

THE ROLE OF ARTIFICIAL INTELLIGENCE TECHNIQUES IN ACHIEVING AUDIT QUALITY

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ABSTRACT

This research aims to measure the role of artificial intelligence impact on the auditing profession where artificial intelligence has become serving society in all areas, and dealing with complex auditing processes, improving auditing performance, and enhancing the capabilities and competence of practitioners in the profession of auditing, this research discusses the impact of using artificial intelligence on improving the quality of audit professional performance, the impact on increasing the ability to perform complex auditing process and the impact on improving the efficiency of audit.

The sample of this research is represented by a group of auditors in the State of Palestine, where the distribution of 135 survey forms to a group of auditors in the field of auditing. A number of 118 questionnaires were received. After sorting them, it was found that the number of valid forms reached 104.

The field study concludes that there is a significant and positive relationship between using artificial intelligence and improving the quality of audit professional performance where R^2 87.1%, there is a significant and positive relationship between using artificial intelligence and increasing the ability to perform complex auditing process where R^2 91.4% and there is a significant and positive relationship between using artificial intelligence and improving the efficiency of audit where R^2 87.4%.

Keywords: Artificial Intelligence, Audit Quality, American Accounting Association, Complex Auditing Process, Certified Public Accountant.

INTRODUCTION

Artificial intelligence (AI), is the intelligence that man creates or manufactures in a machine or computer and it is a part of computer science that aims to simulate a cognitive ability to replace humans in performing appropriate functions in a specific context that require intelligence.

However by the late 1990s, the profession had been compelled to computerize its operations as a way of promoting efficiency, with standing compellation and reducing expenses (Manson et al., 2001).

This technology is rapidly evolving, and will also be important for auditors to understand the capabilities of (AI) and how it affects the audit decision-making processes, by leveraging artificial intelligence, auditors can capture and ingest greater amounts of information, and analyze a broader range of data formats. Moreover, they can perform these tasks faster than ever before, in turn, auditors can provide more insights to clients and increase stakeholder return on auditservices (Anbar & Mohammed, 2016).

Although the use of AI in the auditing profession is still in early stages of development, which is considered an alternative that helps in the continuity of business completion, auditing profession is at the core of the jobs most affected by artificial intelligence, it is expected that, this will increase the ability to complete complex auditing work, improve and develop the quality of professional performance of auditors, and improve the proficiency of practitioners, as the new methodologies adopt the concept of risks which includes a strategic dimension regarding the ability of the economic unit to achieve its

objectives, which requires auditors to rely on AI to identify the factors that improving the efficiency, and effectiveness of the external audit process, and accomplishing audit tasks in the least time and lower cost, which contributes to improving the efficiency of the quality of audit services and reducing audit risks.

In general, what can be expected from (AI) for auditing is a composite of functionalities drawn from many disciplines and applications that can perform complementarities of audit functions of many types increasing the competencies and effectiveness of the assurance function (Qin, 2014).

Research idea can be formulated with the following main question:

1. How are using artificial intelligence impact on the quality of auditing profession?

The main question is divided into the following sub-questions:

2. How are using artificial intelligence impact on improving the quality of performance the Audit process?
3. How are using artificial intelligence impact on increasing the ability to perform complex auditing process?
4. How are using artificial intelligence impact on improving the efficiency of audit process?

Research Hypotheses

From the exhaustive review of research problem above, it is expected that artificial intelligence and auditing be positively related. The following hypotheses are derived to provide direction for the study:

H1: There will be a significant and positive relationship between of using artificial intelligence and improving the quality of audit professional performance.

H2: There will be a significant and positive relationship between of using artificial intelligence and increasing the ability to perform complex auditing process.

H3: There will be a significant and positive relationship between of using artificial intelligence and improving the efficiency of audit.

Importance of the Study

The importance of this study is that its subject is based on artificial intelligence, and the dimensions of artificial intelligence are important, and measuring the impact of artificial intelligence on the audit profession, contributes to community service in all areas, and artificial intelligence has become necessary and indispensable in dealing with simple and complex audits and improving performance The audit profession, and then developing and enhancing the capabilities and competencies of practitioners in the audit profession, and the audit firms sector is one of the important sectors in giving confidence and credibility to the financial statements, which requires the presence of factors that make audit firms seek to provide services of higher quality than other companies through the use of intelligence techniques. This is as a tool to achieve audit quality, which will allow researchers and specialists to benefit in the field of artificial intelligence through the results of the current study and the recommendations that it will present.

Objectives of the Study

This study mainly aims to provide a scientific rooting by recognizing the impact of

using of artificial intelligence on the quality of the audit profession, and to achieve this basic goal the following sub-objectives must be achieved (West, 2018):

The main Objective:

Clarify and explore the role of using artificial intelligence impact on the quality of auditing profession

The main Objective is divided into the following sub- objectives:

1. Clarify and explore the role of using artificial intelligence impact on improving the quality of performance the Audit process.
2. Clarify and explore the role of using artificial intelligence impact on increasing the ability to perform complex auditing process.
3. Clarify and explore the role of using artificial intelligence impact on improving the efficiency of audit process.

Research Methodology and Procedures

The research aims to examine the relationship between the artificial intelligence and auditing quality, because all is such a new and emerging issue in the auditing profession, the methodology used in this research is an extensive review of the existing literature on (AI). This review of the existing literature is intended to provide insights into the origins and development of (AI), how (AI) functions, and concrete examples of certain (AI) tools that possess the potential to affect the auditing profession, determining the potential impact of (AI) on the auditing profession requires gaining an understanding of how these specific (AI) tools work and explain how artificial intelligence has become indispensable in dealing with complex auditing processes and improving auditing performance, developing, and enhancing the capabilities and competence of practitioners in the profession of auditing, The study collected the data through research tools from previous research papers, dissertations, letters, arabic, and foreign books from the databases, specialized periodicals, and related issued standards that target the subject of artificial intelligence and audit quality. In addition the primary data sources represented by the study tool (questionnaire), which was designed to identify the opinions of the study sample with regard to the influence of artificial intelligence to enhance audit quality (Oldhouser, 2016).

Study's Overall Structure

The research will be divided into five sections, the first section explains the introduction: It includes a research overview, the problem, the aims, the objectives, the research hypotheses, and the research's structure explanation. The second section will present the literature review relevant to the research; it provides a critical literature review previously published in highly ranked academic journals, summarizes it coherently and rationally, and identifies gaps. The third section will deal with research methods and methodology; it will present the research Activity, research strategy, research approach, research community, research sample, research boundaries, analytical methods, and ethical considerations. The fourth section will contain the results. The study data analysis's procedure and the hypothesis testing methods will appear and will show all results supported by tables and figures. Finally, the fifth section will end the research with a conclusion; that summarizes the most important discussions in the research, the research study's limitations, and future research recommendations.

Theoretical Framework of the Study: Artificial Intelligence (AI)

(AI) investments by firms in all sectors have skyrocketed in recent and have been associated with increased firm sales and market value. However, the evidence on whether (AI) can help make firms more productive remains mixed. Providing compelling empirical evidence of (AI's) impact on firms' product quality and efficiency is challenging for two reasons. First, there is a dearth of firm-level data necessary to quantify (AI) adoption in individual firms. Second, occupations differ in the extent to which they can be substituted or complemented by (AI) algorithms, indicating that AI's effects may concentrate in specific industries, with muted or null effects overall. We circumvent these challenges by bringing together two key elements: (1) a large proprietary dataset of employee resumes, which allows us to capture actual employment of (AI) workers by individual firms; and (2) a focus on the auditing sector, which is especially well-suited for studying potential effects of artificial intelligence. (AI) algorithms help recognize patterns and make predictions from large amounts of data, and auditing is a standardized task that relies heavily on accurate predictions, placing it among the occupations most exposed to new technologies such as artificial intelligence is a computer application built with software capable of studying and implementing repetitive activities that a human can perform, and understanding the complex mentality that the human mind performs during the exercise of the thinking process, and thus translating these mental operations into the equivalent of accounting operations that increase the ability of the computer To solve complex problems (Anbar & Mohammed, 2016).

Predictive Analysis and Decision Support "*help humans to make better decisions*"

Predictive Analysis and Decision Support pattern uses Machine Learning and other cognitive approaches to understand how the past and existing behaviors can help to predict the future outcomes that help humans to make a decision based on these patterns. Such as search and retrieval, predicting future values for data, predicting failure, predicting behavior, identifying and selecting best fit, identifying matches in data optimize activities and intelligent navigation (Walch, 2019).

The Conversational Patterns "*Machines that interact as human do*"

The Conversational Patterns pattern is a crucial part of (AI) because although artificial intelligence is technologically advanced, there is still a need to interact with humans, this pattern defined as machine and human interacting with each other through conversational form and content through a variety of methods including voice, text, and images.

Patterns and Anomalies "*pattern-machine pattern*"

Discovering anomalies using intelligent monitoring can make a significant difference to businesses such as fraud and risk detection, finding patterns among data and helping to minimize or fix human mistakes. It also includes predictive text, speech, and grammar analytics.

Recognition Pattern "*Deep Learning*"

Recognition Pattern uses Machine Learning and other cognitive approaches to identify and determine objects or other desired things, within an image, video, audio, and text or any unstructured data.

Goal-driven systems “using machine learning to give people the ability to determine the best solution to a problem”

An example of a goal-driven system is in a business that needs to find the optimal way to achieve a goal. Using this pattern will allow the business to have the best solutions to possible problems.

Artificial intelligence technologies like these are dramatically changing the business landscape. Artificial intelligence refers to systems for managing and analyzing information in ways that mimic human intelligence, thus audit's turn to take advantage of (AI) to transform the audit business. By leveraging artificial intelligence, auditors can capture and ingest greater amounts of information, and analyze a broader range of data formats. Moreover, they can perform these tasks faster than ever before (Shaw, 2019).

Auditing

The report of the committee on basic auditing concepts of the American Accounting Association (AAA) defines auditing is a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating the results to interested users (AICPA, 2002).

Financial auditing is the process of examining an organization's financial records to determine if they are accurate and in accordance with any applicable rules (including accepted accounting standards), regulations, and laws. <https://www.accountingedu.org/what-is-auditing/>. It is clear from the above definitions that;

Auditing is the systematic and scientific examination of the books of accounts and records of a business, enables the auditor to judge that the Balance Sheet and the Profit and Loss Account are properly drawn up, so it exhibits a true and fair view of the financial state of affairs of the business and profit or loss for the financial period.

Artificial Intelligence and Audit Quality

The term (audit quality) refers to, a set of policies and procedures designed to achieve quality control in companies that perform audit services for historical financial information, other assurance operations, related services, and procedures necessary to achieve and monitor compliance with these policies (Gomaa, 2009).

Audit quality is defined as: the ability of an audit to discover weaknesses in the control system, and make recommendations to address or limit them, and the possibility of achieving the maximum benefit possible. The importance of audit quality can be determined through the following: (Odeh, 2011; Louwers et al., 2015).

1. The auditor aims to carry out the audit process with the highest possible quality in order to give the highest degree of credibility to his report.
2. The Corporation seeks to ensure that its financial statements are reliable, which requires a process to be carried out auditing of the highest quality.
3. Professional organizations believe that the implementation of the audit process at the highest level of quality achieves the interest of all users of the financial statements.
4. The quality of the audit profession represents a measure for evaluating audit firms in light of the intense competition between those companies.

Artificial Intelligence and Quality Achievement

One of the factors affecting audit quality is the time and effort spent in implementing

audit services, the use of artificial intelligence in carrying out audit tasks contributes to reducing the time and effort required to carry out audit tasks, and to achieve this feature, workers must have a high degree of scientific and practical qualification electronic technologies and their uses in electronic auditing, and to achieve quality in auditing, audit tasks must be accomplished objectively, and artificial intelligence must be used by qualified auditors to achieve objectivity in the audit process, evaluate financial statements and evaluate evidence, in addition to achieving independence and impartiality in auditing financial statements and detecting errors and material misstatements in the financial statements (Al-Sammaraee & Al-Shareeda, 2020; Al-Ratami, 2012).

Artificial Intelligence and Decision-Making

The study of Anbar & Mohammed (2016) has presented the idea of preparing an electronic program that performs all audit work, starting with planning, through choosing the size of samples, documenting working papers, and ending with obtaining an audit report and a report on evaluating the effectiveness of internal control, and the result was that the adoption of artificial intelligence technology in the stages of the audit process will lead To the success of the audit task and improve its quality.

According to Khawalid (2019), the importance of artificial intelligence applications in business organizations improves the decision-making process, solves all administrative problems, reduces costs and improves quality, which helps the organization to survive and enhance competition.

Artificial Intelligence and Excellence

Artificial intelligence in the current era is considered a competitive advantage for business organizations, as all business organizations seek to benefit from it in providing their services and producing their goods, to be distinguished from others with their services and goods. Audit companies are considered part of these organizations that can benefit from artificial intelligence techniques and achieve quality, in providing services and communication between the organization and the auditing company (Reynoso, 2019).

Artificial Intelligence and Creativity

The creativity in using artificial intelligence as a tool in the audit work by making the auditor design the necessary programs for auditing accounts, or developing existing systems to fit with existing accounting systems, and creativity also comes in the use and development of artificial intelligence programs and expert systems programs Statements (Al-Sammaraee & Al-Shareeda, 2020).

Artificial Intelligence and Audit Process

The general audit process is establishing the audit objectives, Conducting risk assessment, Formulating audit plans, Implementing audit procedures, Collecting audit evidence, Preparing audit reports, and with applying AI the contents of the audit objectives will be appropriately changed.

The risk assessment needs to understand the environment, the internal control, and the business of the audited entity. It is more about understanding the adopted intelligent system and understanding the degree and generation of information with human intervention.

As for the audit implementation, including the control test procedures such as inquiries, observations, inspections, re-execution, etc., which can be greatly simplified.

Among the substantive procedures, analytical procedures, recalculations, the collection of audit evidence and audit report generation that can be basically replaced by highly mature audit software (Luo et al., 2018).

For instance, Artificial intelligence systems can perform difficult and complex auditing work, such as its ability to reduce the time spent by auditing companies in examining and analyzing financial data, as artificial intelligence programs will be able to complete all auditing stages for a full year and match them with approved standards, discover errors, assess risks and review Accounts, bank reconciliations, preparation of reports that serve the organization, and suggesting solutions within a few minutes.

The various functions of AI allows auditors to automate a number of tasks such as reviewing source documents (e.g., bank check, sales invoice), processing paper work, analyzing emails, press release, news, and extract metadata from them, all of which could be additional supporting evidence used to supplement traditional financial attributes.

These functions serve financial statement analysis, which is a comprehensive task. when auditors analyze financial reports, the machine scans and identifies each account and its balance and links these numbers to the related supporting evidences automatically (Issa et al., 2016).

Artificial Intelligence and Audit Efficiency

The services performed by the audit and the quality of these services have a significant impact on maintaining Dealing with audit offices, the extent to which the audit achieves in terms of efficiency and credibility Customers are maintained, especially the good ones.

Artificial intelligence helps solve many of the daily challenges facing any business and enables it to work better, smarter and efficiently, It improves speeds up the delivery process, as artificial intelligence performs large-scale tasks that are impossible to accomplish by humans at the same time, It has a high ability to detect errors immediately and this ensures accuracy in business, as well as ability to identify company policies and analyze data in large quantities to ensure that there are no discrepancies, and detect and report incorrect financial data to be removed.

Artificial intelligence techniques need competent people who design, build and test their own technologies such as expert systems and others, as the person carrying out this task (Luo et al., 2018).

Hence the importance of artificial intelligence techniques to create cadres and competencies of auditors who in turn develop the required perception to improve auditing through scientific skill and professional experience.

Thus, artificial intelligence helps increase the intellectual, innovative and productive energy of man in parallel with the increase in the intelligence of machines and tools, as it changes both humans and the machine for the better (Abdul Rahman et al., 2020).

The Literature Review of the Study

Through the researchers familiarizing with the objective of the study, the most important studies related to the main study element, which is artificial intelligence and auditing, have been summarized, and they will be summarized in brief:

Othman & Jamil, (2012), "*The possibility of using artificial intelligence techniques in controlling the quality of internal auditing*".

The aim of this study was exploring the possibility of using artificial intelligence techniques in controlling the quality of internal auditing in its dimensions in Jordanian joint stock companies. The descriptive analytical approach was relied upon to prove a positive

impact of the use of artificial intelligence techniques in reviewing the quality of internal auditing and related to professional care, managing internal audit activities, assessing risk management, and planning and implementing internal audit procedures. The audit process, and it is recommended to pay attention and focus on artificial intelligence techniques for their importance in the development of internal auditing.

Anbar & Muhammed, (2016), "*Auditing Quality According To Artificial Intelligence Applied Research on a Sample of Regulatory Bodies Working In the Federal Board of Supreme Audit*"

The idea of research is to preparing an electronic program for all audit work from planning through sampling and documentation of working papers to get a draft of the report and the report of the evaluation of the supervisory work performance from the hypothesis (that the adoption of artificial intelligence technique in the audit process stages will lead to the success of the audit function and improving its quality), artificial intelligence is related to the representation of a computer model of area, an then retrieve and develop as well as it is compared with the status and events of research to draw helpful conclusions.

Luo et al. (2018), "*Research on CPA Auditing Reform Strategy under the Background of Artificial Intelligence*"

This paper aims to analyze the aspects and logical relations of the ligencheave on accounting and influence that artificial intelauditing under the background of the development of new technology based on artificial intelligence, and to design and propose the reform strategies for accounting firms (CPAs), thus to provide valuable decision-making references for auditing changes of accounting firms (CPAs).

Ukpong et al. (2019), "*Artificial Intelligence: Opportunities, Issues and Applications in Banking, Accounting, and Auditing in Nigeria*"

This paper reviews the nature of accounting and auditing problems and the need for application of artificial intelligence (AI) technologies to the discipline. The discussion includes current accounting issues for which new (AI) development should be fruitful, particularly auditing. This research employed both a qualitative and quantitative research design. The study was carried out using a descriptive survey research design, employing secondary quantitative data. Paper concludes with future roles of banks going forward and the impacts (AI) could have on auditing systems.

Al-Jaber (2020), "*The Impact of Artificial Intelligence on the Efficiency of Accounting Systems in Jordanian Banks*"

This study dealt with the study of the impact of artificial intelligence on the efficiency of accounting systems in Jordanian banks, and relied on the descriptive approach to show the results, which demonstrated the existence of an impact of the use of artificial intelligence on the efficiency of accounting systems in Jordanian banks and recommended strengthening its use in banks.

Ahmed, (2022) "*Artificial Intelligence (AI) in Accounting & Auditing: A Literature Review*"

The aim of this research is to review previous studies interested in the field of application of artificial intelligence (AI) in accounting and auditing. This research relied on describing the approach taken in each study and the results of each study. The research dealt with various initiatives in facing the challenges and financial corruption that have occurred, including the development of accounting and auditing and cooperation with all

other disciplines to serve the field of accounting and auditing. It is expected that the widespread application of artificial intelligence in the accounting and auditing profession will provide an increase in productivity, accuracy and credibility, but it will cause the burden of wealth equality and the disappearance of some traditional jobs and the workforce. There is a need for development on the part of professionals and regulators, and academics must reformulate the accounting and auditing curriculum and redesign of vocational training.

From the previous presentation of the research studies, it appears that although there are a number of studies that examined the relationship between different variables, the relationship of all variables together has not been examined comprehensively. The current study attempts to bridge the gap by examining the in- depth relationship between various other variables in a proposed framework to link artificial intelligence with the quality of the audit process.

Field Study

This section contains the Field study and the section is concerned with presenting and dissection the importance of the field study, where Artificial Intelligence, is the Intelligence that man creates or manufactures in a machine or computer and it is a part of computer science that aims to simulate a cognitive ability to replace humans In performing appropriate functions in a specific context that require intelligence, by leveraging artificial intelligence, auditors can capture and ingest greater amounts of information, and analyze a broader range of data formats. Moreover, they can perform these tasks faster than ever before, in turn, auditors can provide more insights to clients and increase stakeholder return on audit.

This section describing the data of field as well as the method of data collection and the definition of the study variables, then the data are described and statistical tests are conducted to measure the impact of implementing the artificial intelligence on the audit quality.

The Field Study Aims

The field study aims to measure the effect of a group of different factors on the effectiveness of implementing the artificial intelligence, and how each element can affect the effectiveness of the application, as well as measuring the effect of factors together on the audit quality, with the aim of reaching realistic results on actual practices in the firms. This is done through an intensive and focused Field study.

Measuring Variables

This study has one major independent variable; this variable can measure from several statements as:

Artificial Intelligence

We will Measure the relationship between using artificial intelligence and improving the quality of Audit professional performance, by seven statements in Likert scale.

This study has three major dependents variables; this variable is:

Improving the Audit Process Quality

The use of artificial intelligence in carrying out audit tasks contributes to reducing the

time, Audit quality is the time and effort spent in implementing audit services, and effort required to carry out audit tasks, and to achieve this feature, we can measure audit quality by seven statements in Likert scale.

Ability to Perform Complex Auditing

The use of artificial intelligence in audit tasks contributes perform complex audit, we can measure perform complex audit by seven statements in Likert scale Figure 1.

Improving the Efficiency of Audit

The use of artificial intelligence in audit tasks contributes perform audit process in high quality, we can measure audit efficiency by some statements in Likertscale.

We can frame the model as follow

$$Y = B_0 + B_1X_1 + e$$

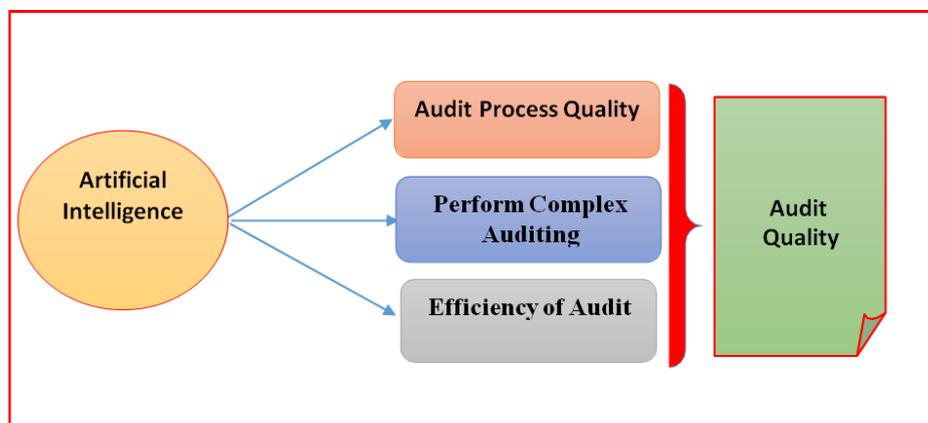
We can down the relationship between variable as follow

$$Y = \text{Audit Quality}$$

B0, B1 = Model Coefficients

X1 = Artificial Intelligence

e = Error Term



**FIGURE 1
RELATIONSHIP BETWEEN VARIABLES**

Data Collection

This study is based on the field study method. We have distributed 135 survey forms to a group of Palestinian Auditors in the field of auditing. A number of 118 questionnaires were received. After sorting them, it was found that the number of valid forms reached 104 valid for statistical analysis, and this can be shown as in Table 1 and Figure 2.

<p>Table 1 SAMPLE OF STUDY</p>

No		observations	Total	Ratio
1	Questioners	135	135	100%
2	Missing	17	135	12.5%
3	Received	118	135	87.5%
4	Non Valid	14	118	11.9%
5	Valid	104	118	88.1%

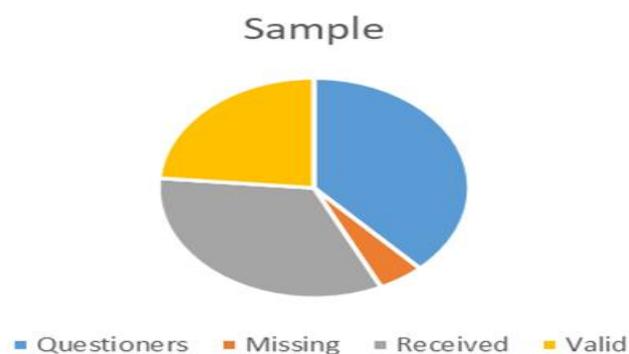


FIGURE 2
SAMPLE IMPACT OF ARTIFICIAL INTELLIGENCE ON

We asked the sample about the impact of artificial intelligence on the audit quality, we can describe their responses in the next section.

Descriptive Analysis

This section for describe sample perceptions on every variables, where we ask about some things well preview it in tables in a degree of impact, we can see these elements as follow:

- **Describe results about hypothesis one**

The results of the description of the impact of artificial intelligence on the audit quality, "*H1: There will be a significant and positive relationship between of using artificial intelligence and improving the quality of Audit professional performance.*" We can show the results as Table 2 and Figure 3.

Table 2					
ANALYSIS RESULTS OF FIRST HYPOTHESIS					
	N	Mean	Mode	Std.	Variance
	Valid			Deviation	
The auditor when use techniques of artificial intelligence carry out the audit process with the highest possible quality.	104	4.1538	4.00	0.86764	0.753
The Corporation using artificial intelligence to improve financial statements reliability, which requires a process to be carried out auditing of the highest quality.	104	4.2308	4.00	0.80328	0.645
Professional audit organizations believe that the implementation of artificial intelligence techniques in audit process achieve the highest level of quality.	104	4.2308	4.00	0.80328	0.645
The quality of the audit profession represents a measure for evaluating audit firms in light of the intense competition between those companies.	104	3.7692	4.00	0.97772	0.956
In order to give the highest degree of credibility to his report.					

The auditor aims to carry out the audit process with the highest possible quality Throw artificial intelligence.	104	4.0769	4.00	0.83250	0.693
Auditors using techniques of artificial intelligence to give the highest degree of credibility to hisreport.	104	3.9231	4.00	0.73329	0.538
The audit process at the highest level of quality achieves the interest of all users of the financial statements.	104	4.4615	4.00	0.50093	0.251



FIGURE 3
ANALYSIS CHART TITLE

Through the previous analysis, the following is found:

The largest average was 4.461 for the seventh statement that states *"The audit process at the highest level of quality achieves the interest of all users of the financial statements"* at a standard deviation of 0.5009, which indicates the importance of artificial intelligence and its role in improving audit quality.

The less average was 3.769 for the Fourth statement that states *"The quality of the audit profession represents a measure for evaluating audit firms in light of the intense competition between those companies."* at a standard deviation of 0.9777, which indicates the importance of artificial intelligence and its role in improving audit quality.

Describe Results about Hypothesis Two

The results of the description of the impact of artificial intelligence on the perform complex auditing process *"H2: There will be a significant and positive relationship between of using artificial intelligence and increasing the ability to perform complex auditing process."* We can show the results as Table 3 and Figure 4.

	N	Mean	Mode	Std. Deviation	Variance
	Valid				
The auditor using artificial intelligence techniques to improve ability to perform complex auditing process, throw minimize time of audit process.	104	3.7692	4.00	0.69994	0.490
The auditor using artificial intelligence techniques to improve ability to perform complex auditing process, throw minimize cost of audit process.	104	3.9231	4.00	0.73329	0.538
The quality of audit profession use of artificial intelligence techniques to improve capabilities in the application of international standards of accounting and auditing, especially standards of quality.	104	3.9231	4.00	0.83250	0.693
The auditors should be involved in the auditing offices and their					

opinions should be taken into consideration when developing the electronic technologies used in the audit process	104	4.1538	4.00	0.86764	0.753
The need to benefit from the experiences of international auditing companies in the field of auditing in light of artificial intelligence techniques	104	4.1548	4.00	0.86764	0.753
The importance of the accounting and auditing offices continuing to develop plans and strategies to maintain the process of continuous updating in light of the latest developments in artificial intelligence techniques so that they can compete in the market	104	4.0769	4.00	0.83250	0.693



FIGURE 4
ANALYSIS CHART TITLE

Through the previous analysis, the following is found:

The largest average was 4.154 for the sixth statement that states *"The need to benefit from the experiences of international auditing companies in the field of auditing in light of artificial intelligence techniques"* at a standard deviation of 0.867, which indicates the importance of artificial intelligence and its role in perform complex auditing process (Munoko et al., 2020).

The less average was 3.769 for the Frist statement that states *"The auditor using artificial intelligence techniques to improve ability to perform complex auditing process, throw minimize time of audit process"* at a standard deviation of 0.6999, which indicates the importance of artificial intelligence and its role in perform complex auditing process.

Describe results about hypothesis Three

The results of the description of the impact of artificial intelligence on the auditing Efficiency *"H3: There will be a significant and positive relationship between of using artificial intelligence and improving the efficiency of audit"* we can show the results as Table 4 and Figure 5.

Table 4 ANALYSIS RESULTS OF THIRD HYPOTHESIS					
	N	Mean	Mode	Std. Deviation	Variance
	Valid				
Designing ethics for the use of artificial intelligence techniques and their impact on improving the quality of the audit process, through the issuance of laws and instructions that help prevent information breaches	104	3.6154	4.00	0.62795	0.394
Laying down laws that oblige auditors and audit offices to use artificial intelligence techniques, electronic technologies and computerized application programs in the audit process, and introduce technological improvements to their work	104	4.0000	4.00	0.78826	0.621
Accounting and auditing offices are committed to applying quality systems that are consistent with international auditing standards, especially Standard 220, and artificial intelligence techniques	104	4.0769	4.00	0.83250	0.693
The necessity of keeping pace with developments and pursuing modern systems, especially in the areas of artificial intelligence techniques in accounting and auditing offices and internal control systems	104	4.1538	4.00	0.66492	0.442
Training auditors by raising their efficiency, as artificial intelligence techniques in these offices are among the basic requirements for quality control.	104	4.0577	4.00	0.78613	0.618

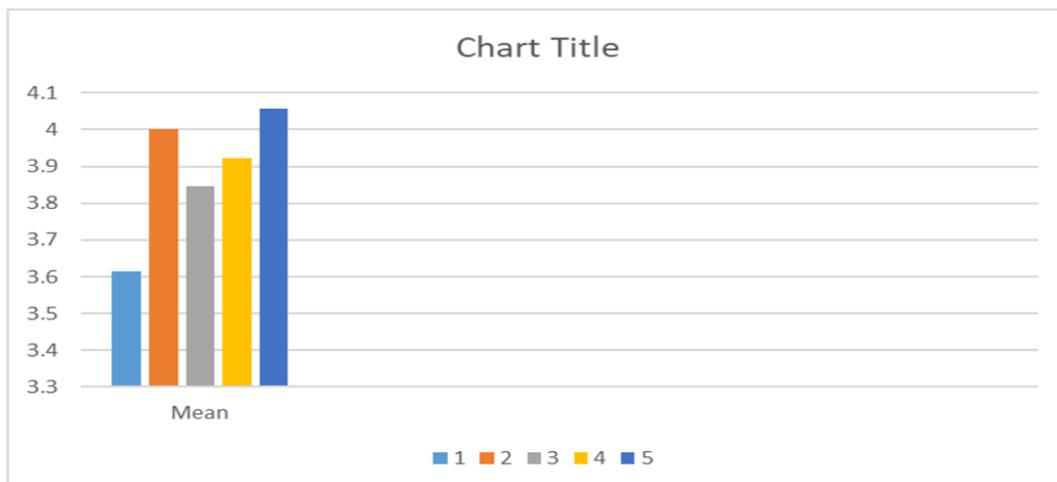


FIGURE 5
ANALYSIS CHART TITLE

Through the previous analysis, the following is found

The largest average was 4.153 for the Fourth

statement that states *"The necessity of keeping pace with developments and pursuing modern systems, especially in the areas of artificial intelligence techniques in accounting and auditing offices and internal control systems"* at a standard deviation of 0.664, which indicates the importance of artificial intelligence and its role in auditing efficiency.

The less average was 3.615 for the Frist statement that states *"Designing ethics for the use of artificial intelligence techniques and their impact on improving the quality of the audit process, through the issuance of laws and instructions that help prevent information breaches."* at a standard deviation of 0.625, which indicates the importance of artificial

intelligence and its role in auditing efficiency.

Impact Analysis

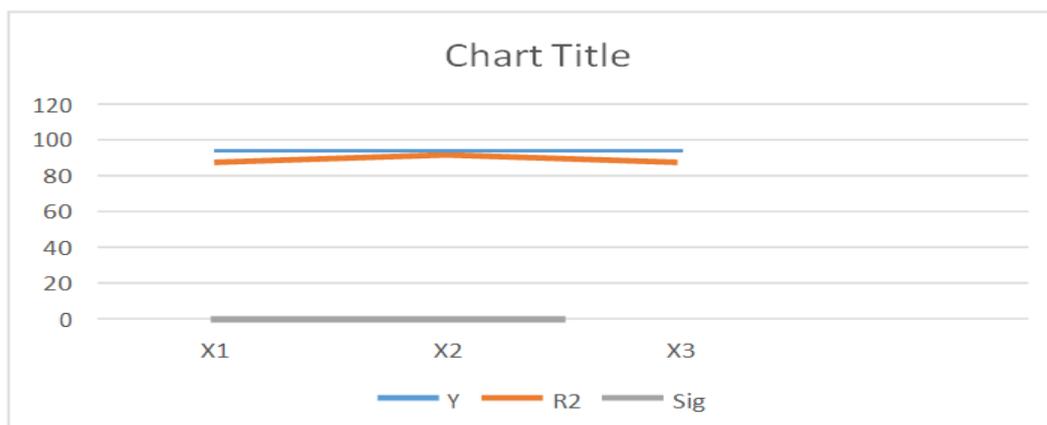
We can do the correlation test to know the relationship between variables, the correlation test results was as Table 5 and Figure 6.

		Y	X1	X2	X3
Y	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	104			
X1	Pearson Correlation	0.933**	1		
	Sig. (2-tailed)	0.000			
	N	104	104		
X2	Pearson Correlation	0.956**	0.827**	1	
	Sig. (2-tailed)	0.000	0.000		
	N	104	104	104	
X3	Pearson Correlation	0.935**	0.804**	0.859**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	104	104	104	104

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

From the previous Table 5, we find that the results:

1. There are a significant relationship between the use of artificial intelligence and the quality of audit process, where Pearson Correlation is 93,3%, and significant is 0.000.
2. There are a significant relationship between the use of artificial intelligence and perform complex audit process, where Pearson Correlation is 95,6%, and significant is 0.000.
3. There are a significant relationship between the use of artificial intelligence and the audit process efficiency, where Pearson Correlation is 93,5%, and significant is 0.000.



**FIGURE 6
IMPACTS OF INDEPENDENT VARIABLE AS**

We can Show results of regression test to know Impacts of Independent variables follow:

The results of the impact of artificial intelligence on the audit quality, we can show these results as Table 6.

		Model
		1
R		0.933 ^a
R Square		0.871
Adjusted R Square		0.869
Std. Error of the Estimate		0.22021
Change Statistics	R Square Change	0.871
	F Change	686.160
	df1	1
	df2	102
	Sig. F Change	0.000
Durbin-Watson		1.946
a. Predictors: (Constant), X1		
b. Dependent Variable: Y		

From the previous Table 6, we find that the results of regression: X1 on Y is 87.1%, the effect of X1 on Y is 0.871.

The results of the impact of artificial intelligence on the perform complex auditing process, we can show the results as Table 7.

Model Summary		
		Model
		1
R		0.956 ^a
R Square		0.914
Adjusted R Square		0.913
Std. Error of the Estimate		0.17994
Change Statistics	R Square Change	0.914
	F Change	1078.516
	df1	1
	df2	102
	Sig. F Change	0.000
Durbin-Watson		1.822
a. Predictors: (Constant), X2		
b. Dependent Variable: Y		

From the previous Table 7, we find that the results of regression: X2 on Y is 91.4%, the effect of X2 on Y is 0.914.

The results of the impact of artificial intelligence on the auditing Efficiency, we can show the results as Table 8.

		Model
		1
R		0.935 ^a
R Square		0.874
Adjusted R Square		0.873
Std. Error of the Estimate		0.21718
	R Square Change	0.874
	F Change	708.307

Change Statistics	df1	1
	df2	102
	Sig. F Change	0.000
Durbin-Watson		2.100

From the previous Table 8, we find that the results of regression: X3 on Y is 87.4%, the effect of X3 on Y is 0.874.

The total results of the impact of artificial intelligence on the auditing Process, we can show the results as Table 9.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.813	0.099		8.174	0.000
	X2	0.808	0.025	0.956	32.841	0.000
2	(Constant)	0.348	0.057		6.065	0.000
	X2	0.493	0.022	0.583	22.133	0.000
	X1	0.417	0.024	0.451	17.131	0.000
3	(Constant)	-4.309	0.000		13.332	0.000
	X2	0.333	0.000	0.394	12.423	0.000
	X1	0.333	0.000	0.360	23.134	0.000
	X3	0.333	0.000	0.307	32.124	0.000

From the previous table, we find that the results of Significant was 0.000 for all hypotheses, this refer to the impact is significant and we can accept all hypotheses.

CONCLUSION AND RECOMMENDATION

We provide in this study a group of aims to measure the effect of implementing the artificial intelligence on audit process quality, and how each element can affect the effectiveness of the application, as well as measuring the effect of factors together on the effectiveness of the application, with the aim of reaching realistic results on actual practices in the firms.

The study has a theoretical framework to all variables, the theoretical framework found that there is a significant relationship between the use of artificial intelligence and the quality of audit process, where Pearson Correlation is 93,3%, and significant is 0.000. There is a significant relationship between the use of artificial intelligence and performing complex audit process, where Pearson Correlation is 95,6%, and significant is 0.000. There is a significant relationship between the use of artificial intelligence and the audit process efficiency, where Pearson Correlation is 93,5%, and significant is 0.000.

Our recommendation is the implementing of artificial intelligence help firms to do audit process in high quality, to success in implementing artificial intelligence firms should do training for employees, auditors can capture and ingest greater amounts of information, and analyze a broader range of data formats. Moreover, they can perform these tasks faster than ever before. We recommend firms for using artificial intelligence techniques in reviewing the quality of auditing and related to the professional care, management of internal audit activities, evaluation of risk management, planning and implementation of the audit process, and recommended attention and focus on artificial intelligence techniques for their importance in the development of internal audit.

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