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ACTIVATING INTERNAL CONTROL PROCEDURES AND THEIR ROLE  
IN REDUCING THE RISKS OF INFORMATION TECHNOLOGY  
(AN APPLIED STUDY IN A SAMPLE OF IRAQI INDUSTRIAL  
COMPANIES)

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**Rifaat Ibrahim Khudhair Shujari, Thaar Umran Mousa, Noor Nadhim Hameed AL-Jassam. Activating Internal Control Procedures and Their Role in Reducing the Risks of Information Technology (An Applied Study in A Sample of Iraqi Industrial Companies) -- PalArch's Journal of Archaeology of Egypt/Egyptology 17(3), 2750-2764. ISSN 1567-214x**

## ABSTRACT

The research aims to clarify what is the internal control and to clarify the concept, importance and risks of information technology in economic units as well as to explain the role of internal control procedures in reducing the risks of information technology, the following two hypotheses have been put forward: (1) There are many risks to which data and information are exposed in light of the use of Information technology, (2) The existence of effective internal control procedures will contribute greatly to preserving data and information in light of the use of information technology, and the research sample is represented by workers in the Iraqi industrial companies including administrators, accountants, auditors and financial analysts These companies are: the General Company for Electrical Industries, the General Company for Textile Industries, the General Company for Battery Industry and the General Company for the Dairy Industry, and in order to achieve the goals of the research and test its hypotheses, a set of statistical methods have been used such as the arithmetic mean, percentage, standard deviation, correlation coefficient and coefficient of variation, as the research has reached a set of conclusions was that the most important internal control is working on scaling risks in the iT environment through a set of procedures for sub-systems of its administrative control and operational control Waller Accounting Department.

## INTRODUCTION

Information technology tools have become an influential element in accounting information systems due to the provision of these tools by appropriate and fast information that helps administrative and economic units in carrying out their work

efficiently, effectively and at the right time. At the same time, the information technology environment has affected the quality and quantity of information that is produced by penetrating computer networks and changing that information by computer hackers. In addition, the Internet networks have in turn helped to penetrate this information, which affects the confidentiality and security of this information, which requires procedures. Effective internal control in order to ensure the stability and reliability of computer networks and determine the extent of dependence on the truthfulness of the information that is produced and circulated and determine the employees authorized to access that information, which increases the confidence of stakeholders in the information produced electronically, and accordingly The research was divided into four topics, the first included the research methodology, while the second included the theoretical aspect through the concept of internal control, its goals and importance, as well as explaining the concept of information technology and its impact on users of that information and explaining the role of internal control in the information technology environment, while the third topic included the study Field, either the fourth topic is devoted to conclusions and recommendations.

### **THE FIRST TOPIC: RESEARCH METHODOLOGY: -**

#### ***Research Problem:***

Many administrative and economic units use modern technologies in the processes of registration, tabulation and operation of economic events and the resulting information that may be subject to damage, vandalism or piracy due to a lack of internal control procedures to protect that information, and therefore the research problem lies in answering the following two questions: (1) What are the risks to data and information that are processed and produced electronically in light of the use of information technology by companies, (2) Do internal control procedures contribute to reducing the risks to which data and information are exposed in light of technological use No information.

#### ***The Importance of Research:***

The importance of the research comes from the importance of data that is recorded and processed electronically and the resulting information that requires maintaining it from the risks of unauthorized access and thus causing harm to economic unity in an environment characterized by change, complexity and intense competition between economic units.

#### ***Research Objectives:***

The research aims to clarify what is internal control and to explain the concept, importance and risks of information technology in economic units as well as define the role of internal control in the information technology environment in addition to explaining the role of internal control measures in reducing the risks of information technology.

#### ***Research Hypotheses:***

The research is based on the following two hypotheses: (1) There are many risks to which data and information are exposed in light of the use of information technology, (2) The existence of effective internal control procedures will contribute greatly to the preservation of data and information in light of the use of information technology.

### ***The Research Sample:***

The sample of the research consists of workers in the Iraqi industrial companies, such as administrators, accountants, auditors and financial analysts. These companies are: General Company for Electrical Industries, General Company for Textile Industries, General Company for Battery Industry and General Company for Dairy Industry.

## **THE SECOND TOPIC: THEORETICAL ASPECT OF THE RESEARCH: -**

### **The Concept, Objectives and Importance of Internal Control:**

The concepts of internal control developed by associations and professional bodies interested in the profession of accounting and auditing varied according to the development of the financial and business world and the many changes in them. They were defined by the Coso Committee as operations that are affected by the institution's board of directors and management and other individuals in the organization that are designed to give reasonable assurance about the achievement of the institution's goals (Hansen, 2014: 20), while the American Institute of Certified Accountants' Methods of Auditing Committee was defined by internal oversight as including the organizational plan, coordination means, and metrics used in the project to protect its assets, control, and audit For accounting data, to ensure its accuracy and reliability, to increase production efficiency and to encourage workers to adhere to the established administrative policies (Angelo, 2016: 401), and from the above it is clear that internal control is an organized program and a plan of action that aims primarily to concert the efforts of all employees of the institution or project to achieve its goals In line with applicable laws and administrative instructions to preserve its property from any practices, methods or methods that would harm its reputation with all parties involved with it (Klein, 2002: 376).

In order for the internal control system to play its role in achieving the security of accounting information in light of the use of information technologies, it is necessary to achieve the following two objectives: (Douglas, et.al., 2015: 198)

1. Achieving information security through a series of necessary measures to maintain data and information that are dealt with by the information systems in the economic unit concerned, starting with how data is collected, stored, updated, and retrieved, passing through the operational processes that can be performed on them, until the production of information Including them and ways of communicating them to the concerned authorities, which means providing the necessary security means for the process of producing information in the economic unit.
2. Achieving the security of the information system by providing the necessary methods to preserve the physical components that make up the information system

responsible for producing information in the concerned economic unit, which can include all assets of computers, software and others.

To achieve the above two goals, the internal control system is required to provide a set of methods related to individual security, hardware and equipment security, and software security, and the following figure shows these methods as a general framework for them. Thus, the internal control system is required to provide all the procedures that are required to achieve the security of accounting information in the economic unit, which are mostly procedures related to providing physical protection for the means used in information technology, as well as technical procedures related to providing the required protection for how data and information are handled Inside and outside economic unity in a manner consistent with its goals (Marquardt & Weidman, 2008: 463).

As for the importance of internal control in the IT environment, there is an increasing importance for it that can be illustrated by the following: (Barman & Verrocchio, 2014: 6)

1. One of the goals that the internal control system seeks to achieve is to protect the assets and property of the economic unit from any misappropriation or misuse through an internal control method, and since information security is also related to the need to provide protection for the physical components of the system that produces this information, The responsibility lies with the internal control system.
2. It is the responsibility of the internal auditors to carry out a periodic evaluation of information security applications, and they should propose how to implement new control methods to protect information.
3. The lack of an internal control system will lead to causing many physical, operational and legal damages that relate to the damages resulting from natural disasters or as a result of committing procedural errors and what could cause the deletion of the important or lost ones and the possibility of stealing the contents of the system from the information without there being Any legal liability that may be assigned to the person responsible.

It is clear from the above that the existence of an internal control system is necessary and inevitable through its ability to reduce these risks (or eliminate them) and in a way that leads to contributing to the achievement of the overall goal of the economic unit in which it operates (Zakat & Hussein, 2017: 12).

### ***The Concept and Importance of Information Technology and the Risks Associated with its Use:***

Information technology is seen as all the advanced technologies that are used to convert data of various forms into information of all kinds and that are used by the beneficiaries in all areas of life. The information resulting from it to its multiple users, and information technology is one of the most important and best outcomes of the information and communication revolution, as it provides the means and capabilities that contributed effectively in reducing time and effort as well as mum The (Hashes, 2008: 7), and the importance of information technology in economic units can be highlighted as follows: (Chan, et.al., 2007: 12-14)

1. Information technology represents one of the basic components within the organizational structure of any economic unit, and direct and indirect relations between it and the rest of the components.

2. Information technology helps raise the administrative efficiency of managers in economic units by improving the efficiency of decision-making, especially in the areas of decision support systems and operational information systems.
3. Information technology contributes to strategic management by creating applications with a direct competitive advantage for economic unity in terms of quality, cost, flexibility, and creativity.

With regard to the risks associated with the use of information technology, there are many risks associated with the use of information technology under the electronic data operation, which can be represented as follows:

1. Fraud and theft: Access to information and systems provides opportunities to manipulate data, and achieve or conceal large financial losses, in addition to that it is possible to steal information, even without transferring it financially or realizing its theft, which may lead to the loss of competitive advantages. Such unauthorized actions can be committed, whether by individuals who own or do not have legitimate rights to view records or information (Engel, et.al., 2010: 4).
2. Errors: Although errors often occur during manual data entry or when developing or modifying computer programs, they can appear at any stage of the information system cycle, which requires the necessity of taking care of auditing and control procedures (Chan, et.al. ., 2007: 15).
3. Stop or Failure: The components of the electronic accounting system are subject to interruption or failure, and without making adequate arrangements to deal with such cases this would lead to serious operational difficulties and severe financial losses (McMullen, 2016: 88).
4. Giving false information: Such problems arise in systems that were not properly designed (incompatibility between records and accounting books and the electronic system to be used), or were not developed properly and these problems may become apparent immediately, but they may also pass without being detected for a period during which these problems can destroy the information that is supposed to be accurate and safe. This is one of the most important risks where audit and audit procedures are modest, so tracing any of the operations becomes difficult (Hashes, 2008: 8).

While others believe that there are other risks that are not less important than what has been mentioned that could lead to damaging information that is produced electronically as follows: (McMullen, 2016: 89)

1. Unauthorized access to the system.
2. Misrepresentation in transferring data to and from the central computer.
3. Misrepresentation in the operation of commercial transactions.
4. Unintended modification of programs.
5. Information is subject to embezzlement and forgery.

It is clear from the above that most of the risks associated with information technology applications can be reduced or reduced through internal control procedures, which reflects its importance in facing these risks. Therefore, adequate arrangements must be made to face such cases in order to reduce the risks that economic units may be exposed as a result of using technology Modern Information (Hashes, 2008: 10-11).

### ***The Role of Internal Control in the Information Technology Environment:***

The components and objectives of internal control in the information technology environment do not differ from that in the manual operating environment for accounting data, but the difference lies in the way these components and procedures are used, and there is no difference between the objectives of internal control between the two systems in terms of maintaining assets and data integrity while achieving efficiency and effectiveness. In operating data, there is no doubt that achieving these goals requires that the internal control system includes oversight that has the following characteristics: (Grenade & Ditched, 2010: 38)

1. Early detection of errors at the nearest point in the data operation cycle.
2. With regard to the feature of separating tasks, the tasks that were separated under the manual system have been collected in one computer program, which enables the employee in charge of this program to make changes to the program and files that are difficult to discover as part of a misappropriation plan.
3. In the shadow of the computer, the operations are performed as approved, because most computer systems are programmed to implement the operations automatically, which may cause many problems for the auditor.
4. Correct transaction registration processes may be adversely affected by the use of a computer because errors in the programming system may lead to wrong registration or the complete deletion of operations.
5. The periodic comparison between the original and the original record as a control feature can be circumvented if the computer is used to make these comparisons.

A framework for an integrated system of internal control can be developed based on the broad concept of internal control, as it is divided into three subsystems, which are administrative control, accounting control, and operational control, and each of these subsystems has a goal that it seeks to achieve through a set of appropriate control measures and these sub-systems are integrated. To finally achieve the overall goal of the internal control system, which is to prevent, detect or control correcting errors and violations and reduce their losses, and accordingly, focus will be on administrative control, operational control and accounting control, which can be clarified through the following: (Barman & Verrocchio, 2014: 6)

First: Administrative Control: - For administrative control to achieve its goals in light of electronic data processing, it must do the following: (Amati & Pleader, 2010: 482-483)

1. Organizational Control: It is based on the existence of a sound organizational plan that defines the departments and departments covered by the facility and specify the duties and responsibilities of each department, as well as clarify the appropriate delegation of job responsibilities so that the electronic operating section of the data is separated from the beneficiary departments.
2. Oversight of system preparation and documentation: Good preparation and documentation of the electronic data system helps to facilitate its review process by providing the auditor with the required documents.
3. Control over systems security: Most computer violations can be overcome through good management planning for systems security and protecting its equipment to reach the maximum possible benefits from the system.

Second: Operational Oversight: - In order for operational oversight to achieve its goals in the context of automated systems, it must include the following measures: (Parker, et.al., 2012: 72-74)

1. Oversight through automated units and programs: Oversight through automated units means the existence of a set of procedures prepared by computer manufacturers with a view to ensuring the accuracy of their operation. Among these procedures is an examination of the extra letter, which is one or more volumes attached to a letter, word or group Of data for the purpose of discovering electronic errors and errors that occur during the process of transferring data, while monitoring through programs means the presence of a set of programs that perform some important functions at the system level as a whole.

2. Control of system security: The weak control of system security leads to unauthorized operation of operations, inaccuracy of data reports and records, loss of important data and data and expiration of data confidentiality, and system security is defined as "protecting electronic computer equipment, data files and programs from risks Environmental and computer violations. "

Third: Accounting Control: - To achieve accounting control objectives in light of electronic data operating systems, it should include the following procedures: (Marquardt & Weidman, 2008: 464-466)

1. Control procedures for preparing data: Accounting control of data preparation aims to verify the accuracy of data before entering the electronic computer system, by working to prevent errors or irregularities or discover them, or to control their correction and minimize their losses.

2. Procedures for testing input control: - There are two methods of data entry: the group input method and the instant data entry method. The first method is to collect data from the original documents and correct them, then it is entered for the electronic computer in groups. As for the immediate input method, the data is entered as soon as Its completion, and data-control procedures play an important role in preventing, discovering and correcting computer errors and irregularities.

3. Procedures for controlling data operation: Operating is an internal function performed by the electronic computer, according to the orders of the operating programs. The operation includes data validation and error correction, and there is a set of control procedures that can be applied to operations in order to prevent errors or irregularities or discover them and control Correct it.

4. Procedures for testing the control of the outputs: The operating system outputs may be stored in a form that the electronic computer can read or in a printed form, and the risks of the outputs can be overcome through a set of control procedures that aim to prevent or detect errors or irregularities or monitor their correction.

The third topic: The applied side of the research:

### ***Research Population and Sample Size***

The research community consists of a group of workers in the Iraqi industrial companies, including administrators, accountants, auditors and accounts clerks for the data for the fiscal year ending on 31/12/2019, and from these companies: the General Company for Electrical Industries and the General Company for Textile Industries, and the General Company for the manufacture of batteries and public companies for the dairy industry As for the research sample, a sample was chosen

from those workers, as (104) questionnaires were distributed and (94) forms were retrieved, which are valid for analysis. The researcher relied on personal interviews with the members of the research sample, and the questionnaire was designed in a way that is consistent with the most important In the research and its hypotheses, the questionnaire included an introductory introduction that showed the nature of the research and the general questions specific to the research sample in addition to the questions related to testing its hypotheses. Degrees, I agree (4) degrees, neutral (3) degrees, I don't agree (2) degrees, I totally disagree (1) degrees.

Where (104) questionnaires were distributed to the individuals of the research sample, and (94) forms were retrieved for analysis, as the percentage of these forms reached 90.4%, either the non-retrieved forms, they reached 10 forms by 9.6%, and after analyzing the demographic characteristics of the members of the research sample, it was found 60% of the members of the research sample are between the ages of 45-55 years and 40% of them are over 56 years old. The percentage of males for the members of the research sample reached 80%, either the percentage of females 20%, and in addition to that, the percentage of diploma holders from the members of the research sample 15%, bachelors 75%, and masters 10%, which means that they are qualified to understand the idea of the topic, and finally, the years of experience for individuals p The largest research NH ratio for the category of 25-35 years by 65%, and the remaining percentage was the age group less than 25 years of actual service in the Iraqi industrial companies.

A set of statistical methods was used, including the arithmetic mean, attributed to the maximum value of the five-degree Likert scale. If the arithmetic mean exceeds three degrees of the area of the scale, the study is acceptable, that is, if it has a percentage greater than 60%, in addition to the use of percentages and standard deviation, In addition to the T-test, which aims to demonstrate that the relationships between the variables of the study are real and not due to chance, through inference about the arithmetic mean of the statistical community.

### ***Test the Research Hypotheses:***

In this paragraph, we review the test of research hypotheses using the arithmetic mean, percentage, standard deviation, and coefficient of variation, in addition to using the T test and simple correlation coefficient in order to prove or negate these hypotheses and to ensure there is a relationship between the search variables.

### ***Test the First Hypothesis:***

The first hypothesis states the following: (There are many risks to which data and information are exposed in light of the use of information technology), and Table (1) shows the mean, percentage, standard deviation, and coefficient of variation for the variables of this hypothesis.



**Table (1)** Arithmetic mean, percentage, standard deviation, and coefficient of variation for first hypothesis variables

<b>Coefficient of variation</b>	<b>standard deviation</b>	<b>percentage</b>	<b>Arithmetic mean</b>	<b>Variables</b>	<b>ت</b>
<b>12.837</b>	<b>0.571</b>	<b>%88.72</b>	<b>4.436</b>	Access to information and systems provides opportunities to manipulate data and achieve or conceal large financial losses	<b>1</b>
<b>11.156</b>	<b>0.496</b>	<b>%77.10</b>	<b>3.855</b>	Manual data entry errors occur or when developing or modifying computer programs	<b>2</b>
<b>11.668</b>	<b>0.519</b>	<b>%80.64</b>	<b>4.032</b>	The components of the electronic accounting system are subject to interruption without making adequate arrangements to deal with such cases	<b>3</b>
<b>13.508</b>	<b>0.602</b>	<b>%93.36</b>	<b>4.668</b>	The incompatibility between records	<b>4</b>
<b>11.497</b>	<b>0.511</b>	<b>%79.52</b>	<b>3.976</b>	Electronic systems are exposed to problems of unauthorized access to the system	<b>5</b>
<b>11.581</b>	<b>0.514</b>	<b>%80.04</b>	<b>4.002</b>	Electronic systems may be subject to misrepresentation in the operation of business deals	<b>6</b>
<b>12.041</b>	<b>0.536</b>	<b>%83.23</b>	<b>4.162</b>	<b>General Average</b>	

**Source:** prepared by the researcher.

It is noted through the above table, that the paragraph (provides access to information and systems provides opportunities to manipulate data, and achieve or conceal large financial losses, in addition to the fact that information can be stolen even without being transferred financially) has obtained an average of (4,436) percent (88.72%) A standard deviation (0.571) and a coefficient of variation are 12.837. Either paragraph (errors of manual data entry occur or when developing or modifying computer programs, but they can appear in any of the stages of the information system cycle) have obtained an arithmetic mean (3.855) Percentage (77.10%) and standard deviation (0.496) and coefficient of variation (11.156), while the paragraph (The components of the common system Electronic captivity is subject to stopping without making adequate arrangements to face such cases,

which leads to serious operational difficulties and severe financial losses (has got an arithmetic mean (4.032) with a percentage (80.64%) and a standard deviation (0.519) and a coefficient of variation (11.668), while paragraph ( The incompatibility between records, accounting books and the electronic system to be used, and it may pass without being discovered, which leads to the destruction of information in which accuracy and safety are supposed)

I got an arithmetic mean (4.668) with a percentage (93.36%) and a standard deviation (0.602) and a coefficient of difference (13.508), either paragraph (electronic systems are exposed to problems of unauthorized access to the system, in addition to distortion in the transfer of data to and from the central computer, which It negatively affects the outputs (has obtained an average arithmetic (3.976) with a percentage (79.52%) and a standard deviation (0.511) and a coefficient of variation (11.497)), while the paragraph (electronic systems may be subjected to a distortion in the operation of commercial deals, as well as modification is not The intentional programs, in addition to the information being subject to embezzlement and forgery (have obtained an arithmetic mean) 4.002 (by percentage) 8 0.04%) and a standard deviation (0.514) and a coefficient of variation (11.581). Therefore, the general mean of the variables of this hypothesis is (4.162) with a percentage (83.23%) and a standard deviation (0.536) and a coefficient of variation (12.041). Thus, this hypothesis can be accepted, as if There are many risks to data and information under the use of economic information technology units.

The relationship between the risks to which data and information are exposed can be analyzed in light of the use of information technology and the existence of effective internal control measures that contribute to the preservation of that data and information, and Table (2) illustrates the simple correlation between risks and internal control procedures.

**Table (2)** Simple correlation coefficient between risk and internal control procedures

<b>Simple correlation coefficient value</b>	<b>Y Risks</b>
<b>0.872</b>	<b>X internal control procedures</b>

**Source:** prepared by the researcher.

Based on the results of the above table, it is clear that there is a positive correlation and a significant function between the risks and internal control procedures, as the simple correlation coefficient between them (0,872) is a statistically significant value at the level (0,05), and through a regression analysis of the relationship between risk and internal control procedures, With the aim of strengthening the previous result, as shown in Table 3, as follows:

**Table (3)** Results of the simple regression assessment between risk and internal control procedures

<b>y =36.324+1.226 x1</b>			Regression equation
<b>The coefficient of determination</b>	<b>T values</b>	<b>Beta values</b>	Relationship
<b>%88.6</b>	<b>4,559</b>	<b>36,324</b>	Among the risks
	<b>8.437</b>	<b>1,226</b>	

Source: prepared by the researcher.

It is noticed from the above table that there is a statistical significance between the risks and internal control procedures in limiting those risks to which data and information can be exposed, as the beta value (1,226) reached at the level of statistical significance (0,05) and the calculated value of T reached (8,437), And the value of the determination factor (R<sup>2</sup>) is (88.6%), as it indicates the explanatory power between risks and internal control, and the determination factor means that the elements are able to explain what is (88.6%) about the extent of the ability of internal control to limit the risks of using Information technology in the electronic accounting system.

***Test of the Second Hypothesis:***

The second hypothesis states the following: (The presence of effective internal control procedures will contribute greatly to maintaining data and information in light of the use of information technology). Table (4) shows the arithmetic mean, percentage, standard deviation, and coefficient of variation for the variables of this hypothesis.

**Table (4)** Arithmetic mean, percentage, standard deviation, and coefficient of variation for the second hypothesis variables

coefficient of variation	standard deviation	percentage standard	Arithmetic mean	Variables	SR
<b>13.104</b>	<b>0.582</b>	<b>%90.56</b>	<b>4.528</b>	The existence of a sound organizational plan defines the departments and departments covered by the facility and specify the duties and responsibilities of each department that helps in maintaining the security and integrity of data and information.	<b>1</b>
<b>13.439</b>	<b>0.597</b>	<b>%92.88</b>	<b>4.644</b>	The good preparation and documentation of	<b>2</b>

				the electronic data operating system helps to facilitate the process of its review and audit, as it provides the auditor with the required documents within the specified time.	
<b>11.407</b>	<b>0.507</b>	<b>%78.84</b>	<b>3.942</b>	Oversight through automated units and programs helps to detect electronic errors and errors that occur during the data transformation process, thus ensuring accurate results.	<b>3</b>
<b>12.201</b>	<b>0.542</b>	<b>%84.32</b>	<b>4.216</b>	Control of system security helps avoid problems with unauthorized operation of operations, inaccuracy of data reports and records, loss of assets and important data, and expiration of data confidentiality.	<b>4</b>
<b>11.946</b>	<b>0.531</b>	<b>%82.56</b>	<b>4.128</b>	The procedures for controlling data preparation help in accounting for data, as well as verifying the accuracy and validity of data before entering the electronic computer system.	<b>5</b>
<b>10.186</b>	<b>0.453</b>	<b>%70.40</b>	<b>3.520</b>	The procedures for testing the control of the outputs enable to overcome the risks of the outputs through the control measures aimed at preventing and detecting errors and controlling their correction.	<b>6</b>
<b>12.047</b>	<b>0.535</b>	<b>%83.26</b>	<b>4.163</b>	General Average	

Source: prepared by the researcher.

It is noted through the above table, that the paragraph (the existence of a sound organizational plan that defines the departments and departments covered by the establishment and specifies the duties and responsibilities of each department that helps in maintaining the security and integrity of data and information) has obtained an arithmetic mean (4.528) with a percentage (90.56%) and a standard deviation (0.582) and a coefficient of variation (13.104), either paragraph (good preparation and documentation of the electronic data system helps to facilitate the process of its review and audit, as it provides the auditor with the required documents at the specified time). I got an arithmetic mean (4.644) with a percentage (92.88%) and deviation Standard (0.597) and Coefficient of Difference (13.439), while Paragraph (The Control) Through automated units and programs that help in discovering electronic errors and errors that occur during the data conversion process, and thus ensuring accuracy of the results) I got an arithmetic mean (3.942) with a percentage (78.84%), a standard deviation (0.507) and a coefficient of variation (11.407), while the paragraph (Monitoring the system security helps to avoid problems of unauthorized operation of operations, inaccuracy of data reports and records, loss of assets and important data, and expiration of data confidentiality) has obtained an average of (4.216) with a percentage (84.32%) and a standard deviation (0.542) and a coefficient of variation ( 12.201), either paragraph (The procedures for monitoring the preparation of data help in slavery Accounting data on the data, as well as checking the accuracy and validity of the data before entering the electronic computer system) has obtained an arithmetic mean (4.128) with a percentage (82.56%) and a standard deviation (0.531) and a coefficient of variation (11.946), whereas the paragraph (control testing procedures On the outputs, he managed to overcome the risks of the outputs through the control measures aimed at preventing and detecting errors and monitoring their correction. She obtained an arithmetic mean (3.520) with a percentage (70.40%) and a standard deviation (0.453) and a coefficient of variation (10.186), and accordingly the arithmetic mean The general variables for this hypothesis are (4.163), with a percentage (83.26%), standard deviation (0.535), and a coefficient of variation (12). .047), and thus this hypothesis can be accepted, thus it can be said that effective internal control measures will contribute greatly to the preservation of data and information under the use of information technology.

The relationship between internal control procedures and the risks of using information technology can be analyzed with a view to identifying that relationship by calculating the value of the simple correlation coefficient, as shown in the following table:

**Table (5)** Simple correlation coefficient between risk and internal control procedures

<b>Simple correlation coefficient value</b>	<b>Y إجراءات الرقابة الداخلية</b>
<b>0,855</b>	<b>X Risks of using information technology</b>

**Source:** prepared by the researcher.

It is clear from the above table that the relationship between risk and internal control procedures is a positive correlation, as the simple correlation coefficient reached (0,855) and it is a statistical function at the level (0,05), and the results of

estimating the simple regression between the search variables can be explained through the following table: -

**Table (6)** Results of the simple regression assessment between risk and internal control procedures

<b>Y=24.668 + 1.672 x2</b>			Regression equation
<b>The coefficient of determination</b>	<b>Calculated T values</b>	<b>Beta values</b>	Relationship
%78.4	5.803	24.668	Between internal control procedures and risks
	6.336	1.672	

**Source:** prepared by the researcher.

It is noted through the above table that there is a relationship between internal control procedures and risks, as the beta value (1.672) reached at the level of statistical significance (0.05) and the value of T (6.336) and the value of the determination factor (R<sup>2</sup>) (78.4%) as it indicates the explanatory power between procedures Internal control and risks The determination factor means that the internal control procedures are able to explain (78.4%) in reducing the risks of using information technology in the electronic accounting system.

#### **THE FOURTH TOPIC: CONCLUSIONS AND RECOMMENDATIONS:**

##### ***Conclusions:***

1. The internal control represents one of the most important tools of the executive management in preserving the assets of the economic unit from loss or embezzlement as well as reviewing the accounting data and ensuring its accuracy and extent of dependence, whether in terms of manual or electronic method.
2. Information technology is one of the most important elements in any economic unit because of its high efficiency in the speed of operating data and converting it into high quality information and low costs.
3. Increasing the efficiency and effectiveness of different information systems by improving data collection, storage, processing, updating and retrieval processes, and then converting that data into information that reduces the uncertainty of the decision-maker as well as increasing his knowledge.
4. Internal control reduces or reduces the risks of using information technology through procedures for regulatory, operational, and accounting control.
5. The existence of an effective internal control structure contributes to providing the necessary security and protection for data that is entered, operated and processed electronically through general oversight activities.

##### ***Recommendations:***

1. The necessity for economic units to activate internal control procedures, especially in the information technology environment because of their positive impact in maintaining the integrity and accuracy of accounting data and information resulting from it for beneficiaries with whom they have direct or indirect relationships.

2. Developing the skills of workers in the electronic operating department in a way that suits new applications through training courses and educational programs, which helps to raise the level of efficiency in performance and effectiveness?
3. Allocate sufficient resources to provide electronic software and applications for the purpose of updating their existing systems with more efficient and easier to use ones, with an emphasis on securing backup software to protect those applications from penetration or piracy.
4. The necessity of having a system of rewards and incentives for workers in the electronic operating department that contributes to reducing the risks of accessing the information produced by the system if we take into consideration the competitors seeking to provide material and financial inducements for them in order to obtain that information.
5. Economic units should activate internal control procedures to help reduce potential and expected risks from the use of information technology in its various forms.

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