



THE ROLE AND IMPORTANCE OF THE EXTERNAL AUDITOR IN REVIEWING INTERNAL CONTROL IN ELECTRONIC ACCOUNTING SYSTEMS (A PROSPECTIVE STUDY OF THE OPINIONS OF A SAMPLE OF AUDITORS IN THE STATE AUDIT BUREAU)

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| Article history: | | Abstract: |
|-------------------------|----------------------------|--|
| Received: | 1 st March 2023 | The research aims to explain the role and importance of the external auditor in reviewing the internal control in the electronic accounting systems with regard to each of the requirements of the information technology of the control environment in the internal control system, the requirements of the information technology of risk assessment in the internal control system, the requirements of the control activities technology in the internal control system, and the requirements of Information technology of the communication and information process in the internal control system, and information technology requirements of the control process in the internal control system. The research was applied to a sample of individuals working in the Bureau of Financial Supervision, who are the external auditors who audit the accounts of government units during the year 2022. The research reached a set of conclusions, the most important of which was that the quality of the software used in computerizing accounting information systems has an effective role in improving the internal control system, and that computerizing accounting information systems makes data available in the hands of investment decision makers in record time to make investment decisions successful decisions. And keeping pace with market changes, and that this will increase the efficiency of the external auditing apparatus and thus improve the quality of the reports it provides because the computerized software is characterized by impartiality, it made investment decision makers trust the outputs of the computerized accounting system |
| Accepted: | 30 March 2023 | |
| Published: | 6 th May 2023 | |

Keywords:

INTRODUCTION:

With the growing use of information technology, many institutions worked on data processing electronically, so that information technology became part of the environment of these institutions, and the continuity of information technology due to its impact on its various operations and data processing imposes on the internal control systems to keep pace with these developments. Since the most attractive business organizations to technology are public shareholding companies, so this study came to examine the extent

to which the internal control systems in this institution can keep up with information technology requirements from the point of view of internal auditors. In addition to explaining the role and importance of the external auditor in reviewing internal control in electronic accounting systems, where the accounting and auditing profession, like other professions, began using technology when it first appeared, and employed it in the accounting system in a way that made the implementation of the accounting cycle a mechanism of a nature characterized by speed and accuracy, but



despite the advantages. However, there are serious drawbacks associated with this technology, such as the possibility of penetrating it or manipulating its inputs, and thus obtaining misleading outputs, and from this standpoint it has become necessary to keep pace with the internal and external control systems of this technology and the changes it brought about in the accounting system, so that it became a computerized system that lacks some confidence and credibility in line with modern environmental requirements.

The first topic: research methodology

1-1 Research problem:

The problem of the study lies in the fact that the external auditors do not depend on the skills possessed by the internal auditors in the economic units in light of the use of information technology as well as the use of computers and its various programs in the audit work. Availability of information technology requirements for risk assessment in the internal control system, the availability of control activities technology requirements in the internal control system, the availability of communication and information process information technology requirements in the internal control system, and the availability of information technology requirements for the control process in the internal control system.

1-2 Research objectives:

The research aims to explain the role and importance of the external auditor in reviewing the internal control in the electronic accounting systems with regard to each of the requirements of the information technology of the control environment in the internal control system, the requirements of the information technology of risk assessment in the internal control system, the requirements of the control activities technology in the internal control system, and the requirements of Information technology of the communication and information process in the internal control system, and information technology requirements of the control process in the internal control system.

1-3 Research importance:

The importance of the research stems from the administration's need to obtain a lot of information that helps it in making decisions, and the internal control system is the most interactive aspect with the parties within the economic unit and their changing needs in the light of information technology. The external control system, especially with regard to the evaluation of the internal auditor, as well as the evaluation of the reliability of networks, computer operations, and the data storage mechanism, and the

extent to which decision-making is possible based on this information.

1-4 Research hypothesis:

The research is based on the following hypotheses:

1. The external auditor keeps up with the information technology requirements of the control environment in the internal control system in the Iraqi economic units.
2. The external auditor keeps pace with information technology requirements for risk assessment in the internal control system in the Iraqi economic units.
3. The external auditor keeps pace with the requirements of the control activities technology in the internal control system in the Iraqi economic units.
4. The external auditor keeps up with the information technology requirements of the communications and information process in the internal control system in the Iraqi economic units.
5. The external auditor keeps up with the information technology requirements of the control process in the internal control system in the Iraqi economic units.

1-5 Research sample:

The research sample is represented by individuals working in the Bureau of Financial Supervision, and they are the external auditors who audit the accounts of government units during the year 2022.

The second topic: the theoretical framework of the research

2-1 Auditing the electronic processing environment:

The dominant feature of many economic units has become their use of technology in conducting their business and processing their data, and it helps in building these units and building distinguished relationships with customers and then increasing their market share. It also helps in the decision-making process, improving productivity and encouraging global competition (Dassin, 2020:15).

All the developments that took place in information technology put management and the auditing profession in front of a major challenge. The management should put in place control procedures commensurate with the development of information technology and the auditing profession by developing its tools and methods to continue providing its services and products with high quality and then overcome some human shortcomings in the case of practicing



Appropriate professional judgment, and it must be taken into account that the objectives of the systems and the objectives of the audit are not affected by the way the data is operated, whether it is manual or automated, and the scope of the audit does not change under the computer-based automated information system during the accounting period (Donald & William, 2010: 89).

At the present time, the economic units are experiencing the information technology revolution, and this revolution required the economic units to quickly process their data and quickly deliver them to the user in order to benefit from them in making various administrative decisions and rationalize them. In return, this technology put the security and safety of these organizations at stake. The security methods and procedures that accompanied the use of this technology in order to protect and preserve its valuable information, and the existence of accurate security and control over information resources related to the organization should be a priority for senior management, and although the objectives of control remained similar in light of the use of information technology, the methods of control and security have changed fundamentally in light of developments in electronic commerce and information technology (Hakim & Okra, 2016:152).

2-2 The impact of computer use on the audit process:

The use of computers in the audit process has led to changes in the work of the auditor in two directions, the first direction is related to internal control, while the second trend is represented by the audit methods used, and the following we discuss these changes in these two directions: (Lawrence, 2012:104)

First: Internal control in the light of electronic accounting systems: The basic elements of internal control in electronic accounting systems consist of general control and control over applications, and there are some procedures and methods of internal control used in traditional (manual) accounting systems that are also followed in electronic accounting systems. The nature and number of internal control procedures in the electronic accounting systems depend on many factors, the most important of which is the size and nature of the accounting operations that are the responsibility of handling the electronic accounting system, as well as on the degree of complexity and development of the computer system used. General oversight is a comprehensive oversight that takes into account most of the activities and events of the electronic accounting system, such as

the organizational structure of the system, protection of files and programs, and oversight of the process of designing and developing systems and programs. Weaknesses in this type of oversight (Watkins, et.al., 2019:155).

Second: Monitoring the security of computer hardware, software, and data: There are many risks that must be taken into account when determining internal control procedures related to the security of hardware, software, and data. The most important of these risks are the following: (Meyer, et.al., 2017:53)

1. Making mistakes: These are the mistakes that are committed by individuals who operate the computer, such as entering a certain operation into the computer incorrectly or entering it twice.
2. Accidents and disasters: such as fires, power outages, exposure to radiation, magnetic field and other accidents.
3. Commercial espionage: It means that competing companies try to obtain important data and programs from a specific company through illegal means.
4. Sabotage and destruction of hardware and software by former and current employees of the facility or persons from outside the facility, motivated by hatred and revenge.

One of the most important internal control procedures necessary for the security of hardware, software and data is keeping a record in which all data and programs stored in the library are recorded so that the record contains the necessary information such as the addresses of those data and programs, the date of their filing, the coding and numbering of tapes, magnetic disks or any other medium (Dangle, 2017:183).

The main objective that the administration seeks to achieve by imposing control procedures on the process of designing and developing electronic accounting systems is to ensure that the change or development in the system or in the programs will benefit the organization more than the current system. And that the new system will be more efficient and effective and that it contributes a great deal to the economic unit than the current system (Communal & Sexton, 2020:236).

It is necessary for individuals from the computer department and other departments related to the computer department to participate with system designers and programmers in the testing process in order to identify deficiencies and weaknesses in the



system or new programs and to ensure the ability of the system or new programs to meet the needs of the departments and in a timely manner to ensure that The ability of new programs to detect errors and then correct them (Ghost & Megon, 2005:586).

2-3 Audit methods used in light of the electronic development:

The application of any type of system using information technology to assist the auditor in planning, controlling and documenting the audit work is called electronic auditing, which uses information technology in the audit process to help him complete the audit process starting from planning through control and then documentation, and there are three methods used by the auditor In the audit process and according to its development, which are as follows: (Duff, 2014:56)

First: Auditing on the computer: This method is characterized by its ease of application, that it does not require knowledge of computer technology, and that it is more economical than other methods. Knowing about the weaknesses in the system and not identifying the control risks accurately and correctly, and thus leads to a lack of integration of the audit process, as well as the auditor will not benefit from the huge capabilities provided by the computer in the completion of a large number of tests and like the real-time operating system for data, the auditor will not be able Implementation of the audit process based on this method during the period (Choi, et.al., 2010:74).

Second: Auditing through the computer: After entering the test data into the computer and processing it with the application programs of the establishment, the auditor compares the results he reached with the results that the auditor expected to obtain from processing the test data. The control procedures in these programs are actually working efficiently. In the event of discrepancies between them, the auditor must then verify the real reasons behind those discrepancies, and the reason may be due to a malfunction in the computer or the use of computer programs and hardware during the period was done in a wrong way, meaning that it is not in all cases that the reason for the discrepancies is a weakness in the procedures Censorship in computer programs (Larry, 2013:25).

Third: Auditing by computer: Under this method, the auditor deals with computer hardware and software as an effective means so that he can benefit from the tremendous capabilities that these programs

and hardware possess to process large amounts of data in the shortest time and with extreme accuracy, instead of considering it an obstacle in the way of implementing auditing procedures. When following this method, the computer is relied upon to perform many audit procedures, such as sample testing, recalculation to test and examine accounting records, make comparisons, calculate financial ratios, use special programs in preparing work papers, prepare and print confirmations, analyze the ages of civilian accounts, and use graphs when presenting Results in reports (Wilson, 2019:67).

2-4 The relationship between internal auditing and external auditing in light of the use of computers:

The relationship between internal audit and external audit in the light of automated data processing systems has an impact on the procedures that must be applied to achieve the elements of an effective internal control system. In general, internal control procedures in a computer environment are divided into three main groups as follows: (Richter, 2016: 8)

First: General Control Procedures: These are the procedures that relate to all or most of the accounting applications that are made by computer, and jobs must be separated in the electronic data processing department and jobs, and the importance of this separation increases in the case of jobs and the preservation of accounting assets and responsibility, so the electronic processing department must to correct cases of error or sudden failure, as well as treatment in emergency cases, and to develop detailed plans to meet any failure in the system. shall be responsible only for the registration function, and the other functions shall be the responsibility of other departments within the facility. Access to the computer room must be controlled to prevent unauthorized persons from entering it. A record of visitors who visit the computer room must be kept after being authorized to do so and accompanied by a person. authorized persons and the use of a personal code or password to limit access to the software to authorized persons (Healey & Kim, 2013:10).

Second: Control procedures on applications: There are general control procedures built into the computer system. These procedures give the computer maximum confidence on the part of those who use it. This confidence is mainly due to the advancement and development of chip technology. The procedures built into the computer system are self-diagnostic means to detect and prevent hardware malfunctions. Diagnostic hardware and software are used. It is the hardware



and software provided by the manufacturers of computers with those computers for use in examining operations and methods of electronic processing within the computer system, as well as protecting the operating range to correct cases of error or sudden failure, as well as treatment in emergency cases, and to develop detailed plans to meet any failure in the system., in most of the central processing units, several operations are performed simultaneously. In order to ensure that the processes that are running simultaneously will not interfere with each other, causing damage or change, the programs contain measures to protect the scope of each operation (Hakim & Okra, 2016:152).

Third: Control procedures on the database:

There are other general control procedures, represented by the use of a system for maintaining backup files to recover data upon damage, to maintain records and the ability to correct cases of error or sudden failure, as well as treatment in emergency cases, and to develop detailed plans to meet any failure in the system. These plans detail the responsibilities of individuals and indicate the alternative operating locations that can be used when needed, in addition to the file protection ring, which is a ring that is attached to the magnetic tape to prevent unauthorized data entry on the tape by the operator, as well as the use of identification cards, which is a sticky paper preamble placed on a magnetic tape reel or any other data storage device to distinguish the file during the audit process to correct cases of error or sudden failure, as well as treatment in emergency

cases, and to develop the system (Choi, et.al., 2010:74).

The third topic: the applied side of the research
3-1 The research community and sample and the statistical methods used to analyze the data:

The research community and sample consists of a group of auditors working in the Iraqi Financial Supervision Bureau who audit government units, and in order to achieve the objectives of the research, a questionnaire specially prepared for this purpose was designed and the validity and reliability of the questionnaire was confirmed, then it was distributed to the members of the research sample, and a scale was used Likert five-pointer to answer the paragraphs of the questionnaire, and the averages of the answers of the study sample were classified for each paragraph, and the apparent validity of the tool or the questionnaire was verified after developing its initial form and presenting it to a number of faculty members in Iraqi universities,

To ensure that it covers the basic aspects of the research, the clarity of its paragraphs, its relevance, and its belonging to the field that it was prepared to measure, and to ensure the stability of the research tool, the Cronbach alpha test was used in order to verify its homogeneity or internal consistency, as the value of the Crumbach alpha coefficient for the study variables ranged between (0.814-0.882). This means that there is a high degree of credibility in the answers, and Table No. (1) shows the most prominent results of this test.

Schedule (1): Reliability coefficients for the research tool according to the internal consistency method

| No. | Hypothesis | The number of paragraphs | The stability coefficient |
|-----|--|--------------------------|---------------------------|
| 1 | The external auditor keeps up with the information technology requirements of the control environment in the internal control system in the Iraqi economic units | 5 | 0.822 |
| 2 | The external auditor keeps pace with information technology requirements for risk assessment in the internal control system in the Iraqi economic units | 5 | 0.814 |
| 3 | The external auditor keeps pace with the requirements of the control activities technology in the internal control system in the Iraqi economic units | 5 | 0.856 |
| 4 | The external auditor keeps up with the information technology requirements of the communications and information process in the internal control system in the Iraqi | 5 | 0.882 |



| | economic units | | |
|---|---|----|-------|
| 5 | The external auditor keeps up with the information technology requirements of the control process in the internal control system in the Iraqi economic units. | 5 | 0.866 |
| | Average | 25 | 0.848 |

Source: Prepared by the researcher.

The sample can be distributed according to demographic characteristics, as shown in schedule (2).

Schedule (2): Analyze the demographic characteristics of the research sample

| No. | Variable | | Frequency | Percentage |
|-----|---------------------|--------------------|-----------|------------|
| 1 | Age | years and under 40 | 20 | 20.00% |
| | | years old 50-41 | 50 | 50.00% |
| | | 50 years and over | 30 | 30.00% |
| 2 | Qualification | Bachelor's | 80 | 80.00% |
| | | Master's | 20 | 20.00% |
| 3 | Years of Experience | years 10-5 | 22 | 22.00% |
| | | years 15-11 | 30 | 30.00% |
| | | More than 15 years | 48 | 48.00% |

Source prepared by the researcher.

It is clear from the above schedule that 20% of the research sample were less than 40 years old, and 50% of them ranged from 41-50 years old, while the remaining members of the research sample were over 50 years old, and the percentage of holders of a bachelor's degree from The members of the research sample are 80% and the master's degree is 20%, which indicates that the members of the research sample are qualified to understand the subject, and for years of experience for the members of the research sample, the largest percentage was for the category of more than 15 years at a rate of 48%, and 30% for the category of 11-15 years, either category The least was for the category of 5-10 years at a rate of 22%, which indicates the accumulated experience in working in the bank among the members of the research sample.

The statistical program for social sciences (SPSS-25) was also applied, and the arithmetic mean was used relative to the maximum value of the five-point Likert scale, as the study is acceptable if it obtained a percentage higher than 60%, that is, if the arithmetic mean exceeded three degrees of the scale area. The t-test was also used for one sample, and it aims to test research hypotheses and find the relationship between the independent and dependent research variables

through inference about the arithmetic mean of the statistical community and its statistical significance. The relationships between the independent and dependent variables of the study are real relationships and are not due to chance. The calculated T is compared with the tabular T, and if its calculated value for accepted and can be circulated to the statistical community, given that this sample is representative of it.

3-2 Presenting the results of the field study and testing hypotheses:

During this paragraph, the results of the research sample answers will be reviewed with regard to studying the role and importance of the external auditor in reviewing internal control in electronic accounting systems. The following is a presentation of the results of testing the research hypotheses, as follows:

First: The results of testing the first hypothesis:

which states (the external auditor keeps pace with the information technology requirements of the control environment in the internal control system in the Iraqi economic units). The following schedule:

Schedule (3): Arithmetic means, standard deviations, and (T) value for the responses of the search sample individuals for the first hypothesis paragraphs

| No | Variables | Arithmetic Mean | Standard Deviation | T Value |
|----|---|-----------------|--------------------|---------|
| | The external auditor keeps pace with the information technology requirements of the control environment in the internal control system in the Iraqi economic units in terms | | | |



| | of: | | | |
|---|---|--------------|--------------|--------------|
| 1 | Assign authorities and responsibilities | 4.224 | 0.678 | 8.716 |
| 2 | Appointment of the Board of Directors and the Audit Committee | 3.678 | 0.451 | 7.452 |
| 3 | Commitment to efficiency | 4.002 | 0.564 | 9.538 |
| 4 | Specialist/external reviews | 4.784 | 0.786 | 5.223 |
| 5 | HR policies and practices | 3.908 | 0.552 | 6.275 |
| | Average | 4.119 | 0.606 | 7.441 |

Source: the numbers of the researcher.

It is clear from the above schedule that the first paragraph obtained an arithmetic mean (4.224) with a standard deviation (0.678) and the T value was (8.716), while the second paragraph obtained an arithmetic mean (3.678) with a standard deviation (0.451) and the T value was (7.452). While the third paragraph got an arithmetic mean (4.002) with a standard deviation (0.564) and the T value was (9.538), and the fourth paragraph got an arithmetic mean (4.784) with a standard deviation (0.786) and the T value was (5.223), and finally the paragraph The fifth got an arithmetic mean (3.908) with a standard deviation (0.552) and the T value was (6.275), so the

arithmetic mean for this hypothesis is (4.119) with a standard deviation (0.606) and the T value was (7.441), so the hypothesis can be accepted and it can be said that the external auditor Keeping pace with the information technology requirements of the control environment in the internal control system in the Iraqi economic units.

Second: The results of testing the second hypothesis: which states (the external auditor keeps pace with information technology requirements for risk assessment in the internal control system in the Iraqi economic units). The following schedule:

Schedule (4):Arithmetic means, standard deviations, and (T) value for the responses of the search sample individuals for the paragraphs of the second hypothesis

| No | Variables | Arithmetic Mean | Standard Deviation | T Value |
|----|--|-----------------|--------------------|--------------|
| | The external auditor keeps pace with information technology requirements for risk assessment in the internal control system in Iraqi economic units in terms of: | | | |
| 1 | Strategic goals | 4.116 | 0.543 | 5.221 |
| 2 | Operations objectives | 3.884 | 0.337 | 4.314 |
| 3 | Sub-process objectives | 3.996 | 0.673 | 7.268 |
| 4 | Continuous business planning | 4.560 | 0.612 | 5.261 |
| 5 | The management of change | 3.852 | 0.526 | 6.805 |
| | Average | 4.082 | 0.538 | 5.774 |

Source: the numbers of the researcher.

It can be seen from the above schedule that the first paragraph got an arithmetic mean (4.116) with a standard deviation (0.543) and the T value was (5.221), while the second paragraph got an arithmetic mean (3.884) with a standard deviation (0.337) and the T value was (4.314). While the third paragraph got an arithmetic mean (3.996) with a standard deviation (0.673) and the T value was (7.268), and the fourth paragraph got an arithmetic mean (4.560) with a standard deviation (0.612) and the T value was (5.261), and finally the paragraph The fifth obtained an arithmetic mean (3.852) with a standard deviation (0.526) and the T value was (6.805), so the arithmetic

mean for this hypothesis is (4.082) with a standard deviation (0.538) and the T value was (5.774), so the hypothesis can be accepted and it can be said that the external auditor Keeping pace with the information technology requirements of risk assessment in the internal control system in the Iraqi economic units.

Third: The results of testing the third hypothesis: which states (the external auditor keeps pace with the requirements of control activities technology in the internal control system in the Iraqi economic units). the following:



Schedule (5): The arithmetic means, standard deviations, and (T) value of the responses of the research sample to the paragraphs of the third hypothesis

| No | Variables | Arithmetic Mean | Standard Deviation | T Value |
|----|--|-----------------|--------------------|---------|
| | The external auditor keeps pace with the requirements of the control activities technology in the internal control system in the Iraqi economic units in terms of: | | | |
| 1 | Authority | 4.602 | 0.608 | 6.968 |
| 2 | Completion | 4.115 | 0.446 | 4.459 |
| 3 | Data accuracy | 3.505 | 0.560 | 6.129 |
| 4 | Good time | 4.018 | 0.789 | 5.352 |
| 5 | Continuity | 3.667 | 0.338 | 4.772 |
| | Average | 3.981 | 0.548 | 5.536 |

Source: the numbers of the researcher.

It is noted from the above schedule that the first paragraph got an arithmetic mean (4.602) with a standard deviation (0.608) and the T value was (6.968), while the second paragraph got an arithmetic mean (4.115) with a standard deviation (0.446) and the T value was (4.459). While the third paragraph got an arithmetic mean (3.505) with a standard deviation (0.560) and the T value was (6.129), and the fourth paragraph got an arithmetic mean (4.018) with a standard deviation (0.789) and the T value was (5.352), and finally the paragraph The fifth obtained an arithmetic mean (3.667) with a standard deviation (0.338) and the T value was (4.772), so the arithmetic

mean for this hypothesis is (3.981) with a standard deviation (0.548) and the T value was (5.536), and accordingly the hypothesis can be accepted and it can be said that the external auditor Keeps pace with the technology requirements of control activities in the internal control system in the Iraqi economic units.

Fourth: The results of testing the fourth hypothesis: which states (the external auditor keeps pace with the information technology requirements of the communications and information process in the internal control system in the Iraqi economic units). In the following table:

Schedule (6): The arithmetic means, standard deviations, and (T) value of the responses of the research sample to the paragraphs of the fourth hypothesis

| No | Variables | Arithmetic Mean | Standard Deviation | T Value |
|----|--|-----------------|--------------------|---------|
| | The external auditor keeps up with the information technology requirements of the communications and information process in the internal control system in the Iraqi economic units in terms of: | | | |
| 1 | Data Center | 3.765 | 0.672 | 5.325 |
| 2 | Operating systems | 4.379 | 0.228 | 4.987 |
| 3 | Access security | 3.227 | 0.520 | 3.424 |
| 4 | Protection against IT risks | 4.224 | 0.410 | 5.260 |
| 5 | Order rules | 4.479 | 0.650 | 4.416 |
| | Average | 4.015 | 0.496 | 4.682 |

Source: the numbers of the researcher.

It is clear from the above schedule that the first paragraph obtained an arithmetic mean (3.765) with a standard deviation (0.672) and the T value was (5.325), while the second paragraph obtained an arithmetic mean (4.379) with a standard deviation (0.228) and the T value was (4.987). While the third paragraph got an arithmetic mean (3.227) with a

standard deviation (0.520) and the T value was (3.424), and the fourth paragraph got an arithmetic mean (4.224) with a standard deviation (0.410) and the T value was (5.260), and finally the paragraph The fifth obtained an arithmetic mean (4.479) with a standard deviation (0.650) and the T value was (4.416), so the arithmetic mean for this hypothesis is



(4.015) with a standard deviation (0.496) and the T value was (4.682), and accordingly the hypothesis can be accepted and it can be said that the external auditor Keeps pace with the information technology requirements of the communications and information process in the internal control system in the Iraqi economic units.

Fifth: The results of testing the fifth hypothesis: which states (the external auditor keeps pace with the information technology requirements of the monitoring process in the internal control system in the Iraqi economic units). The following schedule:

Schedule (7): Arithmetic means, standard deviations, and (T) value for the responses of the research sample to the items of the fifth hypothesis

| No | Variables | Arithmetic Mean | Standard Deviation | T Value |
|----|---|-----------------|--------------------|---------|
| | The external auditor keeps up with the information technology requirements of the control process in the internal control system in the Iraqi economic units in terms of: | | | |
| 1 | Administrative deliveries | 4.220 | 0.513 | 7.006 |
| 2 | Dissemination and transmission of information | 4.105 | 0.782 | 4.114 |
| 3 | Strategic deliveries | 3.775 | 0.462 | 5.249 |
| 4 | Communicate the objectives of the organization | 4.218 | 0.339 | 5.362 |
| 5 | Formal meeting periods | 4.129 | 0.791 | 6.028 |
| | Average | 4.089 | 0.577 | 5.552 |

Source: the numbers of the researcher.

It is noted from the above schedule that the first paragraph got an arithmetic mean (4.220) with a standard deviation (0.513) and the T value was (7.006), while the second paragraph got an arithmetic mean (4.105) with a standard deviation (0.782) and the T value was (4.114). While the third paragraph got an arithmetic mean (3.775) with a standard deviation (0.462) and the T value was (5.249), and the fourth paragraph got an arithmetic mean (4.218) with a standard deviation (0.339) and the T value was (5.362), and finally the paragraph The fifth obtained an arithmetic mean (4.129) with a standard deviation (0.791) and the T value was (6.028), so the arithmetic mean for this hypothesis is (4.089) with a standard deviation (0.577) and the T value was (5.552), and accordingly the hypothesis can be accepted and it can be said that the auditor keeps pace with External information technology requirements of the control process in the internal control system in the Iraqi economic units.

The fourth topic: conclusions and recommendations

4-1 Conclusions:

During this research, a number of conclusions were reached, as follows:

1. The quality of the software used in computerizing the accounting information systems has an effective role in improving the internal control system, and that this will increase the efficiency of the external auditing apparatus and thus improve the quality of the reports submitted by the external auditor.
2. The existence of accurate security and control over information resources related to the organization should be a priority for senior management, although the objectives of control remained similar in light of the use of information technology.
3. The use of computers in the audit process led to changes in the work of the auditor in two directions, the first direction related to internal control, while the second trend represented the auditing methods used.
4. One of the most important internal control procedures necessary for the security of hardware, software and data is to keep a record in which all data and programs stored in the library are recorded so that the record contains the necessary information such as the addresses of those data and programs, the date of their deposit, the coding and



numbering of tapes, magnetic disks or any other medium.

5. The relationship between internal audit and external audit in the light of automated data processing systems has an impact on the procedures that must be applied to achieve the elements of an effective internal control system in a way that helps in rationalizing administrative decisions and in a way that is commensurate with the requirements of the contemporary business environment and the accompanying many developments.

4-2 Recommendations:

Based on the conclusions reached, the research recommends the following:

1. The need to plan the process of auditing the information technology environment and work to solve the problem of information security and the acquisition of information technology tools and the problem of monitoring information technology systems as well as the problem of ethics of information technology.
2. Adopting information technology systems on the accounting audit model and benefiting from the effects of information technology on internal and external audit procedures so that work must be in the light of internal auditing standards and external auditing standards when adopting information technology systems.
3. The need for all sectors to appoint internal auditors with competence and knowledge of the importance of using information technology systems, to increase the efficiency and effectiveness of the internal control system, and to give them the necessary training courses in the field of information technology requirements.
4. The need to pay attention to the management philosophy when creating the control environment, and the necessity of continuous supervision of employees and evaluation of their performance in the use of information technology tools, with an emphasis on the importance of using self-evaluation and quality assurance examination.
5. Work on assessing information technology risks from time to time and pay attention to the impact of those risks on the internal control system and the need to anticipate them before they occur and find appropriate

solutions in the event of their occurrence, and find the appropriate time to determine control activities in the information technology environment and develop control activities from time to time.

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Appendix (1)
Questionnaire form

Respected respondent brother ... We put in your hands a questionnaire tagged with (the characteristics of transformational leadership in insurance companies and their impact on the application of total quality management - an applied study in the Iraqi National Insurance Company), and we would like to explore your views on the existing paragraphs, and that your accurate answer will contribute to achieving the goals research, so please kindly choose the answer that you think is more in line with the actual reality.

First: personal information:

Please put an (X) in the appropriate box:

1. Age: From 30-40 years, From 41-50 years....., More than 50 years..... .
2. Gender: Male....., Female..... .
3. Academic Qualification: Bachelor's....., Master's....., Ph.D..... ,
4. Years of Experience: From 5-10 years....., From 11-15 years....., More than 15 years..... .

Second: Questions related to the study variables:

Please put an (X) in front of the alternative that you see fit.

| No. | Questions | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|-----|---|----------------|-------|---------|----------|-------------------|
| 1 | The external auditor keeps pace with the information technology requirements of the control environment in the internal control system in the Iraqi economic units in terms of: | | | | | |
| | Assign authorities and responsibilities | | | | | |
| | Appointment of the Board of Directors and the Audit Committee | | | | | |
| | Commitment to efficiency | | | | | |
| | Specialist/external reviews | | | | | |
| | HR policies and practices | | | | | |
| 2 | The external auditor keeps pace with information technology requirements for risk assessment in the internal control system in Iraqi economic units in terms of: | | | | | |
| | strategic goals | | | | | |
| | Operations objectives | | | | | |
| | Sub-process objectives | | | | | |
| | Continuous business planning | | | | | |
| | The management of change | | | | | |
| 3 | The external auditor keeps pace with the requirements of the control activities technology in the internal control system in the Iraqi economic units in terms of: | | | | | |
| | Authority | | | | | |
| | Completion | | | | | |
| | Data accuracy | | | | | |
| | Good time | | | | | |
| | Continuity | | | | | |
| 4 | The external auditor keeps up with the information technology requirements of the | | | | | |



| | | | | | | |
|---|---|--|--|--|--|--|
| | communications and information process in the internal control system in the Iraqi economic units in terms of: | | | | | |
| | Data Center | | | | | |
| | Operating systems | | | | | |
| | Access security | | | | | |
| | Protection against IT risks | | | | | |
| | Order rules | | | | | |
| 5 | The external auditor keeps up with the information technology requirements of the control process in the internal control system in the Iraqi economic units in terms of: | | | | | |
| | Administrative deliveries | | | | | |
| | Dissemination and transmission of information | | | | | |
| | Strategic deliveries | | | | | |
| | Communicate the objectives of the organization | | | | | |
| | Formal meeting periods | | | | | |