

DOI: 10.55643/fcaptp.6.59.2024.4565

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EXPLORING THE IMPACT OF ARTIFICIAL INTELLIGENCE ON FINANCIAL ACCOUNTING: OPPORTUNITIES, CHALLENGES, AND FUTURE DIRECTIONS

ABSTRACT

The main aim is to investigate the impact of Artificial Intelligence (AI) on various aspects of disclosing financial information. The case study used a mixed methods approach, and a sample of stakeholders dealing in the Iraq Stock Exchange was taken during 2023 in Iraq. Data collection mainly included a survey conducted on 168 beneficiaries who trade stocks in the stock market, after which 22 clients were selected for personal interviews based on their voluntary willingness to participate in individual interviews. The results revealed beneficiaries prefer to use Artificial Intelligence to get new ideas for tasks or to help them with "plans" for their projects. The results also revealed that artificial intelligence applications raise concerns about ethics and reliability in their use to disclose financial information and their exploitation by management to obtain financial funding against beneficiaries' will. Finally, the results revealed that most current educational curricula differ from technological developments. Based on the participant's responses about receiving training in artificial intelligence, their concerns were related to the need for appropriate education to deal with artificial intelligence tools.

Keywords: Artificial Intelligence (AI), financial accounting, understandability, verifiability, comparability, timeless, features directions

JEL Classification: M4, M41

INTRODUCTION

In recent years, the integration of artificial intelligence has sparked fundamental shifts in the pattern of industries in terms of productivity, costs, and speed of completion. The field of financial accounting is no exception, as companies strive to enhance efficiency and accuracy (Ma J et al., 2018), depending on what management produces in their financial reports, as artificial intelligence technologies have emerged as influential tools in reshaping traditional financial accounting practices and revealing opportunities, challenges, and trends—the future of stakeholders' decision-making processes (Imran & Gregor, 2010). The financial statements are an important tool for effective internal management and decision-making for external investors. By analyzing the financial statements, the financial situation of the institution, operating results, and other information (Yi et al., 2023) can be understood. Artificial intelligence in general represents the development of computer systems that can perform tasks that require the tradition of human intelligence. These include learning, logic, problem-solving, interaction with the environment, language understanding, and speech recognition (Singh et al., 2023).

The use of artificial intelligence can lead to the completion of tasks that usually require human intelligence. The explanation for what decisions is, which may be complicated at times due to the large data and is unable to provide smoothly and clearly to decision makers due to the various heterogeneous sources. As a result, explanatory artificial intelligence calls for trust, safety, security, privacy, morals, justice and confidence resulting from the interaction between humans and artificial intelligence (Holzinger et al., 2019). Accounting information systems are often dependent mainly on well-available data. However, many accounting systems still need to keep pace with technological developments. As a result, artificial intelligence aims to create mechanisms or systems

Received: 11/09/2024

Accepted: 15/11/2024

Published: 31/12/2024

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that can imitate or simulate cognitive functions similar to the human mind (RUPALI & Amit, 2017). More clearly, accounting systems must move very quickly to integrate artificial intelligence applications to provide relevant and reliable financial information to the owners of interest (Askary et al., 2018).

LITERATURE REVIEW

Artificial Intelligence concept

The importance of technological systems in the accounting system has been previously proven. As a result, accountants must master dealing with artificial intelligence software more accurately, enhancing their current data processing capabilities (Emetaram & Uchime, 2021). The increasing expansion of digital technologies has also led to a significant change in economic activities and professions as a result of the scientific and technological revolution that changed organizational structures, business models, and the emergence of new models in dealing with data and decision-making methods (Vărzaru, 2022). As a result, artificial intelligence can reflect the following:

1. Machine learning: Machine learning focuses on enabling machines to learn from data and improve their performance over time without the need to program them, which includes developing algorithms that recognize patterns, make predictions, and adapt to changes (El Naqa & Murphy, 2015).
2. Artificial Neural Networks: Neural Networks are essential to machine learning and artificial intelligence. They are inspired by the human brain's structure and functioning and consist of nodes or interconnected neurons. Deep learning often includes deep neural networks with multiple layers (Müller et al., 2012).
3. Natural language processing: NLP is a branch of artificial intelligence that deals with the interaction between computers and human language. It enables machines to understand, interpret, and create human-like language, facilitating communication between computers and humans (Chowdhary, 2020).
4. Computer vision involves giving machines the ability to interpret and understand visual information, such as image recognition and object detection (Voulodimos et al, 2018).
5. Ethics in Artificial Intelligence (AI Ethics): As technology advances, ethical considerations in artificial intelligence have become fundamental, including issues such as bias in algorithms, privacy, and the impact of artificial intelligence on society (Bostrom & Yudkowsky, 2018).
6. Expert systems: Expert systems are artificial intelligence programs designed to imitate the decision-making capabilities of a human expert in a specific field. They use a knowledge base and a set of rules to make informed decisions or provide solutions to problems (Gupta & Nagpal, 2020).
7. Reinforcement learning: A type of machine learning that interacts with its environment and receives feedback through rewards or punishments, allowing it to learn optimal strategies over time (Arulkumaran et al, 2017).
8. Autonomous systems: Systems that rely on artificial intelligence and can work and make decisions without direct human intervention, such as driving self-driving vehicles, drones, and smart home devices (Hancock, 2020).

Artificial intelligence has become a significant part of business management, and the traditional financial management method, which relies on accounting systems, needs to meet the requirements of rapid development in the global economy. As a result, applications supported by artificial intelligence have opened many doors of competitiveness, whether quickly collecting or analyzing financial data (Malviya & Lal, 2021), using cognates and bibliographic word pairing techniques (Agustí & Orta, 2023). Artificial intelligence aims to create systems or mechanisms capable of simulating the functions of the human mind, as applications of artificial intelligence are widespread in various industries, including health care, finance, and education. As technology continues to advance, talk and debate continue about the ethical, social, and economic aspects of artificial intelligence applications as a result of the interference between human actions and artificial intelligence technology, which disputes the human mind, causing interference in the logic of processing inputs, which is reflected in decision-making.

Advantages of using Artificial Intelligence in Financial Accounting

Improving the quality of accounting information in the traditional accounting situation, starting from registration and ending with the preparation of financial reports, is accompanied by many verification procedures that take a lot of time and human and material resources. As a result of long working hours, it is difficult to avoid errors, which leads to distortion of accounting information. The use of artificial intelligence tools and applications facilitates the process of completing all financial

procedures promptly, which improves work efficiency and reduces the need for data entry and auditing in the accounting system, which will be automatically detected when there are incorrect inputs, which significantly reduces work error and improves the quality of information accounting. It is expected that AI in the accounting profession will provide multiple benefits in efficiency, productivity, and accuracy (Lee & Tajudeen, 2020). What happens is subject to change over time, and the accounting profession as we know it will change dramatically in the coming days. While burdened by income and wealth inequality challenges, the extinction of traditional jobs and an unskilled workforce. As follows (Hasan, 2021), (Li & Zheng, 2018):

1. **Enhanced automation:** Artificial intelligence technologies, such as machine learning and robotic process automation, allow the automation of routine and time-consuming financial tasks. This reduces manual errors and allows finance professionals to focus on the strategic and analytical aspects of their roles.
2. **Data analysis and insights:** Artificial intelligence empowers financial accountants with advanced data analysis capabilities. By processing massive amounts of financial data in real time, AI systems can reveal valuable insights, patterns, and trends, aiding in better decision-making and strategic planning.
3. **Fraud detection and risk management:** Integrating AI algorithms enhances the ability to detect anomalies and potentially fraudulent activities within financial data. This proactive approach to risk management improves the overall integrity of financial reporting.
4. **Reducing costs:** Automation can help organizations achieve significant cost savings by streamlining processes and reducing the need for extensive manual intervention in financial accounting tasks.

The advantages of using artificial intelligence applications in the accounting field are multiple, and Figure 1 shows the most prominent of these effects in the field of analysis and identification of risks and opportunities that can help artificial intelligence applications to stakeholders, including internal management, to make the appropriate decision in the proper time based on the available information that has been provided and analyzed using artificial intelligence tools.

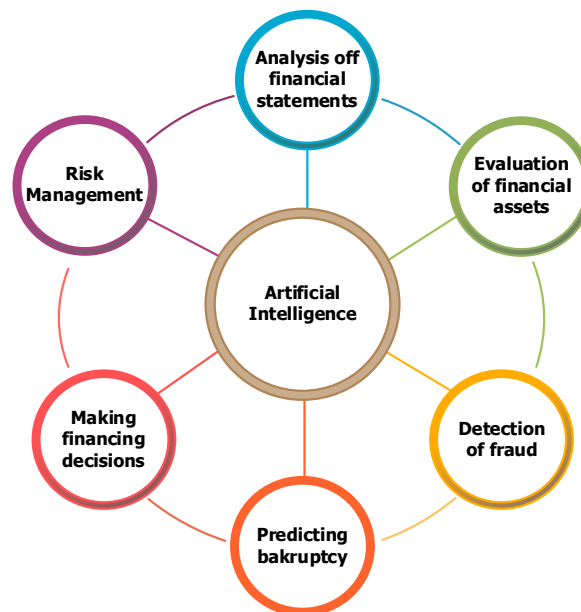


Figure 1. Features of using artificial intelligence in financial accounting. (Source: Yi, Z., Cao, X., Chen, Z., & Li, S. (2023). *Artificial Intelligence in Accounting and Finance: Challenges and Opportunities*. *IEEE Access*, 11, 129100-129123)

Challenges facing the applications of Artificial Intelligence in Accounting

Artificial intelligence technologies affect multiple fields due to rapid technological development and change, as society and companies try to deal cautiously with this progress, including the Financial and Accounting field (Khaled & Al-Sartawi, 2022). The sequential interconnection of its operations characterizes the accounting cycle in the business world. Despite the invention of new and valuable technologies in every step of recording financial transactions, its integration still needs to be improved. It is still marred by caution when dealing with data in preparing Financial Reports (Faccia et al., 2019). Accounting activities have faced many threats, challenges, and opportunities in providing the information necessary for

stakeholders to make decisions as an inevitable result of the development of data collection and processing techniques. Resistance to change, organizational culture, lack of trust, and high technology prices are among the most critical obstacles preventing the adoption of Intelligence technology. Artificial Intelligence in Financial Accounting Figure 2 shows the most vital challenges of adopting artificial intelligence in accounting (Abdullah & Almaqtari, 2024).

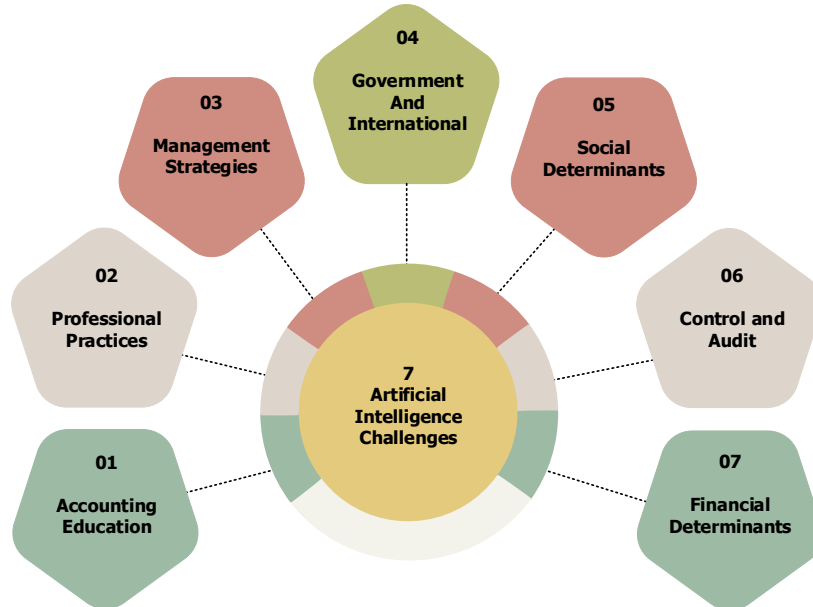


Figure 2. Challenges of Implementing artificial intelligence in accounting. (Source: Abdullah, Abdulwahid Ahmad Hashed, and Faozi A. Almaqtari. 2024. "The Impact of Artificial Intelligence and Industry 4.0 on Transforming Accounting and Auditing Practices." *Journal of Open Innovation: Technology, Market, and Complexity* 10(1):100218. Doi: 10.1016/j.joitmc.2024.100218)

Artificial intelligence applications face many challenges and risks that can accompany their application, most notably the following (Jaderi et al., 2019), (Rasinmäki et al., 2009), (Mohammad et al., 2020), (Li & Zheng, 2018):

1. **Ethical considerations:** relating to ethical concerns in data privacy, transparency, and accountability.
2. **Self-skills:** Facing the challenges of organizations in improving workforce skills to utilize artificial intelligence tools effectively.
3. **Integration:** Integrating artificial intelligence into Accounting systems is a complex matter that requires careful planning and implementation.
4. **Regulatory compliance:** Financial accounting requirements need to be compatible with artificial intelligence applications regarding compliance and transparency in the application of laws.

Artificial Intelligence, as an emerging technology, aims to simulate human cognitive skills with competitive advantages in the field of reporting and risk assessment by combining two thinking that have a reciprocal relationship with the need to pay attention to the ethical aspects of the uses of artificial intelligence (Munoko et al., 2020). With the entry of artificial intelligence into the accounting field, it has begun to play an essential role in improving business efficiency, making decisions, reducing errors, preventing risks, and enhancing the organization's competitiveness. As a result, artificial intelligence technology has become a double-edged sword. The provisions of electronic transformation mechanisms and the development of its strategies must be treated with caution (Shi,2020).

Artificial Intelligence Applications in Financial Accounting

Artificial intelligence relies on statistical methods to identify adaptive patterns based on quantitative data and to provide innovative answers that mimic human mental thinking, using reasonable, logical thinking based on wisdom, which positively impacts decision-makers. Results from the logical-mathematical operations in which artificial intelligence provides alternative solutions to problems that may face the business (Belanche et al, 2019). Artificial intelligence can be used in many scientific and applied fields, most notably artificial intelligence (Omoteso, 2012), which will be reflected in the quality of accounting integration in providing data and information that can have a direct impact on decision-making by stakeholders and the quality of reporting is reflected in the following (Ma J. et al., 2018), (Kureljusic & Karger, 2023), (HAZAR, 2019):

1. **Innovation:** As artificial intelligence technology develops, adopting its applications is necessary to stay ahead in the competitive landscape.
2. **Collaboration:** Future trends include developing collaborative models where AI systems enhance human decision-making rather than replace it entirely.
3. **Explainable Intelligence:** Explaining how AI algorithms make decisions will enhance trust and facilitate regulatory compliance.
4. **Measurement:** The increasing spread of artificial intelligence in accounting fields makes the global unification of practices and regulations pivotal in establishing a framework for the responsible and ethical use of artificial intelligence in Financial practices.
5. **Reinforcement learning:** One area of e-learning is decision-making, which involves finding the best possible behaviour to achieve results when the goal can only be reached by multiple steps.
6. **Crowdsourcing:** It involves linking different groups that work on decision-making with the help of Artificial Intelligence, which coordinates and communicates between them and benefits from human expertise in improving the decision-making pattern.
7. **Internet of Things:** Devices sense and read situations by collecting data using communication protocols to determine the decision-making pattern.

Neural computing is the next generation of Artificial Intelligence. It mimics biological neural networks to achieve human cognition, including independent interpretation and adaptation.

Adopting artificial intelligence applications as specialized systems in accounting and auditing and the related outputs leads to decision-making based on reliable information, resulting in reduced errors and increased efficiency of accounting processes (Berdiyeva et al., 2021). The impact of artificial intelligence on artificial intelligence is profound, as it provides unprecedented opportunities with a focus on continuous innovation and collaborative integration between artificial intelligence and human expertise in the financial and accounting field. Figure 3 illustrates the importance of artificial intelligence applications in accounting and auditing.



Figure 3. Artificial intelligence tasks in accounting. (Source: Hazar, H. B. (2019))

Future trends for the uses of Artificial Intelligence in Financial Accounting

The future directions of artificial intelligence cannot be limited to a specific field in light of the rapid development in its overlapping applications, as well as the revolution in software for things that keep pace with its application processes in the medical, economic, and social fields, including the accounting field (Liu, 2022), which can be used in the following (Robson, 2016), (Hashem & Alqatamin, 2021):

1. **Prediction:** The future of artificial intelligence in financial accounting depends on predictive capabilities that allow companies to anticipate future financial trends, risks, and challenges.
2. **Integration:** Integrating artificial intelligence with financial accounting applications can enhance the transparency and security of financial transactions, reducing the risks of fraud and errors.
3. **Effectiveness of education:** Directing artificial intelligence systems that can learn and adapt to human behaviour in the accounting environment ensures the appropriateness and effectiveness of the decisions made.
4. **Collaboration:** The future direction can create more reliable cooperation between Intelligence and Accounting systems in decision-making through supervision and strategic direction over data outputs.
5. **Process automation:** Artificial intelligence techniques are one form of process automation adopted by artificial intelligence to simplify routine tasks.

The typical accounting treatments, which include recording financial events in records, ensure that data flows smoothly to prepare Financial Reports. This is based on a legal, organizational structure that adheres to the local and international principles, rules, and standards in force (Beerbaum et al., 2021).

As a result, the impact of artificial intelligence on financial accounting poses a wide range of opportunities and challenges, as management can adopt more than one option in reading and addressing potential future risks while ensuring ethical and regulatory compliance. The future of financial accounting is likely to be shaped by continued technological advances and the ability of accountants to adapt to this development. What is happening is subject to change and instability in the future, and Accounting and auditing practices will inevitably change significantly shortly. Figure 4 shows the integration between artificial intelligence applications and financial accounting practices.

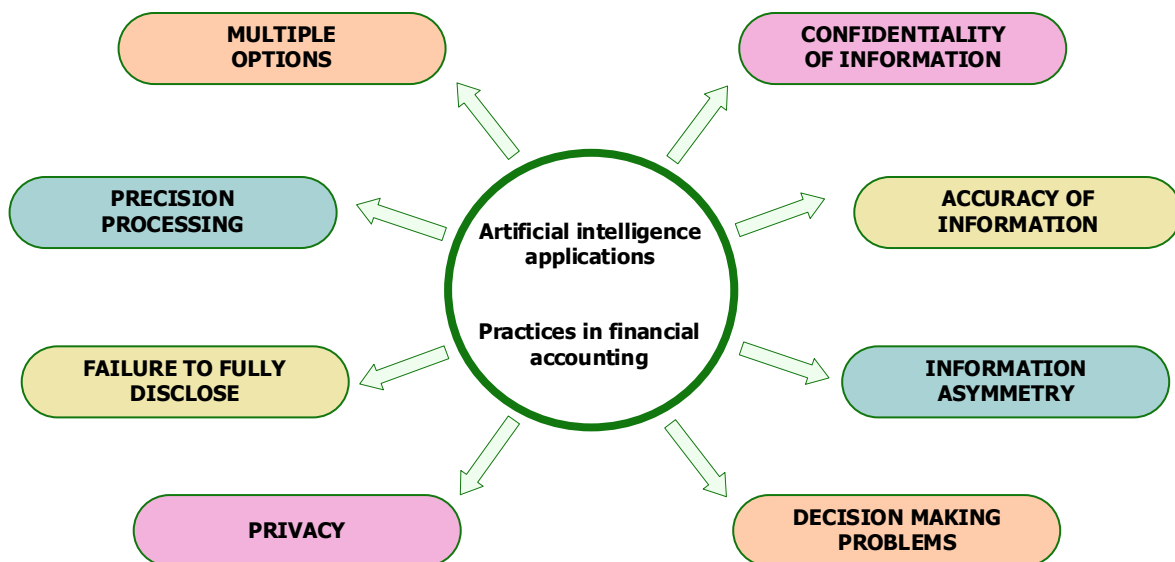


Figure 4. Integration of artificial intelligence applications and financial accounting. (Source: Beerbaum Dr., Dirk, Seppo Ikäheimo, Julia M. Puauschunder, and David Derichs, 2021)

AIMS AND OBJECTIVES

The research aims to discuss the impact of artificial intelligence in accounting applications, and what are the challenges that the tool can face, is it possible to enhance accounting practices and qualitative characteristics of financial reports by asking the following questions:

1. To what extent do artificial intelligence applications contribute to developing multiple solutions to financial reports related to financial reports?
2. Are artificial intelligence applications enhancing the qualitative characteristics of financial accounting?
3. How appropriate are the technological changes related to Artificial Intelligence (AI) for the accounting profession?

METHODS

The study presented is a descriptive scientific study that collected data from a comfortable sample, including participants from the Iraqi stock market and stakeholders who benefit from publishing financial reports for 2023. Firstly, data collection conducting personal interviews and distributing a questionnaire containing twenty Likert measures. Share a total of 168 participants. They were encouraged to voluntarily complete the questionnaire in exchange for the AI cycles successfully. Then the descriptive data was collected from the poll and personal interviews, including 22 interviews.

RESULTS

The current study produced numerous findings, some of which were abundant and contentious. Tables 1-5 summarize some of these results.

Item	Paragraphs	Mean
Artificial Intel- ligence	1. Artificial intelligence applications contribute to the development of multiple solutions to problems related to financial reporting.	3.9286
	2. Artificial intelligence provides multiple tools for management in choosing disclosure methods in Financial Reports.	3.8988
	3. Artificial intelligence applications excel in adapting to the disclosure requirements of stakeholders.	3.7440
Understanding	4. Artificial intelligence applications make reading the information disclosed in Financial Reports easier.	3.9107
	5. Artificial intelligence applications enhance the classification of items according to users' needs.	3.4583
	6. Artificial intelligence applications enhance future reading and understandability of information.	4.1012
Verifiability	7. Artificial intelligence applications contribute to enhancing the verification of disclosed information.	3.8988
	8. The use of artificial intelligence enhances the accuracy of information contained in Financial Reports.	3.8333
	9. Adopting artificial intelligence applications increases users' confidence in verifying the company's obligations.	3.7262
Comparability	10. Artificial intelligence applications facilitate comparing the outputs of accounting systems.	3.4583
	11. Artificial intelligence applications contribute to enhancing the comparison between disclosed information.	3.74
	12. Artificial intelligence applications facilitate the process of clarifying the differences between companies' results	3.66
Timeless	13. Artificial intelligence applications contribute to enhancing timely compliance with disclosure.	3.72
	14. Artificial intelligence applications are a significant tool for management to adhere to the appropriate timing.	3.86
	15. The use of artificial intelligence applications enhances management's credibility with stakeholders	3.63
Decision Mak- ing	16. Artificial intelligence contributes to decision-making based on cognitive and inferential perceptions.	3.73
	17. Artificial intelligence applications enhance solutions to address current and future problems	4.18
	18. Artificial intelligence applications enhance Financial future readings of the economic unit.	3.74
	19. Adopting artificial intelligence applications increases users' confidence in understanding the company's obligations.	3.57
	20. Artificial intelligence contributes to decision-making based on understandable information.	3.89

	Estimate	S.E.	C.R.	P	Label
AI	3.992	.038	106.261	***	
COM	4.008	.041	97.711	***	
VER	3.966	.046	86.002	***	
TIM	3.898	.044	88.966	***	
UND	4.289	.044	96.729	***	
DIS	3.941	.053	73.726	***	

Table 3. Correlation of responses.

	par_1	par_2	par_3	par_4	par_5	par_6	par_7	par_8	par_9	par_10	par_11	par_12	par_13	par_14	par_15	par_16	par_17	par_18
par_1	1.000																	
par_2	.549	1.000																
par_3	.489	.853	1.000															
par_4	.593	.855	.794	1.000														
par_5	.701	.788	.708	.836	1.000													
par_6	.518	.741	.847	.642	.767	1.000												
par_7	.590	.682	.813	.762	.847	.858	1.000											
par_8	.798	.613	.565	.731	.602	.448	.544	1.000										
par_9	.742	.708	.599	.614	.558	.507	.479	.817	1.000									
par_10	.680	.587	.433	.666	.559	.350	.407	.829	.724	1.000								
par_11	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1.000							
par_12	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.382	1.000						
par_13	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.502	.764	1.000					
par_14	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.646	.619	.780	1.000				
par_15	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.409	.702	.782	.668	1.000			
par_16	.505	.511	.597	.528	.745	.812	.859	.369	.351	.281	.000	.000	.000	.000	.000	1.000		
par_17	.505	.311	.229	.362	.297	.181	.216	.635	.536	.768	.000	.000	.000	.000	.000	.146	1.000	
par_18	.379	.785	.871	.582	.563	.812	.617	.405	.536	.324	.000	.000	.000	.000	.000	.492	.167	1.000
par_19	.529	.785	.580	.870	.745	.479	.543	.638	.565	.768	.000	.000	.000	.000	.000	.384	.418	.446
par_20	.507	.718	.871	.870	.717	.692	.859	.635	.514	.465	.000	.000	.000	.000	.000	.584	.252	.612

Table 4. Covariances: Group number 1 - Default model.

			Estimate	S.E.	C.R.	P	Label
COM	<-->	AI	.091	.021	4.291	***	
AI	<-->	VER	.098	.024	4.155	***	
AI	<-->	TIM	.089	.022	3.982	***	
AI	<-->	UND	.044	.022	2.000	.046	
COM	<-->	VER	.187	.028	6.590	***	
VER	<-->	TIM	.186	.030	6.227	***	
TIM	<-->	UND	.163	.028	5.789	***	
COM	<-->	UND	.061	.024	2.541	.011	
VER	<-->	UND	.148	.029	5.127	***	
COM	<-->	TIM	.122	.025	4.864	***	
AI	<-->	DIS	.104	.027	3.820	***	
COM	<-->	DIS	.127	.030	4.236	***	
VER	<-->	DIS	.259	.038	6.884	***	
TIM	<-->	DIS	.228	.035	6.508	***	
UND	<-->	DIS	.210	.035	6.053	***	

Table 5. Correlation. Note: Correlations: (Group number 1 - Default model).

	Item	Estimate	
COM	<-->	AI	.352
AI	<-->	VER	.340
AI	<-->	TIM	.324
AI	<-->	UND	.157
COM	<-->	VER	.593
VER	<-->	TIM	.550
TIM	<-->	UND	.501
COM	<-->	UND	.201
VER	<-->	UND	.432
COM	<-->	TIM	.407
AI	<-->	DIS	.310
COM	<-->	DIS	.347
VER	<-->	DIS	.630
TIM	<-->	DIS	.583
UND	<-->	DIS	.530

Descriptive results of the survey and interviews

Regarding the first question, "To what extent do artificial intelligence applications contribute to the development of multiple solutions to problems related to financial reporting?" - which included paragraphs (1, 2, 3) of the survey - about 67% of participants indicated the possibility of using artificial intelligence tools to improve the financial disclosure process. In comparison, 17% expressed concerns about the use of Artificial Intelligence.

Another important finding is that personal interviews revealed that dealers in the stock market who have received training or have knowledge in artificial intelligence tend to use artificial intelligence tools to understand the information in the financial statements, as indicated in paragraphs (4, 5, 6). The results or financial analysis accompanying the presentation of Financial Reports. In personal interviews, 72% expressed their desire to receive intensive training to learn artificial intelligence and increase their knowledge in making decisions using artificial intelligence tools. They were more likely to be motivated to use artificial intelligence than their counterparts who rely on traditional methods of reading financial results. They view AI positively and find it academically and practically enriching. There may be a connection between those with previous education or training in AI and their desire to use it in financial disclosure and those who express fear due to a lack of prior knowledge or being used to mislead them to obtain false financial results from companies.

This aligns with the second question: "Do artificial intelligence applications enhance the qualitative characteristics of artificial intelligence?" Which was also included in the survey as a sub-section. (57%) disclosed the possibility of artificial intelligence applications contributing to an increased understanding of the information contained in Financial Reports. Reliability in paragraphs (7, 8, 9). 66% responded that they could trust information based on artificial intelligence to strengthen management's commitment to disclosing information appropriately in paragraphs (10, 11, 12). In comparison, 58% responded by agreeing to assist artificial intelligence machines in verifying the information contained in the Financial Reports.

Regarding the third research question, which states, "How relevant are technological changes related to artificial intelligence for the accounting profession?" Which was referred to in paragraphs (15, 16, 17, 18, 19, 20) to the contribution of artificial intelligence applications to the maturity and development of the science of financial information disclosure as a result of the techniques that are used, which is what was disclosed by (85%) of the respondents in the questionnaire and the agreement of (72%) of those who were interviewed personally. They tend to prefer artificial intelligence because it supports programming languages on which financial analysis is built, such as (XBRL). Around 23% said that they used artificial intelligence to help give them new ideas for reading about companies' future based on current information. Finally, 5% of those interviewed said they do not show absolute confidence in artificial intelligence tools, claiming that artificial intelligence has not yet definitively proven the process of verifying the company's financial future. Still, speculation is built based on information prepared by management.

Figure 5 shows the relationships between variables according to the outputs of the Amos statistical program, which supports the research objectives.

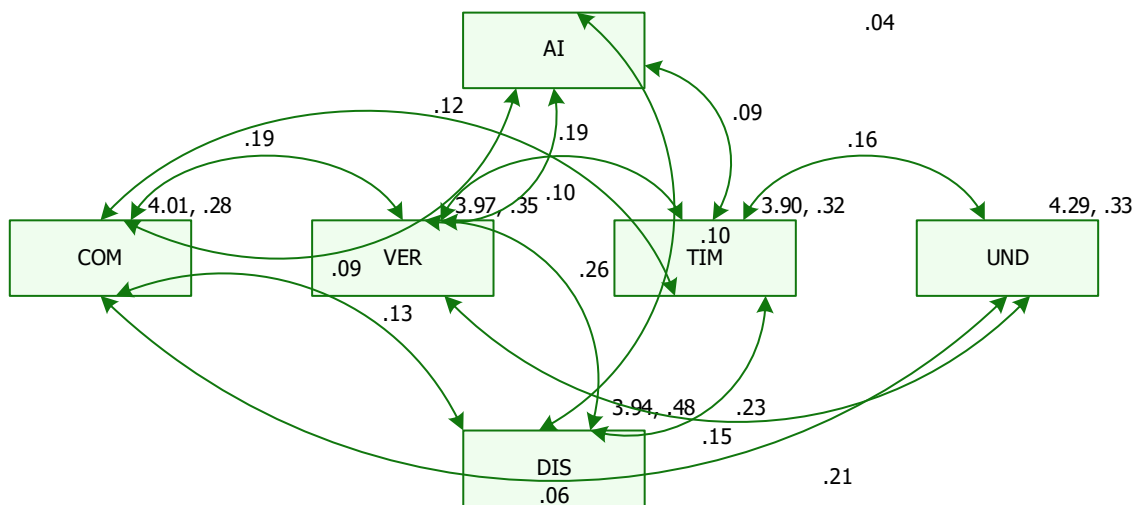


Figure 5. Relation item.

DISCUSSION

The research aims to study three main aspects: the extent of the contribution of artificial intelligence to the future of accounting, the qualitative characteristics of financial reports, and the future of accounting in light of artificial intelligence technology and techniques. It differs from previous studies that tried to take only one aspect of the impact of artificial intelligence, and this may contribute to finding partial results that cannot be relied upon in building future predictions of the risks that may accompany the use of artificial intelligence in accounting applications.

The results found by the study give greater reassurance to users of artificial intelligence, which indicate that beneficiaries have already responded with a desire to explore the impact of artificial intelligence on accounting, including enhancing the process of disclosing information related to vital activities and the possibility of quickly verifying and comparing it between operating sectors. On the other hand, there is a trend towards ensuring the suitability of artificial intelligence tools for professional ethics and their support from associations and institutions related to issuing standards. Their answers showed their lack of confidence due to a lack of prior knowledge or ignorance of the mechanism of work or fear of diving into the ambiguity of modern technological matters and their suitability for decision-making. The future, whether in terms of integrity or reliability in providing information and the possibility of human intervention by management to increase its chances of survival or obtaining funding.

CONCLUSIONS

The research faced limitations in how the beneficiaries were recruited to answer the study questions. The sample included stakeholders and beneficiaries of financial disclosure. The 168 participants in the study were sufficient to provide preliminary evidence about the openness of opinions about AI and its uses, paving the way for further research in the future using a larger sample of participants from diverse backgrounds and educational settings.

Furthermore, the findings of this research relate to a sample of traders in the Iraqi stock market for the year 2023 only. Therefore, the results cannot be considered final as they are based on a sample that may know the use of AI in a specific topic. Other agents may build completely different attitudes based on their interaction with the AI in light of their tasks. The final constraint may also be the time variable. As we adapt to artificial Intelligence, attitudes may change dramatically over time. Again, we recommend further research in this area that may provide solid answers to the study findings or open new avenues of discussion that may have limited the scope of the current study.

The findings revealed by this research are relevant to speculators in the Iraqi Stock Exchange in 2023. As such, the results cannot be considered conclusive again because they are based on a sample that may know the use of AI for a particular topic. And because other beneficiaries may foster very different attitudes based on their interaction with AI in light of their tasks, the ultimate limitation may also be the time variable. As we adapt to AI, attitudes may change significantly over time. Again, we recommend further research in this area, which may provide enhanced answers to the study's findings or open up new avenues for discussion that may have limited the scope of the current study.

The study at hand attempted to investigate a myriad of aspects of artificial intelligence in financial accounting. They are:

1. Does artificial intelligence contribute to enhancing accounting processes?
2. Do artificial intelligence applications enhance the qualitative characteristics of artificial intelligence?
3. How appropriate are technological changes related to artificial intelligence for the Accounting profession?

The results seem to indicate that, indeed, to a large extent, approximately 84% of the research sample agreed to use artificial intelligence to help stakeholders make decisions, read the information, understand it, verify it promptly, and give ideas on how to deal with it at the appropriate time. Short-term, medium-term, and long-term. Interestingly, when asked in the survey whether they would use AI technologies if allowed, 67% agreed, although 16% rejected the idea, with 17% expressing concerns about using AI. However, they accepted it, according to the results of the study. The results also indicate that some beneficiaries do not trust artificial intelligence as a result of not receiving the necessary technical training or academic education, which is an indicator that calls for a reconsideration of the curricula adopted in universities.

Artificial intelligence will play a significant role in financial reporting and disclosure. Integration between Accounting applications and AI tools is essential, rather than just intersection, to ensure continuity. This implies the need to enhance AI applications for sustainability in the financial sector rather than mere automation. In the education sector, teachers need training to effectively integrate AI in classrooms and equip students with skills for the evolving job market. The educational system must be revamped at the curriculum level to adapt learning objectives and assessments for AI integration in

classrooms. AI technology will be incorporated into teaching and learning processes through tailored "AI Proof Tasks", where prompts or data are input into AI applications to generate a "final product" for analysis, critique, or project development.

ADDITIONAL INFORMATION

ACKNOWLEDGMENT

The author expresses gratitude to all the people who participated in answering the survey, as well as the senior leaders in the Ministry of Higher Education and Scientific Research who facilitated obtaining the data and allocated time to respond.

FUNDING

The Author received no funding for this research.

CONFLICT OF INTEREST

The Author declare that there is no conflict of interest.

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ВИВЧЕННЯ ВПЛИВУ ШТУЧНОГО ІНТЕЛЕКТУ НА ФІНАНСОВИЙ ОБЛІК: МОЖЛИВОСТІ, ВИКЛИКИ ТА МАЙБУТНІ НАПРЯМИ

Основна мета — дослідити вплив штучного інтелекту на різні аспекти розкриття фінансової інформації. У цьому прикладі використаний підхід змішаних методів, і протягом 2023 року в Іраку було взято вибірку зацікавлених сторін, які працюють на Іракській фондовій біржі. Збирання даних в основному включало опитування, проведене серед 168 бенефіціарів, які торгують акціями на фондовому ринку, після чого 22 клієнти були відібрані для особистих інтерв'ю на основі їхнього добровільного бажання брати участь в індивідуальних інтерв'ю. Результати виявили, що бенефіціари вважають за краще використовувати штучний інтелект, щоб отримати нові ідеї для завдань або допомогти їм із «планами» для їхніх проєктів. Результати також показали, що програми штучного інтелекту викликають занепокоєння щодо етики та надійності їх використання для розкриття фінансової інформації та їх використання керівництвом для отримання фінансування всупереч волі бенефіціарів. Зрештою результати показали, що більшість поточних навчальних програм відрізняється від технологічних розробок. Ґрунтуючись на відповідях учасників щодо навчання штучного інтелекту, виявили, що їхнє занепокоєння стосувалося необхідності відповідної освіти для роботи з інструментами штучного інтелекту.

Ключові слова: штучний інтелект, фінансовий облік, зрозумілість, верифікованість, порівнянність, позачасовий, особливості, напрями

JEL Класифікація: M4, M41