



APPLICATIONS FOR ARTIFICIAL INTELLIGENCE AND ITS IMPACT ON REDUCING THE RISK OF HIDDEN ACCOUNTING-A FIELD STUDY OF THE OPINIONS OF A SAMPLE OF EMPLOYEES OF AUDIT FIRMS AND IRAQI COMPANIES REGISTERED IN THE IRAQ STOCK EXCHANGE FOR THE PERIOD FROM 2024-2025

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Article history:		Abstract:
Received:	30 th July 2025	The research aims to shed light on the importance of using artificial intelligence technologies as one of the innovations of the digital age, and its impact on and mitigation of hidden accounting risks, given the negative effects resulting from its use. This is to present companies' financial statements in a real, clear manner, free of any manipulation or forgery. This is to improve the quality of financial statements through their ability to process and analyze data quickly and accurately, as well as their ability to classify financial data and detect unusual patterns. This contributes to strengthening control and mitigating the risks of hidden accounting. This research relied on the descriptive analytical approach, in addition to adopting a statistical analysis method to demonstrate the nature of the relationship between the independent and dependent research variables, according to a questionnaire designed with two axes and distributed to a purposive sample of accountants and auditors, primarily (163). The results of the hypotheses were tested using the statistical program (SPSS). The value of the research was represented in the results reached: the most prominent of which is the existence of a significant correlation between the use of artificial intelligence and hidden accounting risks. This confirms the important role of using technologies. Artificial intelligence in auditing is an effective means of mitigating the risks of shadow accounting. The study recommends the need to leverage the capabilities and features of artificial intelligence technology in the field of accounting and auditing, along with the need to train and qualify employees to enable them to keep pace with contemporary changes in the modern environment.
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INTRODUCTION:

Recent advancements in technology have accelerated digital transformation and intelligence in modern business. In particular, the increasing use of AI in accounting is expected to accurately measure the performance of companies, provide intelligent analytics, and predict the future of the company. However, along with the benefits, ethical concerns also arise from the use of AI, such as lack of professionalism, data breaches, and isolation among accountants. This research explores the impact of using artificial intelligence in reducing the risks of hidden accounting. We found that data security, privacy, and abuse; accountability; accessibility, benefits and challenges; transparency and trust in AI are among the most common risks in the development and use of AI in stealth accounting. Unique ethical impacts have also been discovered on four types of stakeholders: developers, managers responsible for AI adoption, accountants,



and regulators. The concept of hidden accounting and its origin and what are the negative effects that its use generates on the company's position and financial statements, and how to avoid the use of this type of accounting by reducing its impact by using artificial memory tools and reducing its risks. Artificial intelligence has profoundly influenced the development of modern business and the accounting profession. Thanks to advances in data collection technologies and a significant reduction in the cost of storage, companies now collect massive amounts and different types of data. The increasing availability of data has stimulated the need for technologies such as artificial intelligence that can perform effective and efficient analyses, and artificial intelligence uses machines to interpret and learn from data to accomplish specific tasks, and it also provides a unique opportunity for management accountants, who are already proficient in analyzing data and obtaining insights from it, and based on the above, the research was divided into four topics, where the first topic included the research methodology, while the second topic dealt with the theoretical framework of the concept of artificial intelligence and hidden accounting, its goals and reasons, and the topic Third, it was concerned with the practical aspect of the research, and then the research came out with a set of conclusions and recommendations in the fourth topic.

The first topic

Research Methodology

The research methodology is the first step that clarifies the scientific path of the research, as it will present the research problem that gave light in doing this research, then the importance of the research, and then the goal it seeks to achieve, as well as the research hypothesis, the extent of which will be clarified at the end of the research, its temporal and spatial limitations, and the sources of information that the researcher relied on in investigating the research information, and presenting them as follows:

1-1 Research Problem:

The problem of the research lies in the negative effects that result from the use of hidden accounting in financial operations by some accountants and showing the records in a way that shows that the company is making profits and not in its real form. Here, the research problem arises in the following questions:

- ✓ Will AI reduce the risks generated by hidden accounting?
- ✓ Are AI users fully aware of hidden accounting tools.

1-2 Importance of Research:

The research derives importance from the topic it addresses to face the problem of some accountants using hidden accounting in financial business for the purpose of hiding some real information about the company in a way that is not discovered, and here the importance of using artificial intelligence tools to reduce this phenomenon and its risks, set limits for people who manipulate accounting information, and apply modern techniques in reducing the risks of hidden accounting, thus increasing investors' confidence and meeting their needs in decision-making.

1-3 Research Objectives:

The research aims to shed light on a very important phenomenon, which is the risks of hidden accounting, and the research aims to show the importance of using artificial intelligence techniques to reduce the risks of using hidden accounting and avoid the negative effects that result from its use, and in order to show the financial statements of companies in a real, clear and free manner from any manipulation or fraud through the use of modern technologies and automation in conducting financial operations, as well as to measure the relationship and impact between artificial intelligence and accounting risks. Hidden Ones.

1-4 Research Hypotheses:

The study of the research variables and the nature of the relationship between them is based on a main hypothesis (there is a statistically significant relationship between artificial intelligence and the risks of hidden accounting) and the following sub-hypotheses are derived from it:

Sub-Hypothesis 1: There is a statistically significant correlation between AI and hidden accounting risks.

The second sub-hypothesis: There is a statistically significant impact relationship between artificial intelligence and hidden accounting risks.

1-5 Research Limitations:

The research consists of the following limitations:

Spatial Boundaries: Represented by Iraqi audit firms and companies listed on the Iraqi Stock Exchange.

Time Limits: Represented by the period of distribution of the questionnaire from (1/12/2024) to (1/2/2025).

1-6 Research Population and Sample:

The Iraq Stock Exchange was selected as a research community and the auditors and the private shareholding company were selected as a random sample for the purpose of conducting research .



1-7 Research Methodology and Tool:

In light of the nature of the research problem, its objectives and its importance, the following approaches will be adopted within the framework of the two aspects of the research as follows:

1.7.1 Theoretical aspect: The descriptive approach will be adopted in presenting and analyzing the research variables in its theoretical framework, based on previous books, research, and studies published in relevant journals and websites.

1.7.2 Practical: The descriptive-analytical approach was employed through the use of the survey method, of which the questionnaire is one of its tools in the framework of studying and analyzing the reality of the practice of artificial intelligence and its reflection on the quality of the financial statements, by adopting the statistical software SPSS to analyze the questionnaires, solve the research problem, achieve its objectives, test its hypotheses, reach the results of the research sample, and then put forward the appropriate suggestions and recommendations. The Iraq Stock Exchange was selected as a research community, and a private shareholding company was selected. as a random sample for the purpose of conducting research on it.

1-8 Research Variables:

1.8.1 Independent Variable: Artificial Intelligence Applications: These are computer programs that use artificial intelligence techniques to perform specific tasks. These tasks range from simple, repetitive tasks to complex cognitive tasks that require human intelligence.

1.8.2 Dependent variable: Hidden accounting risks: Risks include potential threats to organizations, whether neglected or tacitly accepted. These risks create hidden costs that are not addressed in official accounting reports and information systems.

Second Topic

The First Requirement - Artificial Intelligence - A Theoretical Approach

With the entry of companies into the smart era and the emergence of what is known as the Industrial Revolution, which relies on advanced information technology and social networks, artificial intelligence technology has replaced traditional work methods, as the business environment over the past two decades has witnessed tremendous developments in technology, its uses and applications, which has been reflected on most of the business sectors, workers and various professions in those sectors, as it is a major source to provide decision-makers with the necessary information, it is necessary to acquire new skills and experiences that enable them to employ these technological technologies In achieving the goals of companies and society, many trends have emerged at the economic and societal levels that support advanced technology and the ability to employ it in an appropriate way that serves the interests of society and supports the wheel of development and prosperity.

2.1.1 Definition of Artificial Intelligence :(AI)

It is difficult to determine an exact date for the emergence of artificial intelligence, as in 1956, the first and clear contribution to the field of artificial intelligence emerged by the American scientist John McCarthy, and he was considered one of the branches of computer science interested in designing machine models for human behavior, as it is a science that introduces an invention and intelligent computer programs similar to the way humans think, so it learns as humans learn and decides as they decide, which includes robots, speech and image recognition, expert systems, neural networks, planning, and solving Problems (Habeed, 2017).

Through the exchange of experiences and the transfer of different views between individuals and experts specialized in the field of artificial intelligence, this in turn led to the creation of an atmosphere of competition to build systems that exceed the systems and programs carried out by many experts before the emergence of the term globalization, and with the emergence of these expert systems and their gradual development, it has become possible to study the behavior, actions and orientations of a large segment of people and build intelligent systems that are somewhat similar to human work and behavior, and sometimes their work exceeds the way. It is difficult to formulate a specific definition of artificial intelligence, as it was initially defined as a set of programs that allow the computer to simulate human intelligence and human abilities to carry out human actions that require understanding, interpretation, thinking, movement, and performing various life skills (Nelson, 1998).

Artificial intelligence is also defined as: a set of technical technologies that simulate human intelligence and invest in machine learning skills just like humans, and it is an advanced branch of machine learning, and it represents an advanced branch of computer over the years. It is also defined as a subfield of computer science that includes the creation of smart devices and programs that work and interact like humans. .(Hamadneh et , 2021)

Based on the above, the researcher defines artificial intelligence as: a broad field and has several uses, the most prominent of which is the preparation of computers to perform complex tasks that depend on human intelligence with the least effort and in the fastest time, and to provide accuracy and efficiency in performance.

2.1.2 Types of Artificial Intelligence:

There are several classifications of artificial intelligence, which are represented in the following (Ma & Siau, 2018), (Al-Qamoudi, 2024):

2.2.2.1 Narrow AI (NAI, which is the stage of artificial intelligence that involves machines that can only perform a set of precisely defined tasks (Lateef, 2023:40) This is the only AI that exists at the moment, narrow AI is something that the majority of people interact with daily via Google Assistant, Google Translate, Siri, Cortana, or Alexa is all machine intelligence that uses natural language processing (NLP),

2.2.2.2 General Artificial Intelligence (GAI): It is a type of artificial intelligence that has human ability, however, general AI is still an emerging field, given that the human brain is a model for the creation of general intelligence, (Fourtané, 2019)

2.2.2.3 Super-Artificial Intelligence (SAI) in which a machine will have more super-intelligent cognitive abilities than a human, where super-artificial intelligence (ASI) is expected to outperform humans in almost all fields, but especially in scientific creativity, logic, wisdom, and also in social skills (Szabadföldi, 2021).

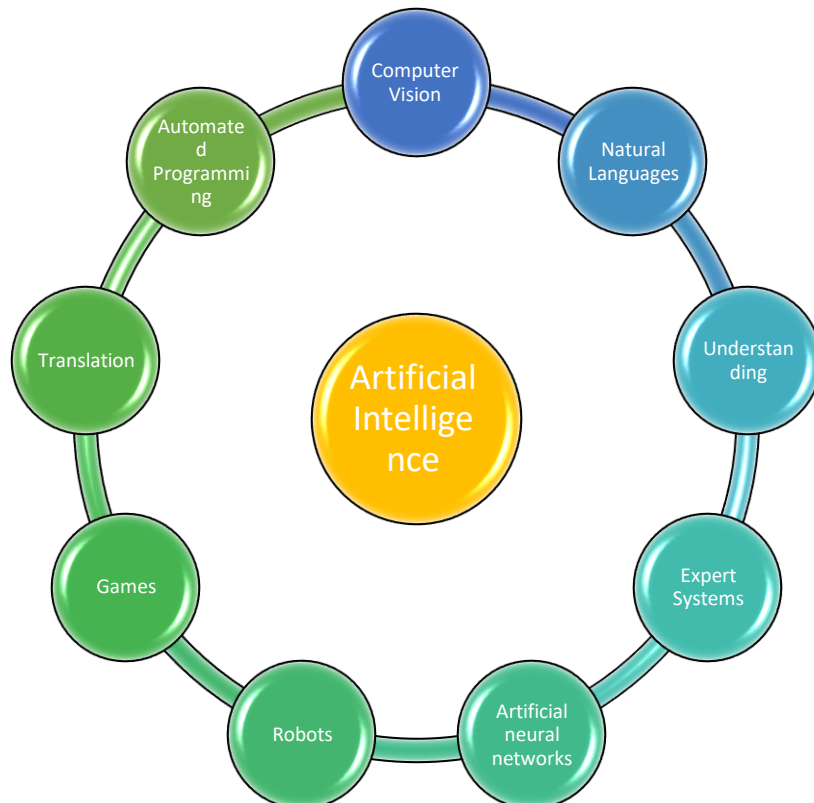
2.1.3 Areas of Artificial Intelligence:

) Artificial intelligence has many fields, including the following fields (Ittner and Larcker, 2001). (Granlund and Malmi, 2002):

1. Understand written and then spoken natural languages.
2. Speech, comprehension, and computer generation.
3. Computer vision, viewer recognition and decision-making.
4. Computer-aided intelligent education systems.
5. Artificial neural networks.
6. Robotics and sensing systems (vision, kinesthesia, and signal processing to perform actions and make decisions).
7. Games.
8. Translation and information summarization software.
9. Automated Programming (Smart Software).

Figure 1 below illustrates the areas of artificial intelligence.

Figure 1: Fields of Artificial Intelligence



Source: Prepared by the researchers

2.1.4 Importance of Artificial Intelligence:



The importance of artificial intelligence is manifested in the preservation of increasing human expertise and its transfer to intelligent machines, and humans are able to employ natural language in dealing with machines instead of resorting to computer programming languages, as it has become used in medical development, reaching successful solutions, and controlling industries, which makes the employment of these machines the possibility of employing them in all fields and sectors of society, and the importance of artificial intelligence lies in the following (Mahmoud, 2020) (Al-Fakhri, 2018):

1. Maintain expertise and transfer it to intelligent systems.
2. Humans are able to use natural language when dealing with machines instead of using computer programming languages.
3. Generating new ideas that lead to innovation, creativity, and emulating humans in terms of thinking and behavior, moving away from routine, and making more than one version of the system available as an alternative to experts.
4. Not relying heavily on experience, human technical skill, speed in carrying out tasks and providing accurate results.

2.1.5 Components of Artificial Intelligence:

Artificial intelligence has several basic components, which are (Al-Jaber, 2020):

1. User Interface: It is considered the main pillar to gain the satisfaction of computer users, and it includes computer hardware and programs, as the design and shape of the interface have an impact on the level of effort that the user must make to provide inputs to the system and analyze and interpret its results.
2. Database: It includes a data store called internal memory, analytical processing via the Internet, and it also contains the operations of the integrated and comprehensive information management system, related to customer service and data processing for their inputs in the data warehouse, and these units are for databases.
 - ✓ A module for user service.
 - ✓ Geographic Demographic Information Unit.
 - ✓ Virtual Connection Module.
 - ✓ Module for obtaining information without planning.
3. Search Engines: It is a program that assigns a location to the intended information in the database and contains new information by applying several strategies to process and analyze data in an adaptive manner.

2-1-6 Pros and Benefits of Artificial Intelligence

The goal of artificial intelligence is to realize the nature of human intelligence, through the work of computer programs that have the ability to simulate human behavior and are characterized by intelligence and the ability to process data and information electronically and provide all users with the data they require to make many decisions at a tremendous speed (Thowfeek, 2020), and Al-Azzam (2021) added that the benefit of artificial intelligence is embodied in enabling technical machines to imitate and simulate the intelligence processes that take place in the human mind so that the machine becomes capable To solve problems and make decisions in a scientific, logical and similar way to the way the human mind thinks, especially the representation of accounting programs for a field of life and to improve the existing relationship between its components, and this led to the creation of a competitive climate to build systems that are superior to the systems carried out by many experts before the emergence of the term globalization, and with the emergence and development of these expert systems, it has become possible to study the behaviors of a large group of individuals and form systems similar to them, and even surpass them in most cases.

Artificial intelligence may emerge from many positives that benefit its user, most notably the finished accuracy and high speed, as it continues to work for long periods of time without fatigue, as well as high efficiency in information management, flexibility in response and control of emotions, unlike humans because they are not guided by emotions and feelings that may hinder the progress of work, artificial intelligence is conducted according to organized, logical and scientific thinking methods, which improves the ability to make sound decisions within a short period of time (Tuomi, 2018).

Among the most important advantages of artificial intelligence are as follows (MilanaZ & Ashta, 2021), (Cabrera, et,al, 2015), and (Makri & Azzouz, 2023):

- 1 Reduce production costs.
- 2 Achieving sustainable development in all its dimensions.
- 3 Disseminate achievements in the field of human development all over the world.
- 4 Clear growth in human potential through improving the quality of health care and education.
- 5 Reducing the time period for completing the work and tasks.



1. Symbolic representation: Its software deals with symbols to indicate available data, such as indicating temperatures or running out of fuel, similar to the way humans represent information in ordinary life .
2. Diligence: Artificial intelligence software is characterized by not relying on a specific algorithmic solution to address the problems that the individual is exposed to, as it resorts to diligence by choosing the appropriate solutions with the possibility of replacing one solution with another solution in case it is not suitable.
3. Learning Ability: Artificial intelligence is based on machine learning strategies and this talent is related to a number of human mental abilities, such as the concept of symmetry, which in turn expresses a method through which an individual applies a specific rule to all similar examples, moving from part to whole, and getting rid of useless information.
4. Different or uncertain data: This means that artificial intelligence is characterized by the ability to propose appropriate solutions to problems and issues, even if there is little data required to make decisions.
5. Modeling Human Behavior: One of the most prominent features of the field of artificial intelligence is its simulation of the methods used by humans in the face of challenges and obstacles.

Through the above, the researcher believes that artificial intelligence achieves many benefits, including tremendous speed and extreme accuracy, as it works for long periods without feeling tired or bored, in addition to being characterized by high efficiency in data management, providing health services to humans, reducing the cost of production, achieving sustainable development in all its dimensions, reducing the time spent in completing tasks and works, and providing convenient and cheap services and means of transportation.

The second requirement

2-1-7 Hidden Accounting

The concept of creative or hidden accounting, although it may seem strange or modern to some, is in fact not. This term raises many questions about the nature of creativity and the nature of accounting methods, procedures, and methods used in accounting applications. The term "hidden accounting" refers to some accounting procedures sought by the company's departments in an effort to bring about a formal (unreal) improvement either in their profitability or in their financial position, by taking advantage of the gaps in the audit methods or by taking advantage of the alternatives available in the accounting policies that the accounting standards allow the company to follow in the areas of measurement and disclosure methods used in the preparation of financial statements, which negatively affects the figures shown in those statements, whether in terms of profits or For the center, the beginnings of the use of manipulation of corporate accounting values date back to the early days of the Industrial Revolution, and the manipulation process takes place during the conduct of cost calculations, and this created the need for what is now called hidden accounting.

2.2.1 Definition of Hidden Accounting:

The term "hidden accounting" refers to companies resorting to exploiting gaps in the available accounting methods and alternatives to improve the company's image in the eyes of the beneficiaries, even if it is at the expense of the truth. It is a general term used by critics and analysts of financial markets to describe the practices and means of misleading the beneficiaries of the financial statements, the most famous of which are (Griffiths 1986, 1995), (Jameson, 1988), (Smith, 1992) and finally. . (Pijper, 1994)

Mulford & Comiskety (2002) defines occult accounting as: "some or all of the steps used to play the game of financial numbers, including the arbitrary selection of accounting principles, fraud in the financial report, and any other steps taken to manage earnings or prepare income."

and the Numbers Game. It is the term used by Levitt, 1998, the former president of the New York Stock Exchange Commission (SEC) in his speech on the manipulation of the accounting profession, through which he identified some of the most widespread accounting methods such as the Big Bath and Cookie Jar Reserves.

Hidden accounting (Naser, 1993) is also defined as: "Converting accounting financial figures from their real status to the preferred position of the authors of those figures by taking advantage of the available laws or ignoring some or both of them."

It is also defined as: a set of methods that the accountant innovates through his practical practice and experience in the accounting field, so that the figures contained in the financial statements appear in a way that shows the interests of a particular party and not the other parties that deal with the economic unit." (Al-Obaidi, 2008) is the method or practice by which accountants can use accounting rules and laws to manipulate or manipulate the numbers recorded in companies' accounts in order to achieve specific goals (Al-Mukhaizem, 2008).

Based on the above, the researcher defines hidden accounting as: a set of methods followed by the accountant to achieve the interest of management, such as the use of computers to manipulate accounting figures by seizing the



opportunity to get rid of compliance with accounting rules, measurement alternatives, and disclosure applications to transfer financial statements from what they should be to what the preparer of these statements prefers to report.

2.2.2 Objectives of Hidden Accounting:

Hidden accounting aims to make the company appear as successful and profitable as possible through accountants distorting financial facts and exploiting loopholes to take advantage of them so that companies can reach their goals (Belkaoui, 2000) such as improving the company's reputation in front of investors to attract them and obtain the necessary funds, in order for the investor to reassure the company, he needs proof of its success and current financial situation to be assured that his funds will return him profits, and companies aim to use accounting practices Hidden accounting is used to evade paying taxes by inflating their expenses to reduce profits and thus reduce the taxes imposed (Agha, 2011), and achieve personal gains by increasing profits, as well as using hidden accounting to outperform competitors in the market and in the same field, so companies manipulate their financial profits to obtain a good professional classification in the field of industry from international institutions dedicated to this field, and then sweep the market and control it. (Al-Tikriti, 2022).

2.2.3 The Importance of Hidden Accounting:

Although this accounting performance that stems from the application of hidden accounting is unethical and not welcomed by many, but for its users, they find it of utmost importance, for example (Al-Agha, 2011):

1. Attracting investors: Hidden accounting users aim to announce regular and high profits for the company and prove this by means of statements and announced statements, in addition to giving a dose of optimism to ensure a profitable future, and hide any potential defaults or risks.
2. Maintaining the level of the company: There are certain requirements that become almost imposed on companies in order for the company's name to continue in the market and investors to continue dealing with them, and companies cannot be held accountable when distributing profits according to the share of the partners in a fair way to meet what is required to continue, so the company is unable to rotate its operations, and to maintain these conditions and continuity, it resorts to the use of hidden accounting.
3. Good impression of the company's name and reputation: A company's reputation in the market can be improved by publishing misleading reports that certain goals have been achieved and the reality is hidden.

2.2.4 Hidden accounting methods

There are many hidden accounting methods that can be used by companies, and they can be summarized as follows (Al-Baroudi, 2002), (Al-Tikriti, 2022), and (Yassin, 2017):

1. Manipulation of the timing of the recognition of profits related to the sale of assets (securities and fixed assets), which leads to an impact on the profits actually made.
2. Manipulation of financial records through some financial transactions that extend for more than one year and change that they belong to the current year, or capitalize some expenses related to the current year and charge them to future years or include expenses for fictitious income for the purpose of increasing profits or reducing losses for the purpose of affecting taxable income.
3. Using the method of cleaning the financial statements by charging some expenses during the period of making changes in the structure, which extend to several years, in order to charge them in one year in order to enhance the income of the coming years.
4. Showing the lease of long-term contracts within the budget items for the purpose of withholding the cost of a new building due to the large cost of the new building.
5. Adopting equivalent estimates, especially for accounts that rely on the estimate, including estimating the useful life of fixed assets to affect the depreciation premium and thus affecting the size of profits, identifying and classifying debts to affect the loans granted to the company for the purpose of reducing the provision for doubtful debts, which leads to an increase in profits and showing them in real value, and adopting market values to evaluate commodity inventories that do not reflect the real value of this inventory in the market when following the cost or market method, whichever is lower, and manipulating the financial estimates of reserves and provisions under the flexibility of the application of accounting standards.

2.2.5 Motives for the use of hidden accounting methods:

There are many motivations for management to use hidden accounting methods, but the most important of these motives are the following (Mulford & Comiskey, 2012):

1. Positive impact on the company's reputation in the market: Hidden accounting methods are usually used to improve the financial values related to the performance of business enterprises, which, if not distorted, will reflect a negative image of the company in front of its competitors.



2. Impact on the company's share price in the financial markets: The decline in the financial values of business establishments negatively affects the prices of their shares in the financial markets in which the shares are traded, and if they remain the same, they necessarily lead to a decrease in those prices, so the use of hidden accounting methods aims to maximize these values and thus improve the share prices of those companies in the financial markets.
3. Increasing borrowing from banks: Many commercial banks use a set of credit criteria and influences in order to evaluate the performance of business establishments as a step before making the decision to grant loans to these enterprises, so these enterprises resort to using hidden accounting methods in order to improve these indicators and criteria, which will positively affect the process of making credit decisions to grant loans.
4. For the purposes of tax manipulation: Some business enterprises reduce their tax deduction margins by reducing profits and revenues and increasing expenses.
5. Improving the financial performance of the organization in order to achieve personal interests: The management of many business establishments improve the values of the enterprises they manage to reflect a positive image of their performance for personal purposes of improving the image of this department in front of the boards of directors.
6. For the purposes of professional classification: Many business establishments operating in the same sector compete to obtain an advanced classification over their competitors in the professional classification processes conducted by specialized international institutions based on financial indicators and criteria extracted from the annual, semi-annual and quarterly financial statements prepared by the business establishments, so these establishments resort to improving some of their financial values to obtain an advanced classification.

Based on the above, the researcher believes that each item of the financial statements is subject to hidden accounting practices by the preparers of financial statements (accountants), because the practitioners of hidden accounting often have high accounting capabilities that enable them to manipulate the numbers and convert them in the way they wish, and we note the role played by the audit committee and the use of artificial intelligence techniques in reducing these practices and thus providing all interested parties in the economic unit with financial data that help them in making decisions. This is done by selecting highly efficient and credible audit firms that rely on the latest audit techniques.

Third Topic

Practical side

This topic includes the analysis of the two research variables at the level of the studied sample, relying on the frequency distributions of the answers of the research sample members and the percentage thereof, up to the arithmetic mean and standard deviation for each of the paragraphs of the questionnaire, and the research relied on the five-point (Likert) scale in the sample answers, which is the arithmetic mean attributed to the maximum value of the (Likert) scale, i.e. (5) and is used to express the response rate or relative importance. Note that the standard hypothetical mean is (3)The analysis of the paragraphs mentioned in the questionnaire for the research variables will be described through the responses of the researched sample in the light of the arithmetic mean, standard deviation, coefficient of difference, and response ratios.

1.3 Questionnaire Analysis

A questionnaire form designed for the purpose of testing the research hypotheses was relied upon, and these consisted of two main axes: the first axis included artificial intelligence, and the second axis included the risks of hidden accounting, and it was used to express the sentences of the above axes using the five-point Likert scale to determine the level of each item of the measurement tool as follows:

I strongly agree	agree	neutral	I don't agree	I don't agree Strongly
5	4	3	2	1

1-2 Research Sample

The research sample was represented by the Iraqi companies listed on the Iraq Stock Exchange, with (163) employees to whom the questionnaire was distributed, and approximately (163) questionnaires were retrieved from them, and after classifying the data, it was found that there were (10) invalid questionnaires, which means that the number of valid questionnaires for analysis was (153) questionnaires, and Table (1) below shows the characteristics of the research sample.

Table 1: Characteristics of Respondents

Categories	Frequency and percentages
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More than 50 years		45-Less than 50 years old	31-Less 45 years ago	Under 30 years old		Age Group
13		67	48	25	Duplicate	
8%		45%	31%	16%	Percentage	
More than 20 years	16-20 years	11-15 years	6-10 yrs	Less than 5 years old		Job Experience
29	7	83	34	-	Duplicate	
19%	5%	54%	22%	-	Percentage	
Doctor		Master	Bachelor	Higher diploma		Educational Qualification
20		47	80	6	Duplicate	
13%		31%	52%	4%	Percentage	

Source: Prepared by the researcher through SPSS results

The information in the Demographics Table is set out below:

- Age Group:** The results show that the number of age groups among employees in accounting and auditing firms and Iraqi companies listed on the Iraq Stock Exchange indicates that there are 67 individuals in accounting and auditing firms and Iraqi companies listed on the Iraq Stock Exchange between the ages of 45 and less than 50 years old. These individuals belong to the middle age group. The results also indicate that there are 13 individuals in companies and audit firms over the age of 50. These individuals belong to the advanced age group.
- Educational Qualification:** The results show that the number of categories of educational qualification among the employees of audit firms and companies shows that there are 80 individuals in offices and companies who hold a bachelor's degree in various disciplines. They represent 52% of the total employees, these individuals are considered to have a high academic qualification and enjoy a university education. The results also showed that there are 6 employees in offices and companies who hold a high diploma in various disciplines. They represent 4% of the total employees, and these individuals are considered to have an intermediate scientific qualification, Height.
- Job Experience:** The results indicate that the number of job experience categories among employees in offices and companies shows that there are 83 individuals in audit firms and companies with 11 to 15 years of work experience. They represent 54% of the total employees. These individuals are considered to have average experience in the field. On the other hand, the results also show that there are 7 employees in offices and companies with 16 to 20 years of work experience. They represent 5% of the total employees. Highly experienced in the field.

3.3 Research Variables Measurement Tool

This measurement tool was developed based on a set of previous studies and literature that dealt with this topic, and the variables were measured as follows:

3.3.1 Independent variable: represented by artificial intelligence

3.3.2 Dependent Variable: Represented by the hidden accounting risks, and Table (2) below shows the number of paragraphs of the research variables

Table 2: Number of paragraphs of research variables

Icon	Paragraphs	Study Variables	
CRGO	10	Artificial Intelligence	Independent
PSGB	10	Hidden Accounting Risks	minion

Source: Prepared by the researcher

3.4 Apparent honesty

Apparent honesty is represented in the performance of the test in general, with regard to the quality of the vocabulary used, the way it is worded and clarified, it also deals with the description, accuracy, clarity, objectivity, and suitability of the test for its intended purpose, and apparent honesty is less important than internal and external honesty. However, it is preferable that the test has internal truthfulness that can be proven and documented.

3.5 Stability of the measuring instrument

The term "stability" refers to the accuracy, stability, and consistency of the results of measurements. It is about the degree of stability of the measuring instrument, as there are no changes when it is used twice to measure the same person or item on different occasions. It is critical that the instrument is highly reliable to ensure the reliability and consistency of the measurements used in the search. However, it should be remembered that reliability alone is not enough to achieve the effectiveness of the tool, and it is clear from the information in Table (3) that the reliability



coefficient of the AI variable measurement tool is (0.859), and the reliability factor of the tool measuring the quality of the financial statements variable is (0.827), which reflects the stability of internal management. Harmony. The variables and dimensions of the research, which contributes to enriching and consistency of these dimensions.

Table 3: Cronbach's Alpha

Artificial Intelligence	Study Variables
0.859	Cronbach's Alpha Factor
Hidden Accounting Risks	
0.827	

Source: Prepared by the researcher based on (SPSS)

3.6 Sincerity of internal consistency

Internal consistency is typically a measure based on correlations between different elements of the same test (or the same subscale within a larger test) in statistics and studies, and measures whether multiple elements proposed to measure the same overall structure produce a similar score.

Independent Variable: Artificial Intelligence: Table (4) below provides a detailed presentation to analyze the opinions and attitudes of the research sample members on the paragraphs that measure this variable and the extent of its importance from the point of view of the research sample members, through arithmetic averages, standard deviations, and importance in the level of impact, and the results appeared as follows:

Table 4: Describe the AI Variable

Order of importance	Relative importance	Standard Deviation	Arithmetic mean	Paragraph	t
2	82%	0.66	4.09	Artificial intelligence techniques in processing financial data through the inference engine work objectively and impartially to strip it of emotions and psychological tendencies	1
5	81%	0.63	4.04	The company relies on artificial intelligence tools to provide the best services in a smooth and secure manner that is better than ever before	2
6	80%	0.76	3.99	The company uses artificial intelligence tools to workflow and tasks according to its goals	3
4	81%	0.57	4.07	AI technologies are helping to reduce costs because of their .ability to replace experts	4
7	79%	0.69	3.97	AI technologies help predict stock prices and identify potential investment opportunities	5
10	77%	0.69	3.86	AI Technologies Help Executives Make Accurate Stock Market Predictions	6
1	82%	0.73	4.10	Expert systems are designed as one of the AI technologies in order to process accounting events and processes and make them free from fundamental .misrepresentations and errors	7
9	78%	0.70	3.89	Artificial intelligence technologies within the company update themselves periodically and .automatically	8



3	82%	0.66	4.08	,AI technologies help investigate classify, and analyze invoices and financial transactions to determine the extent of their .impact on profits and losses	9
8	79%	0.76	3.95	Artificial Intelligence Addresses Logical and Programmed Computational Errors	10
AI variable rate					
****	80%	0.39	4.00		

Source: Researcher preparation based on SPSS software

Table 5: Frequency and Percentages of the AI Variable

I strongly agree	agree	neutral	I don't agree	I strongly disagree	Artificial Intelligence	t
Artificial intelligence techniques in processing financial data through the inference engine work objectively and impartially to strip it of emotions and psychological tendencies						
36	100	12	5	0	Duplicate	1
23.5	65.4	7.8	3.3	0	Percentages	
The company relies on artificial intelligence tools to provide the best services in a smooth and secure manner that is better than ever before						
33	93	27	0	0	Duplicate	2
21.6	60.8	17.6	0	0	Percentages	
The company uses artificial intelligence tools to workflow and tasks according to its goals						
43	66	44	0	0	Duplicate	3
28.1	43.1	28.8	0	0	Percentages	
.AI technologies are helping to reduce costs because of their ability to replace experts						
30	103	20	0	0	Duplicate	4
19.6	67.3	13.1	0	0	Percentages	
AI technologies help predict stock prices and identify potential investment opportunities						
31	90	29	3	0	Duplicate	5
20.3	58.8	19.0	2.0	0	Percentages	
AI Technologies Help Executives Make Accurate Stock Market Predictions						
23	88	40	1	1	Duplicate	6
15.0	57.5	26.1	.7	.7	Percentages	
Expert systems are designed as one of the AI technologies in order to process accounting events and .processes and make them free from fundamental misrepresentations and errors						
46	80	24	3	0	Duplicate	7
30.1	52.3	15.7	2.0	0	Percentages	
Artificial intelligence technologies within the company update themselves periodically and .automatically						
25	91	32	5	0	Duplicate	8
16.3	59.5	20.9	3.3	0	Percentages	
AI technologies help investigate, classify, and analyze invoices and financial transactions to determine .the extent of their impact on profits and losses						
39	88	25	1	0	Duplicate	9
25.5	57.5	16.3	.7	0	Percentages	
Artificial Intelligence Addresses Logical and Programmed Computational Errors						
33	88	24	8	0	Duplicate	10
21.6	57.5	15.7	5.2	0	Percentages	

Source: Researcher preparation based on SPSS software

Through the results of the statistical description in Table (4) above, from the frequencies and ratios mentioned in Table (5) above, it is clear from the results that the seventh paragraph, which talks about the design of expert systems as



one of the artificial intelligence techniques in order to process accounting events and processes and make them free from fundamental distortions and errors, was ranked first. The arithmetic mean of this paragraph is 4.10, with a standard deviation of 0.73. This indicates that the sample members believe that artificial intelligence is being designed In order to address accounting events and processes and make them free from fundamental misrepresentations and errors. This paragraph has a relative importance ratio of 82%.

On the other hand, the sixth paragraph, which talks about AI technology assistant executives making accurate stock market predictions, ranked last. The mean of this paragraph is 3.86, with a standard deviation of 0.69. This indicates that the respondents believe that artificial intelligence techniques help executives to make accurate predictions for the securities market, but their consensus on this paragraph was less than the rest of the paragraphs, and the percentage of relative importance of this paragraph is 77%.

Dependent Variable: Hidden Accounting Risks: Table (6) below provides a detailed presentation to analyze the opinions and attitudes of the members of the research sample on the paragraphs that measure this variable and the extent of its importance from the point of view of the members of the research sample, through arithmetic averages, standard deviations, and importance in the level of impact, and the results appeared as follows:

Table 6: Description of the Hidden Accounting Risk Variable

Order of importance	Relative importance	Standard Deviation	Arithmetic mean	Paragraph	t
4	81%	0.67	4.06	Manipulation of the disclosure of restricted cash items contributes to the appearance of unreal business results	1
3	82%	0.67	4.10	Accountants resort to underestimating the provision for doubtful debts for the purpose of reducing the taxes incurred by the company	2
2	83%	0.71	4.13	Accountants are changing the accounting method of valuing long-term investments as one of the hidden accounting methods	3
8	80%	0.72	4.02	Accountants resort to overvaluing intangible assets such as trademarks	4
1	83%	0.76	4.14	Accountants use the method of transferring current expenses to previous or subsequent accounting periods as one of the hidden accounting methods and for the purpose of .reducing profit and thus evading taxes	5
5	81%	0.72	4.04	Accountants use current and next year's earnings, as proof of expenses or income (paid/received) in advance in the current period's income statement for the purpose of tax evasion	6
9	80%	0.74		Accountants use the transfer of expenses incurred by the bank in the .future to the current financial periods	7
10	80%	0.76		Accountants use the transfer of current revenue to subsequent financial periods as one of the hidden accounting methods and for the purpose of tax evasion	8
7	81%	0.71		Accountants use hidden accounting methods in the income statement for the purpose of reducing taxes on a .company's bottom line profit	9



6	81%	0.58		Accountants use the change in the value of operating cash flows to partially evade paying taxes	10
Variable Rate of Financial Statements Quality					
****	81%	0.47	4.05		

Source: Researcher preparation based on SPSS software

Table 7: Frequencies and Percentages of the Quality Dimension of Financial Statements

I strongly agree	agree	neutral	I don't agree	I strongly disagree	Hidden Accounting Risks	t
Manipulation of the disclosure of restricted cash items contributes to the appearance of unreal business results						
39	84	30	0	0	Duplicate	1
25.5	54.9	19.6	0	0	Percentages	
Accountants resort to underestimating the provision for doubtful debts for the purpose of reducing the taxes incurred by the company						
42	84	27	0	0	Duplicate	2
27.5	54.9	17.6	0	0	Percentages	
Accountants are changing the accounting method of valuing long-term investments as one of the hidden accounting methods						
48	79	24	2	0	Duplicate	3
31.4	51.6	15.7	1.3	0	Percentages	
Accountants resort to overvaluing intangible assets such as trademarks as one of the hidden accounting methods						
39	80	32	2	0	Duplicate	4
25.5	52.3	20.9	1.3	0	Percentages	
Accountants use the method of transferring current expenses to previous or subsequent accounting periods as one of the hidden accounting methods and for the purpose of reducing profit and thus evading taxes						
53	72	26	1	1	Duplicate	5
34.6	47.1	17.0	.7	.7	Percentages	
Accountants and auditors use the current and next year's profits, such as proof of expenses or revenues (paid/received) in advance in the current period's income statement for the purpose of tax evasion						
40	82	28	3	0	Duplicate	6
26.1	53.6	18.3	2.0	0	Percentages	
Accountants use the transfer of future expenses of the bank to the current financial periods						
37	82	30	4	0	Duplicate	7
24.2	53.6	19.6	2.6	0	Percentages	
Accountants use the transfer of current revenue to subsequent financial periods as one of the hidden accounting methods and for the purpose of tax evasion						
37	80	33	2	1	Duplicate	8
24.2	52.3	21.6	1.3	.7	Percentages	
Accountants use hidden accounting methods in the income statement for the purpose of reducing taxes on a company's bottom line profit						
38	84	30	0	1	Duplicate	9
24.8	54.9	19.6	0	.7	Percentages	
Accountants use the change in the value of operating cash flows to partially evade paying taxes						
29	101	23	0	0	Duplicate	10
19.0	66.0	15.0	0	0	Percentages	

Source: Researcher preparation based on SPSS software

Through the results of the statistical description in Table (6) above, from the frequencies and ratios mentioned in Table (7) above, it is clear that the fifth paragraph, which talks about the accountants using the method of transferring current



expenses to previous or subsequent accounting periods as one of the hidden accounting methods and for the purpose of reducing profit and thus evading taxes, was ranked first. The mean of this paragraph is 4.14, with a standard deviation of 0.76. This indicates that the sample members believe that when accountants use the method of transferring current expenses to previous or subsequent accounting periods, it will lead to a reduction in profit and thus tax evasion, and this paragraph has a relative importance of 83%.

On the other hand, the eighth paragraph, which talks about the use by accountants of the transfer of current revenues to subsequent financial periods as one of the hidden accounting methods and for the purpose of tax evasion, ranked last. The mean of this paragraph is 3.98, with a standard deviation of 0.76. This indicates that the members of the sample believe that the use of accountants to transfer current revenues to later financial periods is for the purpose of tax evasion, and it is considered one of the hidden accounting methods, but their consensus on this paragraph was less than the rest of the paragraphs, and the relative importance of this paragraph is 80%.

In general, it is clear that corporate auditors believe that the use of AI techniques in the audit process reduces the risks of hidden accounting, and the company's financial statements are free of bias and through which the company's management provides information about its resources and obligations to help investors, suppliers, lenders, and other parties in making their decisions.

3.7 Hypothesis testing and discussion of results

Correlation hypothesis

Sub-hypothesis 1: There is a statistically significant correlation between AI and hidden accounting risks.

Table 8: Correlation Matrix between Artificial Intelligence and Hidden Accounting Risk

Hidden Accounting Risks		Artificial Intelligence
.705**0	Pearson correlation coefficient	
.0000	Moral Value	
50	Sample size	
**. Correlation is significant at the 0.01 level (2-tailed).		

Source: Researcher preparation based on SPSS software

The information in Table (8) above indicates that there is a strong correlation between artificial intelligence and hidden accounting risks, and this strength was estimated at (0.705), which means that the research sample is interested in the importance of the research topic related to (artificial intelligence and hidden accounting risks). Thus, the research hypothesis that there is a statistically significant correlation between artificial intelligence and hidden accounting risks has been proven.

Impact hypotheses

Second sub-hypothesis: There is a statistically significant impact relationship between artificial intelligence and hidden accounting risks

Table 9: Regression Equation for the Impact of Artificial Intelligence on Reducing the Risks of Hidden Accounting

Hidden Accounting Risks							Variable
MRT Corrector R2	Determination coefficient R2	Itself.	Fvalue	Itself.	Tvalue	Regression equation β	
0.301	0.305	0.000	66.382	0.000	8.148	0.670	Artificial Intelligence

Source: Researcher preparation based on SPSS software

From the information mentioned in Table (9) above, we can see that the value of the regression equation ($\beta=0.670$) of AI technologies has an effect on reducing the risks of hidden accounting. The value of T for this equation was calculated and reached (8.148), which contributes to the explanation of the factors and issues that affect the reduction of the risks of hidden accounting by relying on artificial intelligence techniques by ($R^2=0.305$)., meaning that 30.5% of the variance in hidden accounting risk can be explained by AI technologies. The calculated F value was calculated as (66.382), indicating that there is a standard effect of AI technologies in reducing of the risks of hidden accounting, and thus the research hypothesis that (there is a statistically significant effect relationship between artificial intelligence and hidden accounting risks) has been proven.

The Fourth Topic



CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

The research aimed to study the impact of the ability of artificial intelligence technology in reducing the risks of hidden accounting, and the researcher reached the following results through the theoretical and field study:

1. There is a significant correlation between the use of artificial intelligence and hidden accounting risks, which confirms the important role of the use of AI techniques in auditing as an effective means of reducing the risks of hidden accounting.
2. The existence of a statistically significant impact relationship between artificial intelligence and hidden accounting risks.
3. The impact of the rapid development and progress in information and communication technology and digital transformation on the accounting profession One of the areas most affected by it is the hidden accounting practices and the approaches to their discovery and reduction, which may be called traditional, as these practices have become more advanced and sophisticated and characterized by increasing, complexity and diversity, due to the exploitation of technological technologies by practitioners. Among them is the existence of a huge amount of financial transactions and their complexity
4. Traditional accounting tools are one of the means that can contribute to the discovery and reduction of hidden accounting practices that have become less effective, and are no longer sufficient on their own to combat these evolving practices, and often fail to detect and reduce them, which required the development of modern tools and means and increase the effectiveness of their role by integrating them together, and supporting this integration through advanced technological technologies, and artificial intelligence technology as one of the most important developments in information technology can contribute to the development and improvement of the effectiveness of the accounting role, and thus It can contribute to improving the effectiveness of the integrated role of accounting with artificial intelligence in companies in this field.
5. In light of these developments, companies have become obliged to adapt and keep pace with these recent developments through the use of information technology to benefit from its capabilities and advantages, as it contributes to developing and improving the effectiveness of the role of accountants and auditors and facilitating their tasks.

4.2 Recommendations

In light of the results communicated, the researcher recommends the following:

1. The need to benefit from the capabilities and characteristics of artificial intelligence technology in the field of accounting and auditing, with the need to train and qualify employees to enable them to keep pace with contemporary changes in the modern environment.
2. The interest of academic and professional institutions in the scientific and practical qualification of the accountant and increasing his experience and abilities to deal with modern technology and benefit from it to perform their tasks efficiently and effectively.
3. The need to activate corporate accounting in a way that supports corporate governance as an accounting mechanism, or the formation of audit committees should be dominated by the presence of competent accountants, to detect fraud in financial statements and reduce hidden accounting practices.
4. The need to follow up with the Securities and Exchange Commission to activate the application of corporate governance rules, and to set the necessary and strict controls to ensure their implementation.
5. Today's situation requires the introduction of special legislation to frame all investments in the digitization sector, of which artificial intelligence is at the highest level.
6. Recent developments in AI and its prospects require an awareness of the limits and limitations needed to regulate its applications to ensure reasonable and controlled use. In this context, we must ensure not only ethical monitoring in guiding the design, manufacture and use of AI technologies, but also ethical monitoring of the behavior of these artificial entities.
7. Since artificial intelligence has become a necessity for the development of financial and accounting systems, economic and accounting laws must be adapted to it to secure databases and protect their systems from the risk of hacking and hacking on the one hand, and to achieve efficiency and effectiveness on the other hand.

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