

The Impact of Adopting Artificial Intelligence Technologies in Enhancing Financial Data Transparency and Improving Corporate Reputation - A Survey Study

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Abstract

This research aims to explore how the adoption of artificial intelligence (AI) technologies contributes to strengthening and enhancing financial data transparency and its impact on improving corporate reputation. This research examines the influence of key AI technologies on financial reporting and their impact on enhancing corporate value, thereby maintaining a company's reputation and competitiveness. A descriptive analytical approach was used to develop a scientifically designed questionnaire tailored to the objectives and problem of the current research. The questionnaire was distributed to the research community and a sample of individuals working in banks registered on the Iraq Stock Exchange. The questionnaire was analyzed using the statistical software (SPSS) to arrive at a set of results, the most important of which is that adopting AI technologies in financial reporting significantly contributes to improving financial data transparency and facilitates accountants' ability to conduct more in-depth and accurate analyses. This has positively impacted banks' reputations, as the results confirmed that the application of AI technologies played a strategic role in building trust and integrity when preparing financial reports. Based on the results, the study recommends increased attention to the application of artificial intelligence technologies by banking management, given their importance in improving the process of gathering the necessary evidence in the financial reporting process. This positively reflects on enhancing the transparency of financial data and, consequently, improving the company's reputation.

Keywords: *Artificial intelligence technologies - financial data transparency - corporate reputation - banks.*

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I.Introduction

Commercial banks today play a fundamental and pivotal role in driving development and the economy forward, particularly after the significant openness witnessed by international financial and banking markets and the increasing pace of financial globalization and its widespread spread. The transformations that have taken place in the Iraqi banking sector have also witnessed expansion and spread, with the entry of Arab and foreign banks operating in the Iraqi environment. This expansion and spread have not contributed to the development of Iraqi banks in a manner that serves economic development, resulting in the banking sector remaining very slow towards globalization. The adoption of artificial intelligence technology applications in preparing financial reports in Iraqi economic entities is currently almost non-existent or in its early stages. There are still opportunities to identify the potential and challenges facing accountants in applying this technology, which is not available in most companies. Artificial intelligence technologies have revolutionized many different sectors, particularly in the development of the accounting system and the preparation of monthly and annual financial reports. The integration of artificial intelligence technologies into these sectors has led to significant progress, simplifying operations, enhancing accuracy, and improving decision-making capabilities. Economic entities are often cautious about implementing AI technologies due to questions about the business case and return on investment. Technological innovations made possible by the use of AI in the finance and accounting sectors are revolutionizing these fields by discharging or laying off some financial workers, as has happened in some global economic entities in the United States. In the age of AI, traditional accounting professionals are shifting complex tasks to electronic accounting software to significantly reduce work errors and improve the performance of economic entities. Therefore, AI technologies are gradually adopting decision-making tasks. AI mimics human thought processes and information acquisition, contributing to improved performance. The issue of transparency and disclosure has gained increased attention

following the increasing economic role of financial markets. This has made dealings in these markets more equitable, providing investors with equal access to information. This, in turn, creates a favorable investment climate and increases the potential for growth, prosperity, and sustainability of the financial market. The reputation of economic entities is not a new concept. Its emergence dates back to 1983, when Fortune Business magazine conducted an inventory of the world's most admired, well-known, and reputable companies. Since then, academic interest in corporate reputation has grown. The concept of corporate reputation is developed as "the overall assessment of a company by its internal and external customers, which is formed over a long period of time and results from the degree of appreciation, awareness, and impressions formed about the company's image." It appears that enhancing trust occurs through communicating accurate, complete, and clear information about the company's activities, which leads to a sense of equality and fairness. This helps in predicting financial reality and making efficient decisions about the future, as creating competitive advantages for companies occurs through voluntary disclosure and transparency of information. The research problem is represented by a review of the sample banks and personal interviews conducted with officials. It was found that there is a lack of use of artificial intelligence technologies and a reliance solely on traditional records and programs when preparing their monthly and annual accounts. This affects the integrity and transparency of financial data, as well as the service provided to customers, particularly with regard to cash payments, advances, and loans. This has, in general, affected the reputation of banks, similar to global banks that have adopted AI technologies extensively. The importance of the research stems from providing clarifications to all parties (various economic units, including banks) that wish to adopt AI technologies in analyzing their financial data and managing their various activities. The use of AI technologies in banks leads to the development of their work and enhances their reputation by keeping pace with information technology in providing banking services, enabling these banks to continuously develop. The objectives of the research are to understand the important role of AI technologies in presenting financial data with a high degree of transparency and how this data reflects on the reputation of banks. It also highlights the most important obstacles preventing the implementation of AI technologies in the sample banks.

II. Artificial Intelligence and Its Technologies

1- Artificial Intelligence

The artificial intelligence concept has recently gained extensive attention across all business sectors. In finance and banking, especially, it has been applied widely. This attention has encouraged many banks and corporations to adopt AI as an essential method to improve their performance, ensure their endurance, and cope with technological developments to enhance chances of development. The variety of views among researchers on the AI concept is based on the diversity of their fields of research, such as economics, psychology, sociology, and management sciences (Khair & Khawalid, 2020). At this stage, AI is considered one of the vital elements that can maximize performance through the use of technological tools and programs, capable of providing economic units with a wide range of advanced applications and programs that can replace human resources and lead economic units to unprecedented levels of financial success (Mjongwana & Kamala, 2018). According to (2021& Salimi (Damerji), AI has helped accountants by allowing them to handle large and complex numbers and data and learn new accounting systems with less cost, effort, and time, which has helped improve their work performance. AI technologies offer a potential solution by advancing algorithms and techniques for machine learning to mechanize and simplify processes of accounting, improve the competence of data analysis, and enhance the timeliness and accuracy of financial reports. Therefore, Nana (2023) defined AI as a powerful tool for managing issues by establishing strong governance frameworks, ensuring transparency and accountability, and maintaining ethical standards when developing and deploying AI systems. Minsky (2014;34) defined it as the science of making machines perform tasks that require intelligence that mimics the human mind.

2- Advantages of Artificial Intelligence: One of the main advantages that AI technologies provide to the accounting field is reducing the accounting process time with minimal effort, as well as providing appropriate solutions when using AI technologies while performing many tasks independently, giving practitioners enough time to focus more on higher value-added activities. Among the benefits cited by accounting firms as reasons for adopting AI for use in auditing and consulting are reducing time, accelerating data analysis, increasing accuracy, gaining insight into business processes, and better customer service. To achieve independence, objectivity, and efficiency, which are among the most important attributes of effective internal auditing (Ikin Solikin et al., 2023). These benefits include:

A. Benefiting from AI in the business activities of economic units, such as analyzing and evaluating documents by handling them extensively in accounting, and the use of RPA (Robotic Process Automation) and (IA) Intelligent Automation, which is useful for saving time and increasing accuracy.

B. The use of AI technologies enables logical, emotionless thinking at work, providing real-time processing of financial matters because it enables documents to be processed using natural language processing and computer vision faster than ever before, making daily reporting possible.

C. The use of AI technology will enhance many internal accounting processes, including purchases, sales, invoices, purchase orders, expense reports, accounts payable and receivable, etc. Organizations hire auditors to verify Accounting books and ensure the validity and legitimacy of their

financial records. With the help of artificial intelligence, the auditor can easily access accounting work, and the chances of error are much lower. C- In an accounting firm, accounting functions such as data processing, payroll preparation, and accounting are easily handled by artificial intelligence. C- Improving artificial intelligence to detect fraud through a more advanced machine learning model for regular activities and better prediction of fraudulent activities. Uses of artificial intelligence. H- In the banking sector, machine learning helps in storing banking data for long periods and easily accessing banking work. 3- Artificial Intelligence Technologies A- Information Technology: It is known to include all aspects of technological computing that help companies use information technology to attract customer attention by allowing the provision of immediate information updates on the website so that customers, investors, and creditors can see a clear picture of the company's plans and future goals (Moorthy, 2012). B- Expert Systems: Expert systems differ from human experts in that expert systems develop appropriate solutions and make decisions in the presence of incomplete or uncertain data. The ability to deal with incomplete information, unlike human experts. Expert systems consist of a user interface through which the user interacts, and a search engine consults data within the knowledge base to obtain answers. The expert system provides the ability to answer any question at any time (Lucas & Van der Gaag, 2014). C- Advanced Manufacturing Technology: It is defined as production and service systems related to operations and machine equipment, including automation, robotics, and measuring systems. It is characterized by leading to a significant increase in production, a reduction in costs and materials consumed, improved operating accuracy, and a reduction in the production time of the product or service. In other words, it includes the formation of advanced technological products, the use of innovative technologies in their manufacture, and the discovery of new processes and technologies for future manufacturing (Sallee, et al, 2010).

2- Financial Statement Transparency

A-The Concept of Transparency Al-Karaawi (2019) emphasizes that disclosure and transparency constitute a fundamental pillar for ensuring fairness, integrity, and trust in sound decision-making by the management of economic units. This pillar ensures the communication of accurate, complete, and clear information to all parties interested in the economic unit's activity, whether internal or external. (Burgo et al., 2018) defined financial reporting transparency as "the public widespread provision of reliable relevant information about the status of financial performance, investment opportunities, governance, value, and risks." (Babalo and Baydar, 2019) defined it as "the simple and easy dissemination of relevant and effective information with a purposeful analysis of a company's activities and economy." While (Llewellyn, 2021) defined financial reporting transparency as "a measure of disclosure and earnings that reflects changes in the unit's economic position. Many economic units choose to disclose information without compromising the privacy of donors or sensitive business information. The need to operate more efficiently, share information better, and demonstrate transparency has arisen because most managers of economic units believe that a degree of independence remains necessary for their fiduciary responsibilities and the fulfillment of their missions. The appropriate degree of independence for any economic unit is determined by the various laws of the country, the system's policies, and financial resources (Jaslove, 2017).

B- The Importance of Transparency in Financial Reporting

1- Disclosure and transparency are essential components of establishing an effective corporate governance framework, as they constitute a fundamental resource for all stakeholders to make sound and wise decisions. Therefore, the adoption of corporate governance policies by emerging financial markets is essential, relying on a strong framework of reliable financial statements (Benjamin, 2014).

2- The low level of transparency in financial reporting is one of the main causes of the recent global financial crisis. Therefore, the demand for accounting and auditing bodies to support the transparency of financial reporting has increased, through the U.S. Securities and Exchange Commission (SEC), which has called for numerous improvements aimed at enhancing the transparency of financial reporting to ensure the provision of all the information users need. This effort has led to increased interest from many standard setters and professional organizations in supporting transparency in financial reporting by working to create a transparent information environment that plays a crucial role in reducing the level of risk associated with decision-making (Shaban et al., 2015).

3- The term transparency poses a dilemma not only for investors, but also for business owners, accountants, and auditors. Bahloul (2022) asserts: First, without transparency, disclosure becomes ineffective, as transparency ensures equal opportunities for all investors to obtain information. Second, transparency prevents the emergence of uninformed speculation, as speculation is based on providing information unavailable to others. This information can be used to buy or sell, depending on the type of information, and to realize gains or avoid losses before other stock market participants obtain this information. Third, transparency prevents the leakage of internal information from companies.

3- Corporate Reputation

1-The concept of corporate reputation Karimi (2017) indicated that corporate reputation "is synonymous with its fame and standing among various companies, as a company's reputation reflects its external evaluation by its customers, based on their knowledge of and feelings towards it." While Barnett (2006) believes that it "reflects customers' degree of awareness of the company's position in the market and their impressions and opinions about it." Ciesiolkiewicz (2020) also pointed out that it "represents an existing asset among the intangible assets of an economic unit, as it expresses the company's emotional capital and the source of its competitive advantages." From another perspective, Almeida (2017) sees it as "reflecting the degree of reliability and credibility that the company enjoys with its stakeholders." From another perspective, Chung (2019) defined it as "one of the most valuable intangible assets that a company possesses." (Jawad, 2021) explained that a company's reputation consists of two parts: the first is internal, which is reputation through the company's employees' evaluation of the company's reputation, and the second is external, which is at the level of the sector in which the company operates, and it takes years to build and consists of the degree of credibility within the company. This was supported by (Al-Zayadi, 2020), who added that the first part, which is internal, is very important for maintaining the company's identity, survival, and continuity, while the second part, which is external, is represented by building harmonious relationships with stakeholders. The company's reputation leads to many competitive advantages. Hassan (2013) added that a company's reputation can be viewed from two perspectives: the first is emotional and reflects customers' beliefs and impressions of the company, and the second is cognitive and represents the accumulated and stored experience of customers towards the company. Through the previous review of the various concepts of corporate reputation, researchers can conclude that despite the efforts of writers and researchers to develop a unified and acceptable definition, and the lack of agreement on the content of the definition, we find that most concepts focus on reputation as an intangible moral concept related to the evaluation of relevant parties, whether inside or outside the company.

2-The importance of corporate reputation Reputation is of great importance to a company, whether commercial, governmental, or non-profit, in order to achieve its goals and compete for its survival and continuity. This importance can be indicated through the following points (Youssef, 2015): 1- A good reputation paves the way for the company's acceptance by the public and stakeholders in the business world, and reputation is viewed as an essential element in delivering organizational performance. 2- It provides an opportunity Access to more valuable employees when you want to hire someone (most people prefer to work for a company that respects everyone). 3 – Increases the effectiveness of advertising and the impact of sales force (for example, a positive reputation has a significant impact on the credibility of a company's advertising). 4 – Supports the introduction of new products to the market. 5 – Represents a strong signal to competitors. 6 – Provides access to the best companies providing professional services. 7 – Provides a second chance for the company in the event of a financial crisis. 8 – Helps increase the company's capital on the common stock market. 9 – A good reputation is considered the most important intangible resource and one of the most important variables that reflects and explains how a company is managed internally.

III. The relationship between artificial intelligence technologies and improving financial data transparency.

Integrating technologies of AI into financial data plays a crucial role in enhancing financial data transparency, facilitating accountants' ability to conduct deeper and more accurate analyses, and improving reputations of accountants in view of stakeholders. Research demonstrates that artificial intelligence also contributes significantly to establishing credibility and trust in financial reporting (Kuswara, 2024). Comprehending these challenges is critical for accountants, financial experts, and organizations seeking to utilize the technology of AI to improve the efficiency, accuracy, and decision-making of financial reporting. AI in accounting and financial reporting offers the potential to increase the efficiency and accuracy of financial data processing (2023, Nana). Shani & Tameemi (2021) examined modern technology use in financial reporting and its impact on the financial statements transparency. By reviewing previous research demonstrating the impact of AI on the reputation of external auditors, which may be reflected in a company's reputation, they concluded that the use of AI by large financial reporting firms in electronically audited company statements reduces manipulation and subjective opinion, thus producing more transparent and reliable financial information. AI also contributes to improving the quality of financial reporting by means of effective and competent analysis process, to decrease error occurrence and augment the financial statements credibility. This, however, leads to statements transparency increment that stakeholders are offered, presenting meticulous information to them for decision-making. This better transparency enhances confidence in auditors and confirms their guardianship role of financial information integrity within the market (Kuswara, 2024). (The use of artificial intelligence has simplified business processes and significantly changed the operating environments of all economic units. Due to these factors, the overall cost of economic units has decreased, resulting in improved financial results. These results could enhance the social profiles and business of companies. The use of artificial intelligence has also improved transparency in the business process, especially with regard to financial disclosure (Mohammad, et al; 2020). This may compromise

the vital properties of data due to the improper use of technologies, incompatible IT systems, improper manipulation of data stored or during transmission, or improper implementation of IT solutions. Another challenge is weak internal controls, which can affect the reliability of accounting information. To treat this issue, practitioners need have internal control and IT departments should identify and minimize the risks of established controls. They must also apply new controls to minimize residual risks (Askary, et al; 2018). AI technology make large amounts of data faster to access and analyze by auditors. This is conducted with higher accuracy with AI, with better identification of financial risks and potential issues. Therefore, higher transparency in financial statement can be achieved, as auditors' findings can be presented more accurately and clearly, decreasing error occurrence or loss of important information. This higher transparency is important in establishing credibility with stakeholders, such as regulators and investors, who have high expectance of comprehensiveness and accuracy in financial statements. This is consistent with previous research (Al Lauati & Sanad, 2023; Ikhsan et al., 2022; Mohammed Shani & Al-Tameemi, 2021; Appelbaum et al., 2017; Tawfeeq Yousif Alabdullah, 2023). Therefore, researchers believe that AI technologies significantly contribute to improving transparency, accuracy, and efficiency in the preparation of financial reports for economic entities. This is achieved by automating data processing, detecting financial fraud, and ensuring compliance with laws and regulations. Thus, AI enhances trust among investors, regulators, and stakeholders. Accordingly, companies must address data security, regulatory compliance, and AI bias to maximize its applications in financial reporting. AI technologies reduce manual errors, enhancing the accuracy of financial reports. AI algorithms detect inconsistencies and fraudulent transactions in financial data, and AI automation helps accelerate financial reporting and decision-making processes. AI ensures compliance with financial reporting standards, reducing the risk of non-compliance. Consequently, data-driven financial reports prepared using automation technologies build investor confidence and enhance a company's reputation by: 1. Improving accounting work and reducing accounting errors. 2. Detecting fraud and ways to prevent such operations. 3. Increasing efficiency and speed when preparing monthly and annual financial statements. 4. Regulatory compliance with laws, regulations, and the internal regulations of economic units. 5. Enhancing the confidence of stakeholders, whether internal or external.

IV. The relationship between artificial intelligence technologies and enhancing corporate reputation.

The finance and accounting world could benefit greatly from the introduction of artificial intelligence tools and technologies that enable the automation of tasks, leading to improved analytical capabilities compared to previous technologies. Although artificial intelligence offers many new and exciting opportunities, it also has some limitations that may make it unsuitable for performing certain activities within an economic unit (Mohammad, et al., 2020). Additionally, these findings may indicate that economic units that use artificial intelligence technologies in auditing have financial statements with higher accuracy and transparency, causing investors and regulators to have a positive view. This represents a significant shift in the market's perception of the role of auditors, as artificial intelligence technology is recognized as an important tool in enhancing financial integrity (Kuswara, 2024). (Manica & Bogin, 2018) find that economic units, including finance, also use similar software to assess the financial requirements and credibility of customers, which leads to improved satisfaction in customers and develops financial products such as loans that are disbursed within minutes. These processes have reduced default rates and improved the overall reputation of financial institutions. AI technologies have proven their value in the world of e-commerce because they not only reduce costs but also improve the efficiency of complex processes (Thalassinios & Thalassinios, 2018). (Thottoli, 2024) investigated financial reporting practices using ICT and AI, using biometric and quantitative research techniques, and revealed that while ICT has many sophisticated benefits, ICT training has a mediating effect on the relationship between the sophisticated benefits of ICT and financial reporting practices in enhancing a company's reputation. According to Jaslov (2017), the main limitation of the human mind relates to the speed of data processing, which hinders its ability to analyze. Meanwhile, computers do not suffer from such limitations and thus provide organizations with analysis that is mostly free of errors and biases. Due to these facts, organizations have increased the use of computers in routine tasks, from creating a simple chart to complex tasks such as predicting potential outcomes in financial markets. Furthermore, we believe that artificial intelligence can significantly reduce the error rate and thus improve reliability. Therefore, there are various processes in accounting through which the error rate can be reduced, from data entry to forecasting. In addition to the financial risks that incorrect data may generate, companies' reputations may also be affected. Therefore, companies and practitioners should leverage AI-based solutions to reduce error rates. The features of these programs reduce bias and self-interest, making financial statements more useful and reliable in this vital area. One of the most important aspects of the Sarbanes-Oxley Act is its focus on internal mechanisms and their consistency with the organization's internal activities. This law also requires auditors, along with company management, to certify that the financial statements they have prepared are accurate, complete, and timely. Mohammad et al. (2020) believe that AI technologies play a vital role in improving corporate reputations by enhancing the transparency of financial data, efficiency in business management, customer experience, and

risk management against hacking or piracy. By leveraging AI solutions such as information technology, expert systems, and robotic process automation (RPA), banks can enhance their image, build trust with stakeholders, and proactively manage reputational risks. AI technologies thus significantly improve corporate reputations by enhancing transparency, customer satisfaction, risk management, and ethical business practices. By leveraging AI-powered tools, companies can proactively manage their public image, build trust with stakeholders, and ensure long-term brand success. However, organizations must address AI bias, data privacy concerns, and ethical challenges to maximize the benefits of its applications in reputation management.

V. Obstacles and Addresses to the Application of Artificial Intelligence in the Banking Sector

There are several obstacles or problems in the application of artificial intelligence technologies in the banking sector, which can be identified in the following points (Qashi, 2024) (Al-Abdallat, 2024) (Daryanani, 2024)), (Al-Ghurair, 2018): 1- Legal and Ethical Considerations: Artificial intelligence systems raise issues related to a range of issues related to the privacy of financial data, the fairness of algorithms, and the transparency of financial reporting. Therefore, banks must ensure that artificial intelligence systems are transparent, interpretable, and unbiased in providing financial information, especially in the areas of credit assessment and loan approval provided to customers. 2- Integration with Legacy Systems: Some banks rely on outdated technical systems that may not be easily compatible with modern artificial intelligence technologies, which hinders the modernization and integration process. Therefore, bank management must update accounting information in accordance with international accounting standards. 3- Algorithmic Bias: AI-based systems may be susceptible to bias, leading to unfair decisions, such as loan denials based on subjective criteria. 4- Lack of Specialized Skills: Implementing AI technologies requires experts in this field, and banks may face difficulty attracting or developing these talents. 5- High Development Cost: Developing and implementing AI systems requires significant financial investments, which may be a barrier for some banks. 6- Security Risks: AI systems handle sensitive financial data, making it increasingly important to enhance security measures to protect this data from cybersecurity threats. 7- Slow Implementation and Response Times: Banks may face challenges in deploying AI systems quickly and effectively, requiring the adoption of new, flexible organizational strategies that keep pace with the development of information technology. Through interviews with bank officials, researchers identified a number of obstacles, the most important of which are: 1- Lack of experience among bank employees in applying AI technologies to meet customer needs, which positively enhances banks' reputations. 2- Investment is high in banks through loans and advances, but it was found that some banks have low returns compared to the investment amounts. For the AI to be applied to the banking sector, it is imperative to establish a unique system for the artificial intelligence that should be compatible with the requirements of banks based on their actual situation, which will improve the banks' reputation. 3- The lack of a program to train individuals working in the banks in the research sample to use artificial intelligence techniques to improve the transparency of financial reports and enhance the company's reputation.

VI. Research Hypotheses & Mythology:

The first main hypothesis (adopting the AI technologies is positively related to strengthening and enhancing financial data transparency and its impact on improving banks' reputations) can be divided into the following two hypotheses:

1. Adopting the AI technologies is positively related to enhancing financial data transparency.
2. Adopting the AI technologies is positively related to improving banks' reputations.

The second main hypothesis: There are obstacles that limit the possibility of adopting artificial intelligence technologies to enhance financial data transparency and improve banks' reputations.

First: Research Metrics

The research tool consists of three metrics: artificial intelligence technologies (information technologies, expert systems, and advanced manufacturing technologies), improving financial data transparency, and enhancing the company's reputation. Table No. (1) provides an explanation of the coding of each of the research variables and the number of paragraphs:

Table (1) Research variables

Number of phrases	Dimension
14	Artificial Intelligence Technologies (Information Technologies, Expert Systems, and Advanced Manufacturing Technologies)
14	Improving Financial Data Transparency
14	Enhancing Corporate Reputation

Second: Testing the Research Measuring Tool

The Questionnaire represents the primary tool for collecting data for the current research, which pertains to its main variables. This tool relies on a five-point Likert scale (strongly agree to strongly disagree). The following are some of the tests required to verify the validity of the data obtained.

1. Structural Reliability of the Measuring Tool: - The researchers verified the structural reliability of the measuring tool for the current research by using the Cronbach's alpha test. The tool's reliability coefficient was calculated using the Cronbach's alpha correlation coefficient shown in Table (2).

Cronbach's alpha Variable	Variable
0.729	Artificial Intelligence Technologies (Information Technologies, Expert Systems, and Advanced Manufacturing Technologies)
0.778	Improving Financial Data Transparency
0.722	Enhancing Corporate Reputation

We note from the result of the consistency in the role of applying artificial intelligence techniques in improving the transparency of financial data and enhancing the bank's reputation that it is acceptable, because the value of the alpha correlation coefficient is considered statistically acceptable.

Third: **Descriptive statistics**

Table (3) Arithmetic means and standard deviations for the research tool

	Artificial Intelligence Technologies (Information Technologies, Expert Systems, and Advanced Manufacturing Technologies)													
	Q_1	Q_2	Q_3	Q_4	Q_5	Q_6	Q_7	Q_8	Q_9	Q_10	Q_11	Q_12	Q_13	Q_14
Mean	4.52	4.50	4.26	4.11	4.24	3.95	4.57	4.27	4.31	4.14	3.91	3.93	4.36	4.13
Std. Deviation	.565	.536	.854	.896	.745	.783	.590	.710	.501	.771	.862	.813	.606	.865
	Improving Financial Data Transparency													
	Q_1	Q_2	Q_3	Q_4	Q_5	Q_6	Q_7	Q_8	Q_9	Q_10	Q_11	Q_12	Q_13	Q_14
Mean	4.44	4.14	4.34	4.21	4.19	4.34	4.29	4.09	4.36	4.27	4.18	4.14	4.18	4.24
Std. Deviation	.742	.928	.574	.777	1.092	.727	.760	.925	.731	.798	.903	.872	.741	.722
	Enhancing Corporate Reputation													
	Q_1	Q_2	Q_3	Q_4	Q_5	Q_6	Q_7	Q_8	Q_9	Q_10	Q_11	Q_12	Q_13	Q_14
Mean	4.50	4.29	4.57	4.14	4.22	4.24	4.52	4.18	4.24	4.44	4.39	4.21	4.36	4.18
Std. Deviation	.566	.587	.590	.872	.804	.829	.766	.806	.849	.695	.665	.872	.690	.728

Table (4) Arithmetic means and standard deviation of the research dimensions

Statistics			
	Artificial Intelligence Technologies	Improving Financial Data Transparency	Enhancing Corporate Reputation
Mean	50 4.233	50 4.2482	50 4.3443
Std. Deviation	0.34501	0.41416	0.37962

We extract the following analytical indicators from the data in Tables3,4:(First Variable: Artificial Intelligence Technologies (Information Technologies, Expert Systems, and Advanced Manufacturing Technologies), Tables (3, 4) refer to the first independent variable (artificial intelligence technologies). The values of the arithmetic mean for this variable dimension ranged between (3.91-4.57) on an f-p Likert scale, indicating a high degree of agreement from the study sample, with low standard deviations between (0.896, 0.501). As for the first dependent variable (enhancing financial data transparency), the results of the descriptive statistics for the study sample indicated high arithmetic means, ranging between (4.09-4.44) with standard deviations of (0.574, 1.092), in a completely agreed-upon direction. All items also had arithmetic means higher than the hypothetical

mean on the test scale area (3). As for the second dependent variable (improving the company's reputation), the arithmetic mean values of the dimensions of this variable ranged between (4.14-4.75) with standard deviations of (0.872, 0.566), and a strong agreement on the five-point Likert scale, which indicates that there is consistence from the sample of study to a high degree.

Fourth: Testing the Study Hypotheses 1. The First Main Hypothesis A. Sub-Hypothesis (1) The researchers in this research is based on the Pearson (simple correlation coefficient) to examine the first core hypothesis, which is the correlation relationships between the independent and dependent variables (the role of adopting artificial intelligence technologies in enhancing the transparency of financial data) and the second dependent variable (improving the bank's reputation). In table (5) a matrix is shown for Pearson (simple correlation coefficients) between these variables. It also shows the size of sample (50) and test type (2-tailed). In the table, (Sig.) indicates the correlation coefficient significance tested by drawing a comparison between tabular value and the calculated (t) value without displaying its values. If the sign (* or **) appears on the correlation coefficient, this indicates that the calculated (t) value is greater than the table. Table (5) showing the correlation matrix, indicates that there are positive strong correlations (because its value is greater than 0.30), which is significant at the (1%) level between (the role of adopting artificial intelligence technologies in enhancing the transparency of financial data and improving the bank's reputation), as the simple correlation coefficient reached (.593**), (.635**), (.554**), respectively. This result supports the validity of sub-hypothesis (1), which was assumed to verify that adopting the AI technologies is positively related to enhancing the transparency of financial data.

Table (5) Pearson correlation matrix for the relationship between the dimensions of artificial intelligence technologies, improving the transparency of financial data, and improving the reputation of banks, n=50

Correlations				
		Artificial Intelligence Technologies	improving Financial Data Transparency	Enhancing Corporate Reputation
Artificial Intelligence Technologies	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	50		
improving Financial Data Transparency	Pearson Correlation	.593**	1	
	Sig. (2-tailed)	.000		
	N	50	50	
Enhancing Corporate Reputation	Pearson Correlation	.636**	.556**	1
	Sig. (2-tailed)	.000	.000	
	N	50	50	50

**. Correlation is significant at the 0.01 level (2-tailed).

B. Sub-hypothesis (2): In order to verify the validity of Sub-hypothesis (2), which was assumed to verify that (adopting the AI technologies is positively related to improving corporate reputation), Tables (6, 7, and 8) were formulated as a first step to understand the impact of the dimensions of artificial intelligence technologies.

Table (6) Summary of the impact of the role of artificial intelligence technologies in enhancing financial data transparency and improving corporate reputation

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.672 ^a	0.452	0.433	0.2859

a. Predictors: (Constant), The role of artificial intelligence technologies in enhancing financial data transparency and improving banks' reputations.

Table (7) ANOVA test of the impact of adopting artificial intelligence technologies on enhancing the transparency of financial data and improving the reputation of banks

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.91	2	1.95	23.91	0.000 ^b
	Residual	4.74	58	0.08		
	Total	8.65	60			

a. **Dependent Variable:** enhancing the transparency of financial data and improving the reputation of banks

b. **Predictors: (Constant),** artificial intelligence technologies

Table (8) Testing the beta values, coefficient (t), and significance (sig.) for adopting artificial intelligence technologies to enhance the transparency of financial data and improve the company's reputation

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.077	0.473		2.269	0.027
artificial intelligence technologies	0.520	0.133	0.472	3.913	0.000
	0.251	0.112	0.274	2.271	0.027

a. **Dependent Variable:** enhancing the transparency of financial data and improving the reputation of banks

Tables (7,8) illustrate the significant impact of adopting artificial intelligence technologies on enhancing financial data transparency and improving corporate reputation. For the variance analysis, Table (6) also indicates, according to the calculated F value, that the model is significant, reaching (23.910), which is higher than the table value at a significance level of (1). The unstandardized beta coefficient between them was (1.077) and the calculated value (t) recorded (2.269), which indicates the significance of the unstandardized beta coefficient at a level of (1%). This model has a relatively high explanatory power according to the value of (R²=0.452). This means that independent variable has the ability to explain (45.2%) of the dependent variable differences. Therefore, our sub-hypothesis (2) was verified. This indicates the validity of our first main hypothesis, which was assumed to verify that (adopting the AI technologies is positively related to enhancing the transparency of financial data and improving the company's reputation).

2-The second main hypothesis: To verify the validity of this hypothesis, the arithmetic means and standard deviations of the study sample's responses to the paragraphs related to testing the validity of the hypothesis were extracted. The hypothesis was intended to verify whether there are obstacles that limit the possibility of adopting artificial intelligence technologies to enhance the transparency of financial data and improve the company's reputation. The table below shows this:

Table (9) Arithmetic means and standard deviations of the study sample's performance on the paragraphs related to the hypothesis.

Paragraphs Standard	Arithmetic mean	deviation Trend of study	sample answers
Among the obstacles to the use of AI technologies are the cost of expensive software.	3.62	1.238	high degree
Among the obstacles to the use of AI technologies is the lack of academic qualifications for individuals working in banks (the research sample).	3.55	1.171	high degree
Among the obstacles to the use of AI technologies is the lack of practical training in AI technologies.	3.55	1.171	high degree
Among the obstacles to the use of AI technologies is the need to develop electronic computer programs, specifically accounting information systems, within the banks under study.	3.55	1.171	high degree
Among the obstacles to the use of AI technologies is the need to develop electronic auditing programs due to the nature of the accounting information systems in the banks (the research sample).	3.54	1.171	high degree
There is no unified accounting information system. There is no clear definition for regulating AI technologies by international accounting standards in banks.	3.54	1.171	high degree
Among the obstacles to the use of AI technologies is the lack of modern programs followed by the banking system.	3.53	1.171	high degree
Among the obstacles to the use of AI technologies is the lack of modern programs followed by the banking system.	3.53	1.171	high degree
Among the obstacles to the use of AI technologies is the lack of confidence of auditors in AI technologies, as they are vulnerable to hacking and piracy.	3.52	1.171	high degree

Bank employees lack sufficient experience and skill in using AI technologies.	3.55	1.171	high degree
Total	3.54		high degree

Table (13) shows the arithmetic means and standard deviations for the paragraphs related to the hypothesis. The arithmetic means ranged between (3.52-3.62). The paragraph that stipulates the cost of software related to the use of artificial intelligence technologies came in first place with an arithmetic mean of (3.62), while the paragraph that stipulates the auditor's lack of confidence in artificial intelligence technologies because they are vulnerable to hacking and piracy came in with an overall arithmetic mean of (3.52). The arithmetic mean as a whole was (3.54). The study sample's answers indicate a high degree of agreement on the obstacles that limit the use of artificial intelligence technologies in commercial banks.

Table (10) Arithmetic means, standard deviations, and "T" test for the paragraphs

Obstacles to the use of artificial intelligence technologies	No.	Arithmetic mean	standard deviation	t-value,	degrees of freedom,	of degrees of freedom,
	160	3.54	1.174	5.810	159	.000

The table above shows that there are statistically significant differences ($\alpha \leq 0.05$) between the arithmetic mean and the standard score (3), as the value of "T" reached 5.810 with a statistical significance of 0.000. Therefore, the validity of our second main hypothesis was verified, which assumed that there are obstacles that limit the possibility of adopting artificial intelligence technologies in enhancing the transparency of financial data and improving the company's reputation.

VII. Conclusions

1. There is a significant correlation and statistically significant effect between artificial intelligence technologies (information technology, expert systems, and advanced manufacturing technologies) in enhancing financial data transparency.
2. There is a significant correlation and statistically significant effect between artificial intelligence technologies (information technology, expert systems, and advanced manufacturing technologies) in improving banks' reputations.
3. The application of artificial intelligence technologies in the banking sector, the research sample, faced several obstacles, despite the financial capabilities to overcome these obstacles, the most important of which were:
 - A. The lack of experience among individuals working in banks in applying artificial intelligence technologies to fulfill customer needs, which positively enhances banks' reputations.
 - B. The failure of bank management to use artificial intelligence technologies in banking operations and the preparation of monthly or final financial reports.
 - C. The lack of a program to train individuals working in the banks, the research sample, in the use of artificial intelligence technologies to improve financial reporting transparency and enhance corporate reputations.

VIII. Recommendations

1. The banks in the research sample must implement artificial intelligence technologies, given their significant correlation in enhancing the transparency of financial reports, which improves banks' reputations.
2. The banks in the research sample must prioritize the use of artificial intelligence technologies in banking services in a manner that is compatible with the current environment and consistent with the requirements of the business market.
3. The banks in the research sample must design a unique artificial intelligence system that is compatible with the characteristics of the banks and their actual situation, thus improving the banks' reputations.
4. The banks in the research sample must design websites that are impenetrable to hackers, using private identities or passwords used by bank employees. They must update and maintain the websites at least once a week.
5. Banks must invest in technical infrastructure, develop human resources, establish clear regulatory and ethical policies, and enhance cooperation with regulatory authorities to ensure compliance with required standards.
6. The application of artificial intelligence technologies in the banking sector significantly contributes to enhancing the transparency of financial data and improving corporate reputation. Through its ability to process and analyze huge amounts of data quickly and accurately.

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- [1]. Al Lawati, H., & Sanad, Z. (2023). Ownership Concentration and Financial report Actions. *Administrative Sciences*, 13(9), 206. <https://doi.org/10.3390/admsci13090206>
- [2]. Al-Abdallat, Abdel Fattah Zuhair Abdel Fattah (Artificial Intelligence Applications and Their Impact on Achieving Competitive Advantage: A Study of Jordanian Banks), *Mu'tah Journal of Research and Studies, Humanities and Social Sciences Series, Volume Thirty-Five, Issue Five, 2020.*

- [3]. Al-Ghurair, A. (2018) Artificial Intelligence Needed in the Banking Sector, 25-1-2018, available at: <http://www.alkhaleej.ae/home/print/f86dd8f8-3c04-44d2-82b8-89d5a3a5e0c2/631a8a61-c038-458a-910b-a851d8bae9f9>
- [4]. **Al-Karaawi, Muhammad Salman Dawood (Fair Value Measurement to Improve Financial Reporting Transparency and Its Impact on Supporting Investment Decisions), Master's Thesis in Accounting Sciences, University of Karbala, College of Administration and Economics, 2019.**
- [5]. Appelbaum, D., Kogan, A., & Vasarhelyi, M. A. (2017). Big Data and Analytics in the Modern Financial report Engagement: Research Needs. *AUDITING: A Journal of Practice & Theory*, 36(4), 1–27. <https://doi.org/10.2308/ajpt-51684>
- [6]. Askary, S.; Abu-Ghazaleh, N.; Tahat, Y. Artificial Intelligence and reliability. In *Conference on e-Business, e-Services and e-Society*; Springer: Berlin/Heidelberg, Germany, 2018; pp. 315–324.
- [7]. **Bahloul, Badr (2022), "The Role of Electronic Applications in Improving Corporate Reputation - A Study on a Sample of Baridi Mob Application Users," Master's Thesis, Journal of Humanities and Social Sciences, University of May 8, 1945, Algeria.**
- [8]. Benjamin Fung, The Demand and Need for Transparency and Disclosure in Corporate Governance, *Universal Journal of Management* 2(2), 2014.
- [9]. Bosco, M.V. (2020). A Study on Artificial Intelligence Interaction with Organizational Performance. *International Journal of Research in Engineering, Science and Management*, 3(2), 483-486.
- [10]. Christine Reitmaier, Wolfgang Schultze, Enhanced business reporting: value relevance and determinants of valuation-related disclosures, *Journal of Intellectual Capital*, Vol. 18 No. 4, 2017.
- [11]. Damerji, H., & Salimi, A. (2021). Mediating effect of use perceptions on technology readiness and adoption of artificial intelligence in accounting. *Accounting Education*, 30(2), 107-130.
- [12]. Daryanani, M. (2024). How AI influences cybersecurity. Retrieved from KPMG Switzerland: <https://kpmg.com/ch/en/insights/cybersecurity-risk/artificial-intelligence-influences.html> Deloitte. (2018). The new physics of financial services, How artificial intelligence is transforming the financial
- [13]. Ikhsan, W. M., Ednoer, E. H., Kridantika, W. S., & Firmansyah, A. (2022). FRAUD DETECTION AUTOMATION THROUGH DATA ANALYTICS AND ARTIFICIAL INTELLIGENCE. *Riset*, 4(2), 103–119. <https://doi.org/10.37641/riset.v4i2.166>
- [14]. Ikin Solikin1* and Deni Darmawan.2023(Impact of Artificial Intelligence in Improving the Effectiveness of Accounting Information Systems).
- [15]. Jaslove, C. 2017. The rise of artificial intelligence: An analysis of the future of accountancy.KPMG Invests in Game-changing Cognitive Technologies for Professional Services. 2017.KPMG, 28 June.
- [16]. Khair al-Din Abu Zarb - Abu Bakr Khawalid. , - 2020(page 37). The effectiveness of using modern artificial intelligence applications in confronting the Corona virus: the South Korean experience as an example . *Journal of Management and Economic Research* .page 37.
- [17]. Lewellen, Christina, (2021). Tax haven incorporation and financial reporting transparency Retrieved from SSRN: <https://ssrn.com/abstract=3888383>.
- [18]. Maione, G.; Leoni, G. Artificial Intelligence and the Public Sector: The Case of Accounting. In *Artificial Intelligence and Its Contexts. Advanced Sciences and Technologies for Security Applications 2021*; Visvizi, A., Bodziany, M., Eds.; Springer: Berlin/Heidelberg, Germany, 2021; pp. 131–143
- [19]. Manyika, J., Bughin, J. 2018. The promise and challenge of the age of artificial intelligence. McKinsey Global Institute Executive Briefing.
- [20]. Mjongwana, A., & Kamala, P.N. (2018). Non-financial performance measurement by small and medium sized enterprises operating in the hotel industry in the city of Cape Town. *African Journal of Hospitality, Tourism and Leisure*, 7(1), 1-26.
- [21]. Nana Sreseli(Use of Artificial Intelligence for Accounting and Financial Reporting Purposes: A Review of the Key Issues) *American International Journal of Business Management (AIJBM)* ISSN- 2379-106X, www.aijbm.com Volume 6, Issue 8 (August 2023), PP 72-83
- [22]. Neetu Dongre* Alka Pandey** Dr. O. P. Gupta2021(ARTIFICIAL INTELLIGENCE IN ACCOUNTING: OPPORTUNITIES & CHALLENGE, An International bilingual peer refereed research JOURNAL, VOL 11 Issue 4.
- [23]. Paydar, S. R., & Babalou, F. (2019). Investigating Financial Reporting Transparency. *Singaporean Journal of Business Economics and Management Studies*, 6(12), 18-27.
- [24]. **Qashi, Maryam (Artificial Intelligence in Financial Services: Applications, Implications, and Risks), National Forum on: Challenges and Risks of Artificial Intelligence Applications in the Financial and Banking Sector in Algeria, 2024.**
- [25]. Shaban Mohammadi, Behrad Moein Nezhad, The role of disclosure and transparency in financial reporting, *International Journal of Accounting and Economics Studies*, 3 (1), 2015.
- [26]. Shani, M., & Al-Tameemi, L. A. H. (2021). The Impact of Using Artificial Intelligence in the Financial report Process to Enhance the Transparency of Financial report s and its Reflection on the Reputation of the External Auditor. *Journal of Advance Research in Business, Management and Accounting* (ISSN: 2456-3544), 7(3), 21–32. <https://doi.org/10.61841/7axn7168>
- [27]. Suleiman Jamal Mohammad , Amneh Khamees Hamad , Hela Borgi , Phung Anh Thu , Muhammad Safdar Sial , Ali Abdallah Alhadidi'How Artificial Intelligence Changes the Future of Accounting Industry) *international Journal of Economics and Business Administration Volume VIII, Issue 3, 2020.*
- [28]. Tawfeeq Yousif Alabdullah, T. (2023). The impact of financial technology and risk management practices on corporate financial system profitability: Evidence from Kuwait. *SocioEconomic Challenges*, 7(3), 141–151. [https://doi.org/10.61093/sec.7\(3\).141-151.2023](https://doi.org/10.61093/sec.7(3).141-151.2023)
- [29]. Thalassinios, I.E., Thalassinios, E.Y. 2018. Financial Crises and e-Commerce: How Are They Related? Available at SSRN: <https://ssrn.com/abstract=3330169>.
- [30]. Thottoli, M. M. (2024). Leveraging information communication technology (ICT) and artificial intelligence (AI) to enhance auditing practices. *Accounting Research Journal*. <https://doi.org/10.1108/ARJ-09-2023-0269>
- [31]. Viorel-Costin Bant,a l , Sinziana-Maria Rindas,u l , Anca Tănăsie 2 and Dorian Cojocaru 2022. Artificial Intelligence in the Accounting of International Businesses: A Perception-Based Approach *Sustainability* 2022, 14, 6632. <https://doi.org/10.3390/su14116632>
- [32]. **Youssef, Hiba Ibrahim Abdel Aziz (2015). "The Extent of Achieving Financial Statement Transparency in Light of International Accounting Standard No. 1", Scientific Journal of Business Studies and Environmental Research, Issue No. 1, Volume 6, Egypt.**
- [33]. Zakaria Kuswara1*, Marsel Pasaribu2, Fitriana3, Rachmat Agus Santoso 2024 Artificial Intelligence in Financial Reports: How it Affects the Process's Effectiveness and Efficiency - *Jurnal Ilmu Keuangan dan Perbankan (JIKA)* Volume 13 Nomor 2 (Juni 2024)