

RESEARCH ARTICLE

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THE ROLE OF ARTIFICIAL INTELLIGENCE TECHNIQUES IN IMPROVING THE ELECTRONIC ACCOUNTING DISCLOSURE PROCESS

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Abstract

The research aims to study artificial intelligence techniques and the extent of their impact on improving the efficiency and effectiveness of electronic accounting disclosure for financial reports. Therefore, the first section dealt with the concept of electronic disclosure, and dealt with the opposing arguments that posed a major challenge to electronic accounting disclosure for financial reports in business companies, in addition to the supporting arguments that agree With the advantages resulting from the application of electronic disclosure, whether achieved by the applying company or users of information published on the Internet, it also addressed the factors affecting the efficiency and effectiveness of electronic accounting disclosure. The second section, dealt with identifying the concept of artificial intelligence and its techniques, the extent of their application in accounting, and the expected impact of applications of intelligence techniques. Artificial intelligence in the future of business companies, which in turn affected the improvement of the efficiency and effectiveness of electronic accounting disclosure for financial reports. The field study proved that the application of artificial intelligence techniques has an impact in improving the efficiency and effectiveness of electronic accounting disclosure, as the survey list was used as a means of collecting primary data, which was distributed to There are only two categories: accountants and auditors in companies listed on the stock exchange.

Keywords Artificial intelligence, business companies, financial reports.

INTRODUCTION

The research problem

1 What is electronic accounting disclosure and the advantages it achieves when applied in business companies?

2 What risks and challenges affect the electronic accounting disclosure process for financial reports?

3 What are artificial intelligence techniques? What is the expected impact of its application in business companies?

the importance of the study

The importance of the research stems from the importance of artificial intelligence, the positives achieved by artificial intelligence techniques, and

the importance of its application in business companies, to benefit from it in improving the electronic accounting disclosure process for financial reports and making it more transparent and beneficial to the beneficiaries.

goal of the study

To learn about artificial intelligence techniques and know the expected impact of their application on companies.

Explaining the role of artificial intelligence techniques in improving the electronic accounting disclosure process for financial reports.

the hypothesis of the study

The main research hypothesis states: **“The use of artificial intelligence techniques based on activities can help the economic unit improve the electronic accounting disclosure process.”**

Artificial intelligence techniques and their role in accounting disclosure

The concept of electronic accounting disclosure:

There are many concepts and terminology of disclosure This is due to the numerous studies that have dealt with the method of presenting accounting disclosure, due to its strong prevalence in major economies and its impact in increasing the transparency of accounting information provided to related parties. This method is based on the Internet by publishing and displaying the information on the website. For companies. The concept of electronic accounting disclosure for financial reports is clear in that it is: companies establishing one or more websites on the international information network to distribute and publish financial and non-financial information and displaying annual and interim financial reports and performance reports using modern technological tools and means for the purpose of making them available immediately

and appropriately. As well as updating information at any time, which achieves trust and transparency and thus reduces the state of information asymmetry between different parties, satisfies multiple categories of investors at home and abroad, and helps them make rational economic decisions.

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Arguments opposing and supporting electronic accounting disclosure:

Many opposing arguments have emerged that confront disclosure Electronic, which is represented by the risks that affect the efficiency and effectiveness of this disclosure, and these risks began to reduce users' confidence in the reliability of the information and the ability to rely on it, as a group of risks related to electronic systems and websites on the Internet emerged, represented by the risk of poor design, which is considered one of the technical errors that may occur. When designing websites for companies, it threatens the security and integrity of information, and it may be It is not intentional, but it represents a weakness facing websites. Likewise, the danger of viruses and the danger of Internet hackers is one of the biggest problems that companies face, as they are

people trying to access any device or network specific to a certain field of research using programs specialized in decoding codes and breaking passwords and security barriers. Discovering the strengths and weaknesses of the device or information network to which we are connected, to manipulate and distort the information in line with their benefits, which harms the company or the relationship between the company and its customers, (2) which enables them to penetrate the company's systems without leaving any trace, and their crime may be committed without being discovered. There are also risks related to the privacy of customer information, financial accounts, and emails, as the confidentiality of these accounts and messages must be maintained and ensured that no one can view them except the account holders.

The impact of artificial intelligence technologies in improving the efficiency and effectiveness of electronic accounting disclosure:

Artificial intelligence is no longer seen as a means of automating operations to increase production efficiency, but rather an emerging technology that contributes to overcoming challenges and local and global competition, and plays a major role by anticipating potential scenarios and future crises, which leads to a radical transformation in the business models of projects, and from here the importance of technologies has emerged. Artificial intelligence is a major driving force for enhancing organizational and competitive performance. Therefore, workers' companies have benefited in one way or another from the applications of artificial intelligence techniques, as we find in the field of globalization the interconnectedness occurring in the world can be used as an advantage by business companies, as globalization requires a common approach to communication, which has become possible through the use of artificial

intelligence techniques for language. Natural and processed, which help companies penetrate more markets with products designed according to the needs of Customers, and provide appropriate content to them, so artificial intelligence technologies contribute to uniting the world by creating artificial intelligence technology. It also helps in reducing business costs, as companies work to benefit from artificial intelligence at the front end to facilitate the process of identifying and authenticating customers, carrying out the work of direct employees through chatbots and voice assistants, and deepening customer relationships. Artificial intelligence is also applied within middle office functions to detect and prevent... Payment fraud and improving the anti-money laundering process. Technologies play a pivotal role in creating a more predictable and less risky work environment, through the use of a set of complex algorithms that enable them to deal with a large amount of huge and disparate data and process them in record time to predict the financial and competitive conditions of projects, as this feature supports their efforts in detecting opportunities. available and potential future risks, which require immediate decision-making. Business companies use artificial intelligence techniques to improve investment decisions by using their smart systems to help compare investment alternatives and available opportunities to help make investment decisions, as many financial services companies offer automated advisors (robot advisors) that enable them to help their clients manage their money properly. Better, guiding making investment decisions. It also automates business processes and plays an important role in achieving competitive advantage for companies through live automation

networks Nervousness Synthetic: Although mon that networks Nervousness Synthetic It has been around for decades, it has not been implemented in a widespread manner for a long time His forte

My palace Relatively speaking, it is Alluit powers made networks Neuralgia Synthetic is more malleable Application on a week- to-day basis Increasing computing power and availability

Artificial intelligence techniques: The role of artificial intelligence is vital in accelerating achievement and increasing the pace of production through its ability to select the best available options and respond to changes with flexibility and high speed, as well as the diversity of applications and the efficiency of programs so that it enables the completion of the tasks assigned to it with greater efficiency than no human sometimes, and that Because of its characteristics and the goals it achieves, perhaps this is what prompts most countries to launch An integrated strategy to transform artificial intelligence into a tangible reality. What are the characteristics of artificial intelligence? What are the most prominent? Goals? This is what we will explain in the following two sections

first section: Characteristics of artificial intelligence techniques: Artificial intelligence has many advantages, most prominent in its ability to think, imagine, create, understand, and perceive visual matters, such as recognizing sound and image fingerprints and acquiring and applying knowledge, through analyzing data that we have previously combined, as well as Their ability to use trial and error exploration Various matters, and using old experiences and employing them in new situations. It also can deal with difficult and complex cases and ambiguous situations in the absence of information, as a solution to (1) the issues presented. In addition to that, artificial intelligence techniques have several characteristics, and perhaps the most prominent of these characteristics are:

experimental research:

What is meant is that artificial intelligence techniques do not use sequential or sequential

steps to find the correct solution. Rather, they choose a specific solution method that is appropriate, taking into account that they retain the possibility of changing that method if it does not appear that the first option leads to a quick solution. That is, their focus is on Achieving the goal

Representing knowledge:

artificial intelligence techniques use a special structure to describe knowledge, which includes a set of facts, the relationships between them, and the rules that connect these relationships, which ultimately form the knowledge base, which provides the largest amount of information that the technologies need to find a solution to a problem.

Inference:

It is the event or process of arriving at a conclusion based on abstract techniques known before so that new facts are determined from old ones, and inference is recorded. Logically on my part, inference is Deductive And inference is Inductive, the so-called programming learning framework

Dealing with missing information:

This is done by giving these techniques appropriate solutions if the given data is incomplete or uncertain. This does not mean that they provide incorrect or correct solutions in all cases. It is sufficient that they provide acceptable solutions that are appropriate to the data available to them. The conclusions The less realistic approach given is the result of a lack of integration of information, and these techniques cannot then be considered insufficient to perform a role

Learnable. You learn:

Artificial intelligence techniques relate to programs that learn, from previous experiences and practices, by observing or taking advantage of some information, to be able to improve their

performance, and this ability is linked to The ability of techniques to deduce conditions Similar and selective to the problem presented, and then neglecting some redundant information. It is worth noting that, despite the capabilities and capabilities that artificial intelligence technologies display on a large scale, this does not mean that they do not have some defects, nor do they mean technical defects. For example, these technologies It is not aware of human values and disagreements, and this is because they only implement what it was designed for. It is also unable to develop or change its system on its own, even when it receives the same data every time. Perhaps the basic defect appears in that the process of designing, programming, implementing, and even maintaining such technologies is expensive. very

Objectives of artificial intelligence techniques:

Artificial intelligence generally aims to understand the nature of human intelligence through the work of computer programs capable of simulating human behavior characterized by intelligence. This means the ability of computer programs to solve a problem or make a decision on a topic, as the program itself finds the method that should be followed to solve the problem. Or to decide by referring to the many diverse inferential operations that the program has received, this is a very important turning point in that it goes beyond what is known as information technology, whose inferential operations are carried out by Mediation Humans, and the most important reasons for using computers are limited to what is done at high speed. Also, the purpose of artificial intelligence lies in its ability to interpret the situation or texts at times. It is related to constructive activity and the function of the situation and goal by solving problems related to design problems, planning problems, and problems. Diagnosis Based on the above, it becomes clear that artificial intelligence has several goals, the most important of which is

that artificial intelligence contributes to preserving accumulated human experiences and transferring them to smart machines. Because of artificial intelligence, humans can use human language in dealing with machines instead of computer programming languages, which makes machines and their use accessible to everyone. The opinions of society, even those with special needs, after dealing with advanced machines were the preserve of those with experience and specialists in the field of technology and programming. Artificial intelligence is used to improve safety in various fields such as transportation and health care. Artificial intelligence can help reduce costs By automating tasks and reducing the need for human intervention, this can benefit companies and organizations in various industries Artificial intelligence technologies and various systems are a unique way to work in all aspects and within all time limits. If systems are available that can respond quickly and this cycle can accelerate the pace of the operations required of them in general, the more business efficiency required from smart systems, the more This causes instability in its operations, especially if it exceeds the human ability to understand the situation that is occurring controlling her

Definition of accounting disclosure:

The accounting profession has established the principle of full disclosure, which requires a financial report on any material facts sufficient to have an impact On the personal judgment of the informed reader. In some cases, the benefits of disclosure may be apparent, but its costs are uncertain, while in other cases, the costs of disclosure may be certain, but its benefits are not apparent. One of the problems associated with this field is that the accounting profession is still in the stage of developing guidelines that decide whether a particular transaction should not be disclosed or not, and what form this should take, but different

users have declared that they request different information, and there is increasing difficulty. In developing disclosure policies that meet their various objectives. The concepts of accounting disclosure have varied as a result of the conflicting views of stakeholders regarding the purpose of disclosure. We can define disclosure by the following definitions: - (Muhammad,

1- Accounting disclosure is the process of displaying and presenting information about the economic unit to parties that have current or future interests in that economic unit.

2 - The American Society of Accountants has clarified that accounting reports must disclose what is necessary to make them not misleading, without deviating from the assumption of the average investor. The term "full disclosure" has appeared, as this concept requires the preparation of periodic financial statements addressed to the general public in a manner that accurately reflects events and Economic indicators that affected the unit during the session to benefit from them in making decisions.

METHODS

There is a set of methods and means used to express accounting disclosure and the nature and quality of accounting information, as well as its relative importance. The sixth accounting rule issued by the Accounting and Auditing Standards and Rules Board in Iraq has been identified, which relates to the disclosure of information related to financial statements and accounting policies. Which was approved by the Council at its session held on November 9, 1995 AD, as a set of means of disclosure (The Iraqi Accounting Rule, 1995: 29-34), including the following :

1 - Statement of financial position (budget)

2 - Income statement (final accounts).

3 - Statement of changes in equity (statement of retained earnings).

4 - Cash flow statement (financial flow statement). In addition to the basic financial statements mentioned above, the scope of financial reports may expand to include other quantitative and descriptive information that is disclosed.

Types of Accounting Disclosure:

There are two types of environmental accounting disclosure:

1 - Mandatory disclosure: This type of disclosure requires the necessity of clarifying information about the environmental performance related to the organization's activity regarding pollution risks, and these procedures are considered Compliance with the effects of a set of environmental laws and legislation specified by governmental bodies or professional organizations. The organization is committed to working to protect or sustain the environment.

2 - Voluntary disclosure: This is done by the behavior of the administration, which deems it necessary to withhold some information related to the organization's activity to ensure its protection in the future.

3: Cognitive or educational disclosure: Indicates term Knowledge disclosure leads to the trend towards increasing the volume of information

Disclosed information and focus on information that requires a greater degree of experience in its use In addition to the glossy colors Suitability is characterized by a relatively high degree of judgment, including financial forecasts and information Sectoral information aims to provide useful information for decision-making purposes The trend is more clear after the Financial Accounting Standards Board (FASB) affirmed, in its framework, the criterion of the usefulness of information in decision-making and its suitability in addition to its reliability.

Factors affecting disclosure: Several factors could have an impact on the degree of eloquence

Financial reports delve deeply into the community environment in which they are prepared Financial reports, and the following are the factors affecting disclosure

1 - Environmental factors: There is a difference in the preparation of financial reports from one country to another due to hand The difference is for economic, social, and political reasons (Matar). And Al-Suwaiti, 2008: 361.)

2 - Factors related to the economic unit: they are the size of the project, the number of shareholders, external audit (auditor), and the extent of commitment Accounting concepts and rules Registration of the company in the Iraqi Stock Exchange, as it is one of the indicators of the Iraqi temporary market law Securities for the year 2004.)

3 - Factors related to financial transactions: The degree of disclosure in reports is affected by the information that is disclosed and the appropriateness (Gody and Andrew, 2002:4) . Information

4 Laws and legislation: They have an important role in the field of disclosure. Since its inception in 1988, the Accounting and Regulatory Standards Board in Iraq has issued fourteen rules, including two rules that delve deeper into the principle of disclosure.

Disclosure requirements:

There are several from Ingredients Disclosure Accountant And it has been found F Disclosure in general Based on setting all or Using the following main ingredients:

A- The entity that uses the data and information: - The entities that benefit from and use the accounting information and the disclosed data can be divided into internal entities. The discloser is the economic unit or entity outside the economic unit

B - The purpose behind using data and information: - The purpose behind using data and information Disclosure e and presented by m information Suitable for serving the common needs of users of financial statements for decision-making Request circulars - with the establishment, so it is necessary There should be a close relationship between the data and information disclosed.

C- What is the quality of data and information: There are Reports Finance For sulfur Companies And banks are comprehensive Even if F Some of them It is characterized by generality Also, it generally depends Do it Due to diverse data Information And tables and illustrative charts.

D- How to deliver information And data to Beneficiaries: - Information is delivered Accounting For users As for Directly through bulletins Periodicity And reports Annual Published Through the unit Economic or in a way not directly On the way to the site Email For the company

H - The timing of the disclosure of A.N Data: It is self-evident that the availability of information at the appropriate time will be of great benefit to the user and the beneficiary of it. Delaying it may not give any benefit to her or him at least appreciation It will decrease and decrease Benefit and practicality, the timing of disclosure is considered one of the important necessities that must be paid attention to. Divinely.

Disclosure requirements:

1- Accounting policies: Financial statement items are measured by applying ... Policies Accounting maybe You close a file Facility to Other, generally accepted accounting principles Includes Policies Accounting methods Different And it has I explained International accounting standards acknowledge this fact by saying that It is considered Use policies Accounting Different in

fields Multiple Of the factors that lead to. for me difficulty Explanation Lists Finance.

2- Important parties and deals: He should Include clarifications The complement Lists Finance on A description of the deals concluded between the facility and other parties, as well as the relationships between the public Beef Enterprise and external parties Such as the relationship between the holding company and the subsidiary company.

3- Doubts about persistence Enterprise: is being prepared Lists Finance on Basis continuation The facility, Wano Astray Absent any information and forecast It failed The project or non-continuation The project or There are doubts about the continuation of the project

4- Commitments The inevitable: It represents obligations Surrounds With it a lot from Not sure, though Regards Its occurrence or An amount is usually damaged as a result of lawsuits filed against the facility or disputes with other parties, which overlooking b Or contain some " Amounts in the future " upon settlement of the dispute

An introductory overview of Al Barakiya Cement Factory:

In the practical application aspect, it is required that there be a research sample, through which the most important things that happen from the use of the internal control mechanism and system and the internal audit entity are identified, and their effectiveness rate in reducing financial performance risks is clarified. Of course, it can reflect and embody the research on the other samples represented. In the economic unit in general, therefore, the sample represented by Al-Barakiya Cement Factory in Najaf Al-Ashraf was chosen.

Descriptive statistics for the study variables:

In this section, the data for the results of the study were presented and clarified by using a

questionnaire form that was obtained from the economic unit under study, which includes managers working in the unit and the rest of its employees and department heads, in addition to employees working in the internal control department, the internal audit department and human resources. (60) questionnaires were distributed, and (55) questionnaires were retrieved, suitable for use and analysis, using a five-point Likert scale.

Measuring the reliability and validity of the questionnaire:

Barakiya Cement Factory's work and the risks to which it is likely to be exposed, several tests were conducted on the questionnaire to ensure its reliability and validity, including:

Measuring face validity:

Apparent validity is considered one of the most important tests to ensure the ability of the form to measure what it was designed for. The form was presented to a different group of experts according to the appropriate specializations after it was designed, to show their opinion about the correctness of the expression of activities on the items being measured, and the level of Suitability of the answer scale.

Measuring stability (self-consistency):

In this study, the reliability coefficient Cronbach's Alpha was used to measure the extent of internal consistency of the questionnaire's activities, as the alpha value ranges between (0-1), but in terms of the acceptable statistical value of the alpha coefficient (0.5) or more, to ensure that the reliability of the scale is good. This coefficient was calculated for the other enabling and guiding procedures of the form.

Statistical analysis and hypothesis testing:

This study deals with the statistical analysis of the data for the research sample and testing the

related statistical hypothesis, which was formulated to determine the effect of artificial intelligence (the independent variable) on the quality of external auditing (the dependent variable), which was tested through the use of the (SPSS) program using: regression coefficient, analysis of variance, analysis Transactions.

To know the final decision on the hypothesis, which states: The use of artificial intelligence techniques based on activities can help the economic unit improve the electronic accounting disclosure process. Through the results of Table

(1), we notice that the size of the correlation between the independent variable (artificial intelligence techniques) and the dependent variable (accounting disclosure) is (9%), and this is an indication of the strength of the correlation between them, as it is a weak correlation. It is noted in the same table that the coefficient of determination reached (0.8%), meaning that the percentage of artificial intelligence interpretation is based on activities Raising the level of electronic accounting disclosure is somewhat weak, and the remaining percentage is due to other factors.

Table 1: Model summary

Model summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.090 ^a	.008	-.001	.27585

a. Predictors: (Constant), Y

Source: Prepared by the researcher based on the SPSS program.

The research data was tested through an analysis of variance tool, and according to what table (2) shows, the hypothesis is accepted because of the value of (Sig<0.05), that is, there is a significant

influence relationship. Artificial intelligence techniques based on activities and raising the level of electronic accounting disclosure for the economic unit.

Table 2: Analysis of Variance

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.067	1	.067	.878	.351 ^b
	Residual	8.218	108	.076		
	Total	8.285	109			

a. Dependent Variable: W

b. Predictors: (Constant), Y

Source: Prepared by the researcher based on the SPSS program.

The regression line equation for the effect of the independent variable on the dependent variable can be written based on Table (3) as follows:

Table 3: Analysis of coefficients

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	3.414	.531		6.425	.000
	Y	.120	.128	.090	.937	.351

a. Dependent Variable: W

Source: Prepared by the researcher based on the SPSS program.

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