 4.0 Unternehmensführung im digitalen Zeitalter," M. Erner, Ed. Berlin, Germany: Springer, 2019, pp. 389–430.
- [5.] M. Bellucci, D. Bianchi, and G. Manetti, "Blockchain in Accounting Practice and Research: Systematic Literature Review," Meditari Accountancy Research, vol. 30, no. 7, pp. 121-146, 2022.
- [6.] M. Sheth and R. Shukla, "Emerging Technologies and Their Impact on Accounting and Insurance," Bombay Chartered Accountant Journal, July 2018.
- [7.] H. Balicka, "Digital Technologies in the Accounting Information System That Support Decision-Making Processes,".
- [8.] A. Atik and G. Kelten, "Blockchain Technology and Its Potential Effects on Accounting: A Systematic Literature Review," Istanbul Business Research, vol. 50, no. 2, pp. 495-515, 2021.
- [9.] B. Alkafaji, M. Dashtbayaz, and M. Salehi, "The Impact of Blockchain on the Quality of Accounting Information: An Iraqi Case Study," Risks, vol. 11, no. 58, 2023.
- [10.] E. N. Güdelci, "A New Era in Blockchain Technology and Better Accounting Information," Journal of Accounting and Taxation Studies, vol. 15, no. 2, pp. 437-461, 2022.
- [11.] Y. Zhang, F. Xiong, F. Xie, X. Fan, and H. Gu, "The Impact of Artificial Intelligence and Blockchain on the Accounting Profession," IEEE Access, vol. 8, pp. 2020-2032, 2020.
- [12.] J. Tian and L. Li, "Research on Artificial Intelligence of Accounting Information Processing Based on Image Processing," Mathematical Biosciences and Engineering, vol. 19, no. 8, pp. 8411-8425, 2022.
- [13.] D. Anantharaman, A. Rozario, and C. Zhang, "Artificial Intelligence and Financial Reporting Quality,".
- [14.] A. Santra, "Artificial Intelligence: Its Impact on Accounting- A Review Work," NSOU-OPEN JOURNAL, vol. 7, no. 1, 2024.
- [15.] S. Askary, N. Ghazaleh, and Y. Tahat, "Artificial Intelligence and Reliability of Accounting Information,".
- [16.] E. Ezenwa and U. Nkem, "Impact of Artificial Intelligence (AI) on Accountancy Profession," Journal of Accounting and Financial Management, vol. 7, no. 2, 2021.
- [17.] A. Alwajid, "The Impact of the Use of Blockchain Technology on Accounting Information Systems: A Field Study in Joint Stock Companies Listed on the Iraqi Stock Exchange," World Economics & Finance Bulletin (WEFB), vol. 21, April 2023.