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Impact Of Modern Technical Environment Developments On The Auditor's Profession

Hussein Ali Mohammed, Khalid Hamad Jasim Al-Shaikh

College of Administration and Economics, University of Fallujah

Hussain.alim.m@uofallujah.edu.iq

Abstract. The world's working environment is undergoing a revolution in the continuous and accelerated advancement of technology and technology. The accounting profession is also influenced by environmental technical developments in terms of the knowledge and conclusions of the auditor's work policy in his report. With the increasing use of information technology in economic units in recording and processing financial events and accounting processes, the importance of technologies is no less important than human and financial resources. Sophisticated electronic accounting systems have emerged and the comptroller must emulate these developments in his report, Especially because technological developments can easily penetrate from some professional pirates which has made it a profession of auditing the safety valve for the integrity and confidentiality of information and the design of programs that help the work of the comptroller to reach reliable results by users of financial lists to make rational decisions. The research aims to demonstrate the role of the modern technical environment in achieving changes in the auditor's profession within the study community, which includes a sample of the number of auditors' offices in Baghdad (60), to achieve this, the three sub-variables (continuous electronic auditing, cloud accounting, blockchains) were measured Based on the research problem, the research relied on a set of statistical metrics and the SPSS programme. The researchers found that developments in the modern technical environment affect the work of the comptroller in terms of reducing time and cost. The lack of recognition by the auditors in keeping with recent environmental developments makes the profession less professional. The researchers recommended to the audit offices that cadres should be included in ongoing training courses that simulate modern technical developments in the working environment.

Keywords. Modern technical environment, continuous auditing, cloud accounting, blockchains career controller

Research methodology and previous studies:

First: Research Methodology

1. Research Problem

The auditor's profession is constantly challenged in the working environment, and his intensity increases as accounting processes develop and increase in size. The auditor's profession has become challenged by the duty to determine. The use of modern technologies has become inevitable. The chief question summarises the problem with research: how does the modern technical environment affect the auditor's career?

A set of sub-questions is one of the following:

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A. Is there a statistically significant moral impact of continuous electronic auditing on the auditor's profession?
B. Is there a statistically significant moral impact of blockchains on the auditor's profession?

2. Research Objectives

The research aims to clarify the effects of modern technology on the auditor's profession. This objective can be achieved through a set of sub-objectives.

A. Clarify and gain a broad and accurate understanding of the modern technical environment and its complexities and effectiveness in the auditor's work.

B. Measuring the impact of developments in the modern technical environment on the auditor's profession.

C. Look at the role of factors influencing a modern technical environment on the auditor's career and try to apply continuous electronic auditing.

3. The Importance of The Research

The importance of searching on two sides is as follows:

A. Scientific significance: The subject of the effects of the modern technical environment on the auditor's profession has not received its share of academic research and studies in the Iraqi and international working environment. This work will be a good addition to its role in the auditor's profession.
B. Practical relevance: Research adds practical importance in terms of reducing the risks of working for audit offices and helps in the process of moving towards the electronic aspect of the work. This is partly characterized by the quality of auditors' reports in a highly competitive working environment.

4. Research Hypothesis

To reach virtual solutions to the research problem, the two researchers offer the following main hypothesis:

There is no statistically significant moral impact of developments in the modern technical environment on the auditor's profession.

One of the main hypotheses is the following:

A. There is no statistically significant moral impact of continuous electronic auditing on the auditor's career.

B. There is no statistically significant moral impact of cloud accounting on the auditor's profession.

C. There is no statistically significant moral impact of blockchains on the auditor's profession.

5. Research Model

The research model was designed according to the intellectual output of scientific literature regarding the research variables, as the plan provides a clear picture of the research idea, showing the nature of the relationships and the direction of interaction between its variables, and the research model includes the following variables:

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A- Independent research variable: The independent research variable is represented by (the modern technical environment) and its sub-dimensions are represented by (continuous electronic auditing, cloud accounting, and blockchains).
B- Dependent research variable: The dependent variable of the research is represented by (the profession of auditor).
Figure (1) Default research plan:

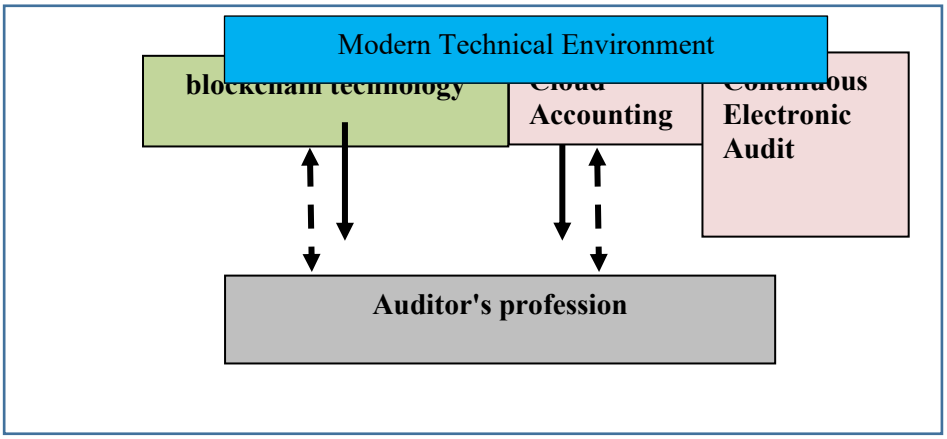

Figure: From the preparation of the two researchers based on the research variables

Second: Previous studies

1- Study: (Al-Bakou, Faiha, 2006) A doctoral thesis entitled "Strategic analysis of the challenges facing the profession of auditing in the framework of the elements of the modern technical environment"

The main objective of the study is to try to identify the most important variables of the external environment and the internal environment of the auditing profession in light of modern technology to diagnose and analyze the challenges it faces to develop the profession in Iraq, and to describe the elements of the modern technical environment and clarify their impact on different aspects of the auditing profession and to analyze and diagnose the variables of the external and internal environment of the auditing profession strategically in light of the elements of the modern technical environment, and to try to address the challenges facing the profession in light of the technical development by adopting new philosophies to modify its strategy and reformulate its work system in a way that matches this development. Iraq is a case study by presenting a questionnaire to teachers and auditors in Iraq. The study concluded that neglecting the factor of developing auditors in electronic transactions makes it the greatest threat to it, as it is the most influential in determining goals, workflow, and decision-making. The most important recommendations of the study are that qualifying human resources is the first main factor that constitutes a force in front of developing the auditing profession in Iraq in light of Changes in the modern technical environment.

2- Study (Haiba and Al-Amin, 2023) Research entitled "The impact of using information technology in improving the quality of external auditing"

This study aims to know the role of information technology in improving the quality of external auditing as a new technology for verifying the accuracy of accounts by exploiting computer capabilities, facilitating the performance of the auditing task, and this study may be summarized that the use of information technology in auditing improves auditing procedures and methods,

while it does not affect its objectives, and it also works to speed up and accurately implement the auditing process and reduce the effort and associated cost, and the study also called for the necessity of training auditors to use information technology because this leads to improving the quality of services provided by audit offices, and gaining the trust of customers. Among the most important findings of the study are the necessity of auditors joining specialised courses in the field of information technology and the necessity of using information technology in auditors' offices.

Theoretical aspect

First: The modern technical environment:

The profession of auditor is a credible profession that protects the interests of others and has a positive return for users of financial statements because the auditor confirms the reliability of the information in the financial statements and provides clarifications that confirm the accuracy of the information in the financial statements. It is agreed that the auditing profession is affected by the technical changes in the modern environment related to the practices of the profession, which have fundamental effects on the work of the economic unit, and with the existence of a renewed revolution in information technology, which represents the most important pillars of the digital economy, and electronic operations represented by computing and communication operations between economic units and proof of exchanges for commercial activities.

The impact of the technical complexity of the information technology environment on the profession of auditor:

In general, the technical complexity of the information technology environment can be classified into three types, and based on that, the technical environment can be divided into: (Al-Bakou: 61, 2006).

1- Modern environmental technical complexity:

A- Information technology environment with less complexity:

It consists of several small computers with uncomplicated use in work and there are several economic units that use this technology to operate their operations, design their systems and are connected to a network so that they can retrieve and easily track the original documents related to the accounting system and reach readable outputs. Daily books and ledger records can be kept through the programs used in this technology and allow the auditor to track all accounting records and internal control that works to provide a comparison between computer records and original records. In this environment, the use of technology will affect the audit path and the auditor can understand the performance of internal control and all basic operations and tests necessary for procedures to verify account balances. This approach does not differ from manual systems and the auditor remains responsible for obtaining an understanding of general control procedures and control of computer applications because this control helps him identify the risks that affect the financial statements and the auditor uses the computer audit approach in this environment.

B- Information technology environment of medium complexity: In this environment, there is a main computer, a server, and several computers or terminals operating on a network system connected to a main computer or server. The programs used in this technology are described as more advanced than the programs of the first type, and programs prepared for multiple purposes can be used to enter and modify data. This environment lacks several important control systems, such as the complete separation of responsibilities within the information technology department and between it and the departments that use the information. There may or may not

be an independent secure location for the computer. The auditor in this environment can reduce control risks in the presence of adequate internal control systems.

B- The more complex IT environment: This environment includes unified electronic systems for all control applications, daily records, the ledger, and electronic accounting documents. Here, the system is more complex, and the less complex environment can be transformed into a more complex environment through one of the following automated methods or by merging these methods: direct and immediate operation, communication systems, distributed data operation, and database management. This opinion is somewhat consistent with the viewpoint of the International Standard on Auditing "401" entitled "Auditing in a Computer-Based Information Systems Environment", as the complex system is described as the system that includes miniature communication lines for the central processing unit, distributed basic information, end-user processors, and business management systems that feed information directly to accounting systems. This environment is the environment with an invisible audit trail that includes most or all of the general control systems and application control, and in it, the manual control systems are programmed with the existing operating path only in a machine-readable form, and the auditor may need to rely on the system used by the customer if he is advanced to implement the audit and control procedures, and the audit methods can be adopted using the computer and its various approaches such as the test data approach or integrated tests or parallel simulation is used in such an environment.

1- The modern technical environment and its impact on the profession of auditor
Economic units possess a huge amount of accounting information with efficiency and accuracy that can be relied upon by internal and external stakeholders in making sound decisions at the right time, as it is available free of charge or at the lowest possible cost. This information is considered the tool that management relies on to disclose its financial position, and it also helps the economic unit maintain its position in a work environment characterized by renewed technical changes. Accounting information must be valuable, comprehensive and integrated, expressing financial events and positions accurately. As a result of the changes that have occurred in the modern technical environment, the exchange of accounting information between economic units and other parties has increased electronically, which has been reflected in the conversion of paper information into exchanged electronic information. This led to the inevitability of economic units going through three basic stages towards the digital transformation process. First: the digitization stage, which means encoding traditional information into digital information that is easy to store and process by combining information technology techniques with the current tasks of economic units. Second: the visual representation stage, i.e. how to rely on technology to implement all operations and build relationships with customers. Third: the digital transformation stage, which refers to the development of current business models and the adoption of new business models to achieve a competitive advantage and add value to the economic unit (Boushaisha: 712, 2022). The quality requirements of the auditor's report include the need to provide an appropriate technical environment that is compatible with the nature of his work, through which he can practice his work by accessing reliable electronic accounting information when preparing his report. The Internet is considered one of the influences that must be studied in the modern technical environment, as most of the information that the auditor relies on is electronic and depends on the Internet to download, store, and analyze it. The auditor also relies on the telephone in his communications with internal and external parties in the economic unit. The existence of

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existing problems and a lack of agreement between communication networks, as some lines do not allow communication from one line to another, confuses and delay in the communication process to obtain information via a mobile phone. (Saleh: 9, 2017).

2- Factors affecting the profession of auditor within an advanced technical environment in information technology. The profession of auditor is affected in the light of the constantly renewed technical environment by a set of influential factors, which are:

A- The transformation of continuous auditing from traditional to electronic:

Continuous electronic auditing is considered one of the influential factors within the information technology environment, as economic units seek to design and operate accounting systems to produce accounting information that is available immediately, and this electronic information requires continuous auditing. Therefore, this is considered a challenge for the profession of auditors, and tangible changes must be made in the profession of auditors that are compatible with the presence of electronic accounting information, as electronic auditing of financial statements is replaced by traditional auditing, and business reports published electronically depend on business results and electronic accounting systems to ensure the truth, correctness, fairness and presentation of these reports. Therefore, the continuous auditing process is carried out by evaluating the elements and components of information in the immediate accounting information systems, and when obtaining a letter of guarantee for contracting, it refers to the procedures for information technology. Auditors must be chosen who have experience and skill in dealing with information technology, and all the details included in the electronic accounting cycle, ending with the published financial statements, as the accounting cycle is dealt with in electronic accounting information systems According to the following: (Shahata: 714, 2020)

 Continuous updating of the database with economic events and all types of financial transactions whenever they occur within the economic unit.
 Continuous auditing of electronic accounting data.
 Preparing immediate financial statements.
 Continuous publication of financial statements that are audited continuously.

The stage of continuous electronic auditing of accounting information differs from the traditional continuous auditing in the method of the testing stage and preparing financial statements. The continuous auditing process consists of the client acceptance stage. Work can continue with an old client when the auditor is assigned auditing work. Here, it is necessary to identify and understand the modern methods of auditing related to all internal control systems within the framework of immediate accounting information systems. This is followed by the planning stage for various accounting work on an ongoing basis, which includes developing an initial plan for all information related to the client's work, provided that the auditor is fully aware and understands the client's work, activities and industry to determine the effectiveness of the control device in detecting errors and tampering with electronic information and identifying audit risks. The stage of implementing continuous audit work begins after the planning stage ends, as it requires collecting evidence that confirms the efficiency and effectiveness of the electronic information system in providing immediate and accurate information. The last stage includes emphasizing information security before the continuous auditor's report is issued (Radhia: 22, 2022). The requirements of continuous auditing include that the auditor's report must be easy to understand and accurate and be presented in a timely manner or in real-time to make appropriate decisions by users and that the information is

permanently available. Therefore, the economic unit must take measures to apply auditing to all automated information update processes. This procedure includes examining and testing the adequacy of internal control, with the necessity that immediate audit procedures be largely automated so that the methods and tools are compatible with the economic unit's systems, and the information subject to auditing must result from reliable electronic systems and be integrated systems subject to continuous auditing procedures to be quality, reliable and immediate information. The auditor must also possess the necessary professional competence and the focus is not related to issues related to the audit. There are non-financial issues such as the characteristics and types of information technology. Auditors are not expected to have sufficient knowledge of electronic information systems, and for them to have the necessary expertise and skills, they can consult specialists or benefit from their expertise and services, which is considered an important part of continuous auditing to ensure efficiency and effectiveness. The components of the continuous auditing approach include providing a basic environment for information technology and providing various records and files. Due to the lack of clarity in fully understanding the electronic accounting system that audits from The auditor therefore finds it difficult to find evidence, and the legal responsibility of auditors increases when using continuous auditing. (Mansour: 446, 2020).

B- Cloud accounting: Cloud accounting is considered one of the factors influencing the profession of auditor within the development of modern technologies in the global work environment. Accounting is constantly affected, especially by technological developments in information that add value to economic units. One of the most important of these technologies is cloud accounting, as cloud accounting is known as "a model that uses networks from everywhere and in an appropriate manner, to shared groups of configurable computing components such as applications, servers, services and storage, which can be provided on demand at a lower cost and administrative effort and at the appropriate time." Cloud accounting provides a set of services, including infrastructure, including processing, storage, networks and computing components that are provided as a service to internal and external users in the economic unit, platform services, including services provided to users in relation to operating systems, software, software languages, offices and applications supported by the service provider, and ready-made software that works on computing components and relies on platform services that provide the user with the ability to control limited settings of that software (Ahmed: 170, 2020). Computing is considered Cloud computing is the new frontier of the Internet era. It is the technology through which data and information are stored, retrieved, operated and modified, through data processing means available within the framework of a service provided directly to customers in a way that pays a cost according to the size of consumption. It refers to the resources and technologies available on demand via the Internet that can provide several integrated services without being restricted to local resources (personal computers), to facilitate the customer’s use of unlimited resources anywhere and at any time. These resources include space for storing data, backups, operating software and applications) and e-mail. Without paying attention to the huge infrastructure and complex communication networks behind this service that require precise supervision and management processes, provided by a service provider, where the cloud here means the Internet, which represents the vast space that provides ease, flexibility and lack of complexity in exploiting the resources and vehicles of modern information and communication technologies, information and communication technology provides many solutions to organize and activate accounting work, where we find specialized software in accounting work such as accounting processing of

invoices, accounting processing of wages, accounting processing of the treasury, preparing financial statements and reports. Including integrated solutions such as economic unit resource planning software, which ensures that reservations and processing are not repeated, and ensures a direct flow of data and information between the information systems in the institution while working in real-time, which raises the degree of automation of information systems and coordination between them, including software solutions as a remote service within the framework of cloud computing, which guarantees the institution a significant reduction in costs due to not relying on direct investment in information and communication technology resources, servers, storage media, software, licenses for use, specialized employees. (Muhammad et al.: 164, 2019).

The researcher believes that the impact of cloud accounting on the accounting profession is reflected in the profession of auditor because it obliges him to develop his capabilities to understand the virtual transactions of cloud accounting, networks and the cloud through which data and evidence are collected. This contributes to facilitating the auditing process and developing it through the accuracy and speed of obtaining information, any change in the nature of accounting work and the production of final accounting information subject to an audit process by the auditor. The process of accessing secure data must be available to those who have the right to view it to prevent manipulation and fraud. The mechanism for obtaining information does not include complexities and stages that affect the mechanisms used in the work of the auditor and the speed of obtaining information at the appropriate time. The efficiency of the devices used has an impact on the work of the auditor, the programs and applications used, and the tools for linking information and the date of its occurrence. The provider of accounting information in cloud accounting must have the same category of technology that exists in the rest of the economic units to ensure that the work of the auditor does not differ, as well as obtaining free support when receiving the service. In addition, the cloud accounting information must be organized to challenge the type of information and how to audit it by the auditor and inform that the information risks present.

T- Blockchains: Blockchains are one of the factors influencing the profession of auditor within the developments of the technical environment and have been defined as "a network of personal computers for a group of individuals that work together as an observer to create or produce records of transactions that cannot be modified or changed by any information and are available to the public, i.e. a chain for storing and transferring digital data" (Thabit: 1489, 2022). Researchers seek to introduce the variable of blockchain technology - as a moderating variable - into the relationship between accounting estimates and the qualitative characteristics of useful information, and the moderating role of blockchain technology can be viewed from the perspective of the impact of applying blockchain technology on the qualitative characteristics of useful information, as the moderating role of blockchain technology is to mitigate the support of the negative impact of accounting estimates on the qualitative characteristics of useful information, and vice versa. Regarding the impact of blockchain technology on the property of relevance, the adoption of blockchain technology on the distributed public ledger helps achieve the property of relevance, as each participant obtains an identical copy of this ledger, or at least has the right to access part of the information, and participation on the network will be available to obtain information. Regarding the impact of blockchain technology on the property of honest representation The reliance of this technology on the consensus mechanism achieves completeness of information, provides automatic and decentralized neutrality of information,

and ensures automatic and automatic encryption that the information is free of errors. The neutrality and impartiality feature is achieved by storing data in different nodes instead of one central location, which makes data processing, saving and transferring under the eyes of each participant on the network, in addition to securing the blocks within the chain and closing them in an encrypted way automatically allows the validity of transactions to be verified and authenticated by the majority. In addition to what the technology provides for secondary characteristics such as freedom from errors, comparison, verifiability and others (Abdul Hafeez: 141, 2024), blockchain technology affects the profession of auditors because this technology provides many advantages for the characteristics of information, the most important of which are suitability, clarity, transparency, honesty, accuracy, transparency and reliability. It provides useful, decentralized data that cannot be modified or manipulated because it uses encrypted systems. Blockchain technology works to reduce the costs of operations and contributes to developing the planning process for auditors through honest representation and impartiality of financial and non-financial information and transactions related to the economic unit on the network and the trend towards conducting continuous auditing of circulating data and then shifting from the sampling method to auditing all transactions during the audit period, which is reflected in improving the quality of the audit. It contributes to Blockchains in developing the electronic audit process making audit models more efficient and facilitating the collection of evidence that the auditor relies on when preparing his report on the audit process. Reports should be immediate, reflecting the credibility of transactions and information available to the parties to the chain and presenting it to the parties with interests to help them rationalize their decisions and improve the competitive position of the facility in light of technological developments in the business environment. (Abu Shaisha: 781, 2022).

3- Auditing in light of the development of the information technology environment:

The technical environment for electronic accounting technology is witnessing continuous development that has led to a change in the methods of auditing in implementing the tasks of the auditor. The auditor may resort to the following methods:

(Khanqawi: 13, 2023)

A- The method of auditing around the computer: It is one of the electronic auditing systems for processing data that focuses on inputs and outputs only, and does not use processors, meaning that the computer is neglected in terms of its impact on the results of the accounting system, and the auditor relies on the control process in controlling the inputs and outputs.

B- Auditing through the computer: With the increasing experience of auditors in operating electronic systems, it was possible to develop more advanced methods to test the validity of the programs used instead of looking at the computer as a closed black box. This is the method of auditing through the computer. Sometimes the auditor sees it necessary to pay attention to internal control within the devices. Thus, the inputs and outputs must be audited on the assumption that the inputs are correct and their processing is correct, then the outputs are correct. The auditor uses the so-called auxiliary methods using the computer, which is a group of methods that provide the auditor with effective means of testing computer applications, as the verification of the validity of the operation is tested in light of the prepared program. These methods are represented by feeding test data.

Balanced simulation, integrated auditor model with the client, integrated testing network, concurrent operation technology and related distinctive signalling and tracking technology.

T- Computer auditing: The auditor audits electronic systems using audit programs, which are programs designed to perform several tasks and are used by the auditor in all stages of the

auditing process, whether planning, implementation or detailed tests. The technology of special audit programs is one of the methods used by the auditor for specific purposes in the auditing process. These programs are prepared in light of the information systems specific to each client so that the stored data can be obtained in a readable form. As for general audit programs, they are the programs used by the auditor in different systems to audit different electronic processing systems regardless of the type of industry or special data.

4- The impact of information technology on the quality of the auditor's report:
The impact of information technology on the quality of external auditing can be summarized as follows:
(Heiba and Amin: 78, 2017)
A- The use of information technology contributes to the implementation of quality control procedures in terms of increasing the confidence of stakeholders in the auditor's profession in the information technology environment.
B- Improving the process of documenting working papers by following specific documentation policies using and applying information technology in documenting the office's work.
C- Providing reasonable assurances about the service provided by the office in line with the requirements of the profession.
D- Improving relations with clients by showing more accuracy and attention while working using information technology in communicating with clients and gaining new clients.
C- Reducing operational costs related to auditing operations, improving efficiency and effectiveness, and saving time and effort in auditing operations.
The researchers believe that the challenges facing the profession of auditors can be overcome in light of the developments in the modern technical environment. Auditing companies and offices must encourage their cadres to participate in continuous courses to learn the basics of operating and knowing the components of the computer and operating programs for accounting systems. They must have the ability and sufficient efficiency to design maps that reflect the flow of advanced information systems, examine them, and analyze them to know the strengths and weaknesses in the system to address the weaknesses and benefit from the strengths. They must have experience in dealing with ready-made programs and preparing simple programs that save time and reduce the cost of work. The auditor must have sufficient experience in methods of collecting data and linking them to audit them and issue a report that can be relied upon by stakeholders to make the right decisions.

Practical Aspect

To achieve the research hypotheses, a questionnaire was used, which consisted of two main axes: The first axis is dedicated to measuring the modern technical environment and includes three dimensions dedicated to measuring the modern technical environment, which is (continuous electronic auditing, cloud accounting, blockchains), and the second axis is dedicated to measuring the auditing profession of the auditor.

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Table (1) Five-point Likert scores, their degrees, and their default mean.

Strongly disagreed	disagree	neutral	agree	strongly agree	response
1	2	3	4	5	degree
Quinquennial Likert scale = total value for above responses and number of scale categories The default medium of the quintuple lectert scale = (5 + 4 + 3 + 2 + 1)/5 = 3 °					

The five-point Likert scale was used to express the five dimensions and measurements ranging from one point with completely disagree content to five points with completely agree content, as shown in the following table: -

First: The measure of validity and reliability of the questionnaire:

Through the data in the table below, it is clear that there is a good stability and reliability rate and that the Cronbach's alpha coefficient, the validity and reliability of the dimensions were found and can be relied upon.

Table No. (2)

The measure of validity and reliability:

dimensions	Alpha Cronbach Coefficient	honesty
Continuous Electronic Audit	0.801	0.871
Cloud Accounting	0.751	0.756
blockchain	0.701	0.721
Auditor's profession	0.801	.0867
aggregate	0.70	0.771

Second: Description and diagnosis of study variables:

Analysis of the opinions of the study community sample to reach a clear comprehensive vision of the nature of the study variables to describe the importance of the variables and diagnose the relationship of influence based on the SPSS program.

1- The first axis: The modern technical environment:

Table No. (3)

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Variation factor	deviation	mean	y ree		disagree		neutral		agree		totally agree		questions
			enta ge	repet ition	perce ntage	repet ition	perce ntage	rep etit ion	per cen tag e	repet ition	perce ntage	repet ition	
0.189	0.710	3.752	0%	0	3%	2	26%	16	46 %	28	23%	14	Q1
0.236	0.649	4.002	0%	0	11%	7	18%	11	50 %	30	20%	12	Q2
0173	0.701	4.045	0%	0	0%	0	21%	16	48 %	29	25%	15	Q3
0.293	0.725	3.033	0%	0	1.6%	1	26%	16	33 %	20	29%	13	Q4
0.164	0.654	3.969	0%	0	3%	2	29%	13	43 %	26	31%	19	Q5
0.202	0.623	3.078	0%	0	6%	4	6%	4	51 %	32	33%	20	Q6
0.209	0.678	3.643	Arithmetic mean, standard deviation and difference factor for the continuous electronic audit dimension										
0.192	0.702	3.645	0%	0	9%	5	29%	13	31 %	19	38%	23	Q1
0.180	0.741	4.102	0%	0	0%	0	5%	3	51 %	31	43%	26	Q2
0.175	0.665	3.799	0%	0	3%	2	6%	4	49 %	29	42%	25	Q3
0.175	0.721	4.110	0%	0	1.6%	1	10%	6	42 %	25	48%	28	Q4
0.176	0.732	4.152	0%	0	5%	3	30%	18	30 %	18	32%	21	Q5
0.188	0.750	3.982	0%	0	9%	5	16%	15	60 %	58	19%	18	Q6
0.172	0.718	4.164	Arithmetic mean,, standard deviation and difference factor for cloud accounting dimension										
0.154	0.757	4.908	0%	0	0%	0	10%	6	53 %	35	31%	19	Q1
0.187	0.789	4.201	0%	0	3%	2	9%	5	25 %	15	61%	38	Q2
0.199	0.797	3.994	1%	1	5%	3	6%	4	55 %	33	33%	20	Q3
0.197	0.792	4.008	0%	0	1.6%	1	10%	6	51 %	31	35%	22	Q4
0.179	0.720	4.003	0%	0	5%	3	11%	7	25 %	30	33%	20	Q5
0.183	0.720	3.878	0%	0	1.6%	1	27%	16	33 %	20	34%	23	Q6
0.185	0.762	4.116	Arithmetic mean, standard deviation and difference factor for block chain dimension										
0.180	0.722	3.991	Arithmetic mean and standard deviation of the modern technical environment as a whole										

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Table (3) Response of the questionnaire sample individuals to the paragraphs of the first part: the modern technical environment:

Standard deviation is the most widely used measure of dispersion to measure the extent of statistical dispersion, i.e. it indicates the extent of the range of values within a set of statistical data, and the lower the standard deviation value, the less the data dispersion from the arithmetic mean, and this reflects the convergence in the views of the individuals in the questionnaire sample.

It is the ratio of the standard deviation to the mean, the lower the coefficient of variation, the lower the level of dispersion around the mean, and this reflects the level of dispersion of individual answers from the average answers of the sample individuals.

It was found that the weighted arithmetic mean for the first axis as a whole is 3.991, which is considered an acceptable arithmetic mean compared to the default arithmetic mean for the scale of 3 degrees, with a low standard deviation of 0.0.22, while the coefficient of variation was 0.180, which indicates a great convergence in opinions about the modern technical environment and among the individuals of the questionnaire sample. At the level of dimensions in this axis, the following is noted from the table above: - It was found that the weighted arithmetic mean for the first dimension (related to continuous electronic auditing) is 3.643, which is greater than the default mean for the scale of 3 degrees, with a low standard deviation of 0.678, while the coefficient of variation was 0.209, which indicates a great convergence in opinions about the paragraphs of continuous electronic auditing among the individuals of the questionnaire sample. At the detailed level of this dimension, it is clear that all paragraphs of this dimension had calculated arithmetic means greater than the default mean of the scale. The paragraph represented by the fifth question, which included (Continuous electronic auditing contributes to achieving the security and confidentiality of information), achieved the lowest coefficient of variation in this dimension, amounting to 0.164, which reflects the high degree of agreement in the answers of the sample members. Its arithmetic mean was 3.969 with a standard deviation of 0.654. While the paragraph represented by the third question, which included (Continuous electronic auditing contributes to raising the efficiency of the auditor and his experience in using the computer to keep pace with technical developments), achieved the highest coefficient of variation in this dimension, amounting to 0.173, and its arithmetic mean was 4.045, which is higher than the default mean of the scale, which is 3 degrees and with a standard deviation of 0.701. This indicates that the individuals in the questionnaire sample believe that electronic auditing represents one of the most important methods that contribute to raising the efficiency of the auditor's work.

The weighted arithmetic mean of the second dimension related to cloud accounting was 4.064, which is greater than the default mean of the scale of 3 degrees, with a low standard deviation of 0.718, while the coefficient of variation was 0.172, indicating a great convergence in the opinions of the individuals in the questionnaire sample on the cloud accounting paragraphs. At the detailed level of this dimension, it is clear that all paragraphs of this dimension had calculated arithmetic means greater than the default mean of the scale, and the paragraph represented by the sixth question, which included (Cloud accounting contributes to the speed of access to accounting information at the time specified by the auditor) achieved the lowest coefficient of variation in this dimension, which amounted to 0.172, reflecting the high degree of agreement in the answers of the sample individuals, and its arithmetic mean was 4.164 and a standard deviation of 0.718. While the paragraph represented by the first question included (cloud accounting can be relied upon by the auditor without the need for other programs)

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achieved the highest coefficient of variation in this dimension, amounting to 0.192, and its arithmetic mean was 3.645, which is higher than the default mean of the scale, which is 3 degrees, with a standard deviation of 0.702. This indicates that the individuals in the questionnaire sample believe that although cloud accounting contributes to the speed of obtaining accounting information from the auditor, the use of other programs affects the accuracy of accounting information. This paragraph received less consensus than the rest of the paragraphs in this dimension in terms of agreement between the sample parties.

The weighted arithmetic mean of the second dimension related to blockchains was 4.116, which is greater than the default mean of the scale of 3 degrees, with a low standard deviation of 0.762, while the coefficient of variation was 0.185, indicating a great convergence in the opinions of the individuals in the sample questionnaire on the blockchain paragraphs. In detail for this dimension, it is clear that all paragraphs of this dimension had calculated arithmetic means greater than the default mean of the scale, and the paragraph represented by the first question, which included (Recording operations automatically without human intervention gives high accuracy) achieved the lowest coefficient of variation in this dimension, which amounted to 0.154, reflecting the high degree of agreement in the answers of the sample individuals, and its arithmetic mean was 4.908 with a standard deviation of 0.757. While the paragraph represented by the third question, which included (block chains contribute to the transparent transmission of information through the network), achieved the highest coefficient of variation in this dimension, which amounted to 0.199, and its arithmetic mean was 3.994, which is higher than the default mean of the scale, which is 3 degrees, with a standard deviation of 0.797. This indicates that the individuals in the questionnaire sample believe that despite the existence of block chains contributing to the transparency of information, the auditor must follow methods that enhance the transparency of obtaining information. This paragraph received less consensus than the rest of the paragraphs in this dimension in terms of the agreement of the sample parties.

2- The second part is the auditor's performance:

Table No. (4)

Variation factor	standard deviation	Arithmetic mean	Totally disagree		Disagree		Neutral		Agree		Totally agree		Question
			percentage	repetition	percentage	repetition	percentage	repetition	percentage	repetition	percentage	repetition	
0.184	0.759	4.11	0%	0	3%	2	16%	6	51%	27	30%	25	Q1
0.203	0.768	3.78	0%	0	4%	1	17%	6	55%	27	24%	26	Q2
0.192	0.767	3.99	0%	0	3%	3	20%	10	50%	27	27%	20	Q3
0.174	0.700	4.01	0%	1	3%	3	14%	13	59%	19	24%	24	Q4
0.143	0.740	4.02	0%	0	%	1	19%	11	52%	21	27%	27	Q5
0.178	0.730	4.10	0%	0	2%	1	19%	9	53%	25	26%	25	Q6
0.182	0.697	4.09	0%	0	2%	2	20%	12	58%	28	24%	18	Q7
0.159	0.637	4.01	Arithmetic Mean, standard deviation and coefficient of variation of the auditor performance gap axis										

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Table (4) Response of the questionnaire sample members to the paragraphs of the second axis - the profession of auditor

It was found that the weighted arithmetic mean for dimension A (the profession of auditor) is 4.01, which is greater than the default mean of the scale of 3 degrees, with a low standard deviation of 0.637, while the degree of the coefficient of variation was 0.159, which indicates a great convergence in opinions about the paragraphs of the auditor's performance among the questionnaire sample members. At the detailed level of this dimension, it is clear that all paragraphs of this dimension had calculated arithmetic means greater than the default mean of the scale, and the paragraph represented by the fifth question, which included (Using programs designed to implement a number of tasks in all stages of the auditing process, whether planning, implementation or tests, helps to raise work efficiency) achieved the lowest coefficient of variation in this dimension, which amounted to 0.143, which reflects the high degree of agreement in the answers of the sample members, and its arithmetic mean was 4.02 and a standard deviation of 0.740. While the paragraph represented by the second question included (publishing electronic information contributes to providing reasonable assurances of the service provided by the auditor that is in line with the requirements of the profession) achieved the highest coefficient of variation in this dimension, amounting to 0.203, and its arithmetic mean was 3.78, which is higher than the hypothetical mean of the scale, which is 3 degrees, with a standard deviation of 0.768. This indicates that the individuals in the questionnaire sample believe that despite the importance of publishing information, it is not sufficient to gain the trust of stakeholders in the profession of auditor.

3- Results of testing research hypotheses

Main hypothesis: There is no statistically significant effect of developments in the modern technical environment on the profession of auditor. .

To test this hypothesis, the following "linear regression" model was formulated:-

Where:-

= (dependent variable) auditor profession.

= (independent variable) modern technical environment.

Using the statistical program SPSS, the results were as follows:-

Table (5) Results of testing the main hypothesis

R	R-Square	F	Sig.	B
0.601	0.400	52.02	0.000	0.700

The table above shows that the correlation value (R) between the variables reached .601, which is a statistically high value, and that the value of the interpretation coefficient R-Square indicates that the modern technical environment explains 40% of the variance in the auditor profession, and that the calculated F value reached 60.01, which is greater than its tabular value because its significance Sig reached 0.00, and this level is less than the value of the error accepted in the social sciences and determined in advance by 0.05, which indicates the rejection of the null hypothesis and the acceptance of the alternative hypothesis (there is a statistically significant moral effect of the developments of the modern technical environment on the auditor profession). To prove the effect statistically. The slope value of the regression equation ( ) means that any increase in the degree of developments of the modern technical environment by one degree leads to an effect on the auditor profession by 70% with all other independent variables outside this model being constant.

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Sub-hypothesis First: (There is no statistically significant moral effect of continuous electronic auditing on the profession of auditor). To test this hypothesis, the following "linear regression" model was formulated: -
Where: -
= (sub-independent variable) continuous electronic auditing.
Using the statistical program SPSS, the results were as follows: -
Table (6) Results of testing the first sub-hypothesis
R R-Square F Sig. B
0.301 0.092 9.98 0.000 0.201

ACCEPTANCE (REJECTION) OF HYPOTHESIS	CORRELATION FACTOR R	BETA) B(	SIGNIFICANCE	CALCULATED F VALUE	R2 SELECTION COEFFICIENT	DEPENDENT VARIABLE	INDEPENDENT VARIABLE
Rejection of Null hypothesis and acceptance of alternative hypothesis	0.301	0.201	Relationship Moral 0.000	9.98	0.092	Auditor's profession	Continuous Electronic Audit

The table above shows that the correlation value (R) between the variables reached 0.301, which is a statistically moderately strong value, and that the value of the interpretation coefficient R-Square indicates that continuous electronic auditing explains 9.2% of the variance in the expectations gap, and that the calculated F value reached 9.98, which is greater than its tabular value because its significance Sig reached 0.001, and this level is less than the value of the acceptable error in the social sciences and determined in advance by 0.05, which indicates the rejection of the null hypothesis and the acceptance of the alternative hypothesis (there is a statistically significant moral effect of continuous electronic auditing in the profession of auditors) because the effect is statistically proven. The slope value of the regression equation means that any increase in the degree of continuous electronic auditing by one degree leads to a change in the profession of auditors, with all other independent variables outside this model being constant.
Second Sub-Hypothesis: There is no significant impact relationship of cloud accounting on the profession of auditor.

To test this hypothesis, the following "linear regression" model was formulated:
Where:-
= (sub-independent variable) cloud accounting.
Using the SPSS statistical program, the results were as follows:-
Table (7) Results of testing the second sub-hypothesis
R R-Square F Sig. B
0.399 0.228 28.12 0.000 0.370

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Table (7) The impact of cloud accounting

ACCEPTANCE (REJECTION) OF HYPOTHESIS	CORRELATION COEFFICIENT R	BETA) B(	SIGNIFICANCE	CALCULATED F VALUE	R2 SELECTION COEFFICIENT	DEPENDENT VARIABLEY	INDEPENDENT VARIABLE X
Rejection of Null hypothesis and acceptance of alternative hypothesis	0.399	0.370	Relationship Moral 0.000	28.12	0.228	Auditor's profession	Cloud Accounting

The table above shows that the correlation value (R) between the variables reached 0.399, which is a statistically moderately strong value, and that the value of the explanation coefficient R-Square indicates that cloud accounting explains 20.8% of the variance in the expectations gap, and that the calculated F value reached 28.12, which is greater than its tabular value because its significance Sig reached 0.000, and this level is less than the value of the acceptable error in the social sciences and determined in advance by 0.05, which indicates the acceptance of the research hypothesis for the statistically proven effect. The value of the slope of the regression equation means that any increase in the degree of cloud accounting by one degree leads to a change in the profession of auditor by 37% with all other independent variables outside this model being constant.

The third sub-hypothesis: (There is no statistically significant moral effect of blockchains on the profession of auditors). To test this hypothesis, the following "linear regression" model was formulated: -

Where: -

= (sub-independent variable) blockchains.

Using the SPSS statistical program, the results were as follows: -

Table (8) Results of the first sub-hypothesis test

R R-Square F Sig. B

0.376 0.097 8.85 0.000 0.201

The table above shows that the correlation value (R) between the variables reached 0.376, which is a statistically moderately strong value, and that the value of the explanation coefficient R-Square indicates that blockchains explain 9.7% of the variance in the expectations gap, and that the calculated F value reached 9.98, which is greater than its tabular value because its significance Sig reached 0.002, and this level is less than the acceptable error value in the social sciences and determined in advance by 0.05, which indicates the rejection of the null hypothesis and the acceptance of the alternative hypothesis (there is a statistically significant moral effect of blockchains on the auditor profession) because the effect is statistically proven. The slope value of the regression equation means that any increase in blockchains by one degree leads to a change in the auditor profession with all other independent variables outside this model being constant.

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Section Three:

Conclusions and Recommendations:

First: Conclusions

1- Modern technical environment developments contribute to making changes in the profession of auditors in terms of reducing time and effort.

2- The lack of professional technical competence of auditors to use electronic systems in auditing.

3- The commitment of auditors to modern technologies in work contributes to the conviction of stakeholders.

4- The use of computers and ready-made programs helps reduce the cost and wages of auditors' offices.

5- There is a deficiency in the performance of auditors due to their failure to use continuous electronic auditing and cloud accounting outputs.

6- The authorities responsible for the profession of auditors in Iraq do not exercise a supervisory role in developing auditors' offices and keeping pace with progress in the profession.

7- The inability of the laws and instructions in force in Iraq to shed light on the efficiency of the work of auditors' offices in dealing with the technical developments of the profession.

Second: Recommendations

1- The necessity of emphasizing the training of audit office cadres and their participation in continuous e-learning programs to raise the efficiency of their performance and activate their commitment to the developments of the profession.

2- The necessity of the bodies regulating the profession of auditors in Iraq to contribute to directing the work of auditors in a manner consistent with modern technical developments.

3- The necessity of studying the expectations of stakeholders regarding the performance of auditors and meeting the needs of all parties benefiting from the audit service.

4- The necessity of audit offices contributing with the participation of their cadres in courses related to cloud accounting, blockchain networks, and how to process information electronically.

5- The necessity of following control procedures on the performance of auditors in audit offices and conducting continuous tests regarding electronic work.

6- The necessity of audit offices in Iraq contributing to developing continuous training programs that enhance the capabilities of auditors and make their performance keep pace with developments in the profession at the global level.

7- The necessity of seeking the assistance of experts to develop planning processes in the work of auditors and to establish laws that resolve all the obstacles that hinder the process of obtaining information electronically.

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