

# The Impact of Information Technology Tools to Improve the Quality of Internal Accounting Controls in the Jordanian Insurance Companies

Ibrahem Abdalla Ahmed Al- Momany    Kholoud Daifallah Hmoud Al-Qallab  
AL-Balqa Applied University –Al- Zarqa University Colleg

## Abstract

This study aimed to identify the impact of the information used in the internal control to improve internal control of accounting quality in Jordan Insurance companies IT tools, consists study population consisted of insurance companies 48 companies and travel, has been distributed to (48) questionnaire by (2) questionnaire to each company, and was recovery of (40) questionnaires are valid for statistical analysis, the researcher adopted the descriptive analytical method based on the spss statistical program to analyze the data and come up with the results of the study, was the most important findings of the study that the use of information technology tools through accounting computerized systems and technological tools affect the quality of accounting internal control in Jordan insurance companies. The most important recommendations of the study was the need to adopt international regulatory releases, such as bulletin coso internal control to enhance the internal control process.

## Introduction

The need for companies to improve their operational performance forced it to enable the internal control system, and enable the internal neck accounting system is one of the most important control over the financial operations of the company areas, due to the sensitivity of the financial aspects of the Company Companies are developing aspects of accounting controls by enabling control procedures at the company, so It is possible that the companies working to develop internal performance oversight in general and accounting in particular through the use of information technology, and that there are many benefits from the use of information technology such as saving time, effort and costs and also to achieve a more accurate result.

## The problem of the study

we illustrated the problem through attention to the process of strengthening the internal control concepts, and enhance corporate governance in the Jordanian insurance sector, and to strengthen and improve the internal control process must evolve and that does not depend on traditional control methods, but should the internal control of the available information technology tools practical benefit in the company, through the availability of equipment and through the availability of computerized accounting systems and through the availability of means of control accounting technology, the availability of these tools in the company to help develop and improve the regulatory process, so the problem of the study show through the following questions:

- 1- What is the level of information technology that is used in accounting internal control process in the Jordanian insurers tools ?
- 2- What is the level of quality of accounting internal control procedures in the Jordanian insurance companies ?
- 3- Is there a statistically significant effect of the level of use of information technology in the Jordanian insurance companies to improve internal accounting controls?

Objectives of the study: This study aims to achieve the following objectives:

1. Identify the level of availability of information technology which helps to enable the internal control system.
2. To determine the presence of a statistically significant effect of information technology in improving internal accounting controls.
3. determine the contribution of information technology tools to improve the quality of internal accounting control performance.

## The importance of study:

The importance of the study of the importance of performance oversight and private accounting control development, since the accounting oversight is considered mainly in controlling waste and spending, embezzlement, and ensure the effective absence of errors in processes that represent the financial side of the company, for example, that a purchase of assets tuning needs to accounting control procedures actor aims to buy high-quality assets and at the lowest possible prices, as the lack of control procedures on the procurement process that might be a room for fraud and theft, and therefore ensure an effective framework of internal accounting control is reinforced presence to support these actions and that is the existence of technology tools to-

date information and sophisticated help in the detection of errors and fraud.

#### **Scientific importance of the study:**

The scientific importance of this study is to reach an empirically validated theory, and this theory is that the use of IT tools in accounting internal control process that may lead to improved regulatory performance in the Jordanian insurance companies.

**Hypotheses:** The formulation of the following hypotheses, which have been drawn from the problem of the study.

**The main Hypotheses:** there is no statistically significant impact on the level of information technology tools used in accounting internal control process in the Jordanian insurance companies to improve the quality of internal accounting controls.

From this Hypotheses the main sub-hypotheses are derived as follows:

- There is a statistically significant effect of the level of availability of computerized accounting systems in the Jordanian insurance companies to improve internal accounting controls.
- There is a statistically significant effect of the level of availability and control methods of accounting technology in the Jordanian insurance companies to improve the quality of accounting internal control.

#### **The study Community and Sample and the unit of analysis:**

The study Community consists of the insurance companies listed on the Amman Stock Exchange and visit the site on 8/12/2016, he found that there are (24) Jordanian public shareholding company, and the study sample consists of accounting departments and IT departments in the Jordanian insurance companies, and the unit of analysis to understand who answering the questionnaire that was distributed by questions (2) identification of each company to the accounting department and one for the IT department. Thus, the number of questionnaires that have been distributed (48) questionnaire, has been Recovery (40) questionnaire valid for statistical analysis.

#### **Previous studies:**

**1- Mohamed Bshayreh (2016), " The Effect Of Using The Elements Of The Electronic Management In Improving The Quality Of Accounting Internal Control In Jordanian Banks " .**

This study aims to release the electronic elements of the administration used in Jordanian banks and their impact on improving the accounting internal control quality , may be a study population of Jordanian banks and the number 15 listed banks in Amman Financial Market researcher has designed and developed a questionnaire to measure four areas of study have been formed of (25) 60 questions were distributed a questionnaire to a sample study Which represents departments of accounting and internal control and information technology, It was the most important results of the study and the presence of trace statistically significant electronic elements of administration used in Jordanian banks in improving the accounting internal control quality , as it was the most important recommendation is to develop internal and external Internet networks for the development of electronic linkage between the Jordanian and foreign banks and programming of internal control accounting system.

**2- Al- Mansi, Ibraheem , Bani Saeed Amany (2015), entitled " The Impact of Networking and Communications Resources to Improve the Quality of Services Provided to Customers in the Jordanian Insurance Companies".**

This study aims to identify the level of availability of networking and communications resources in the Jordan Insurance companies, and their impact on improving the quality of service provided to customers, The researcher has designed a questionnaire and distributed to a sample study in computer departments staff in the Jordanian insurance companies of (26) companies, was recovery (60) questionnaire are analyzed, was the most important findings of the study is that there is high for networking and communications resources in the Jordan Insurance companies level. The study also concluded that there is the effect of the resources of networks and communication to improve the quality of service provided to customers.

**3- Battah Naser (2015), " The impact of management information systems to improve management performance" An Empirical Study on Managing Directors in the Jordanian insurance companies".**

This study aimed to identify the impact of management information systems (MIS) to improve the administrative performance of the staff of the administrative departments in the Jordanian insurance companies has been the study sample Managers administrators or Deputy Managing Director to identify, The researcher distributed (52) questionnaire by (2) a questionnaire to each company's number (26) Insurance Company, has been used as a researcher style simple to get to know the impact of management information systems to improve management performance in the Jordanian insurance companies decline, the study concluded that there is a positive impact of the resources of networks and

communications and material resources to improve the administrative performance of the administrative staff in the insurance companies Jordan, was the most important recommendations that the insurance companies to make greater efforts in the infrastructure of management information systems development.

**4- Al-Khalidi, nahed (2012) , entitled "The impact of information technology in raising the efficiency of the internal control in banks operating in the Palestinian West Bank system".**

This study aimed to identify the impact of information technology in raising the efficiency of the internal control system in the Palestinian banks operating in the West Bank , has been preparing a questionnaire consisting of 5 parts were distributed to auditors and heads of supervision departments and Auditors Chartered and number (80) individuals, The researcher used spss software for data analysis and hypothesis testing was the most important findings of the study: Helps attention to ongoing training, development and use of modern technologies and comply with administrative policies to activate the internal control systems in the Palestinian banks , and to work settings, and reduces the chances of manipulation and to achieve the objectives set , as they were the most important the study 's recommendations is the need to take advantage of technological development and information for internal control in the development of Islamic banks .

**Data analysis and test hypotheses:**

This chapter includes a tool to talk about the study and Tool's study tests, also includes trends and opinions of a sample study on areas of study individuals, and ends with a chapter test the hypotheses of the study.

First: study tool

The study tool: study tool of three basic axes contain (20 consist) question is divided as follows:

1. The first field: the level of availability of computerized accounting systems in the Jordanian insurance companies have been allocated (6) questions.
2. The second field: the level of availability of technological accounting controls in the Jordanian insurance companies, have been allocated (7) questions.
3. The third field: the level of availability of accounting internal control procedures in the Jordanian insurance companies, have been allocated (7) questions.

The study methodology: Tracking this study descriptive and analytical approach in data collection and statistical analysis to arrive at the results of the study and achieve their goals, and has been relying on sources of information gathering through the following:

- Secondary sources: where were collected preliminary information from reference books and theses and publications related to the subject of study.
- Primary sources: it has been the development of a questionnaire study addresses related to information technology as a variable level of independent and improve the administrative performance of the employees in the Ministry of Higher Education as the dependent variable variables.

The researcher used in the study tool measure consisted of five grades (1-5) of the answers, according to a Likert scale Quintet (Likert Scale), which is composed of five degrees to determine the degree of approval of the study sample on each paragraph of the study tool, and convert categorical scale to the amount of data that can be measured statistically, was given the relative weights shown in table (1).1

Table (1)  
 Degrees Likert scale Quintet (Likert Scale) used in the study tool

The degree of the scale	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The degree of approval	5	4	3	2	1
The relative weight	%100-81	%80-61	%60-41	%40-21	%20-0

As it has been the use of the Statistical Package for the program for the humanities and social sciences SPSS, in order to analyze the data and test hypotheses.

Second, the special tool tests study:

The study tool consists of 20 questions, including 13 questions measure the first field, a level of information technology used tools in the internal control process, while the second area is the area of internal accounting control quality in the Jordanian insurance companies have been allocated (7) questions.

1. Alpha Cronbach test: give this test explanation for the consistency of the questionnaire and thread paragraphs internally, and show the strength of the resolution and the interdependence of its clauses, so that if he returned, one of them answered the same questionnaire in the same conditions gave the same results, and if the ratio of Cronbach's alpha of 60% or more, this indicates the resolution and stability coherence and consistency internally well (molhatra, 2004, p268), the following table shows the Cronbach's alpha coefficient for fields of study

<sup>1</sup> Najjar, Faiz (2013), methods of scientific research and practical perspective , Dar Al-Hamed for Publishing and Distribution, Amman , Jordan.

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Internal consistency coefficient Cronbach's alpha for fields of study and the tool as a whole.

Field title	Questions number	Reliability coefficient
The availability of IT tools (computerized accounting and technological means of monitoring systems).	13	76%
Improve the quality of internal accounting controls.	7	81%
<b>Total</b>	<b>20</b>	<b>83%</b>

Seen from the above table that there is a large internal consistency between the paragraphs of the questionnaire individually and between full-resolution where the percentage of Cronbach alpha 83% of the tool study in general, and this confirms the strength and coherence of the questionnaire and internal coherence and stability.

2. **Content Validity:** Honesty is intended to express the extent of the paragraphs of each area of study for the area to which it belongs, has focused attention on making sure that every area of study accurately representative of a group of paragraphs that belong to him, and that these paragraphs actually measure this area (Sekaran, 2003), was measured sincerity resolution content by measuring the relationship between each paragraph and the area to which it belongs by using the Pearson correlation (coefficient Person coefficient of correlation), has adopted a correlation of more than (30%), The task of statistical significance at the significance level ( $0.05 \geq \alpha$ ) table (3) of these relations.

Table (3)

Special measuring the content of the paragraphs of the field of study sincerity Pearson correlation coefficients

Field	Question number	Average paragraphs correlation coefficient	The level of significance
<i>The availability of IT tools (computerized accounting and technological means of monitoring systems).</i>	<i>13</i>	<i>0.444</i>	<i>*0.000</i>
<i>Improve the quality of internal accounting controls.</i>	<i>7</i>	<i>0.535</i>	<i>*0.000</i>
<b>Toatal</b>	<b>20</b>	<b>0.564</b>	<b>*0.000</b>

- statistically significant at the level of ( $0.05 \geq \alpha$ ).

The previous table shows the results of the Pearson correlation coefficient between the vertebrae and fields of study variables, and review the correlation coefficients values and levels of significance can be seen and no statistically significant relationship at the significance level ( $0.05 \geq \alpha$ ) between field vertebrae, which indicates the presence of structural sincerity of these paragraphs.

**- The standard of materiality:**

The researchers With regard to the limits adopted by this study, when commenting on the arithmetic mean of the variables contained in the thesis, which was adopted on the following criteria:

**Table (4)**

1	Greater extent in Likert scale poses: a lesser extent in Likert scale.	5- 4
2	Dividing the unit of analysis directions levels	3
3		1.33

So it is a sample of the study is low if the trends between (1 to 2.33), and moderate (2.34- 3.66), and high (3.67- 5).

**Third, analysis of data on trends in the study sample about fields of study.**

- Discussing and analyzing the results of a sample survey on trends in the field of the level of information technology that is used in accounting internal control process in the Jordanian insurers tools (the existence of a computerized accounting systems).

The results of the arithmetic mean and standard deviation and the relative importance of trends in the study sample on the field provides computerized accounting systems.

**Table (5)**

	Paragraph	mean	s.d	Sig
1-	There is interest from the company's management by providing modern and sophisticated computers.	4.23	0.65	High
2-	There are modern computerized accounting programs in the company.	4.16	0.47	High
3-	It is modified and adjusted accounting systems constantly.	4.08	0.65	High
4-	The appointment of specialists in the field of analysis and design of accounting information systems.	4.02	0.47	High
5-	It is linked to the computerized accounting systems between the center and the branches.	3.92	0.65	High
6-	The provision of computerized accounting systems in all branches of insurance companies..	3.90	0.47	High
	Total	4.12	0.47	High

It is seen from the above table that the study sample trends were elevated on all the paragraphs of the study, the paragraph that states that "there is interest from the company's management by providing modern and sophisticated computers," where I got the highest degree of acceptance of an arithmetic mean was obtained (4.23), and a standard deviation ( 0.65), and the degree of importance relative high, this paragraph explains that the departments of insurance companies interested in providing the sections and branches in the company's latest computers and most sophisticated, as the volume of work requires modern computers and features more technology is high so as not accounting systems disruptions and that hinder work at the company.

As a result of the full field came with a mean (4.12), it is located within a degree of the high acceptance of this paragraph clarifies the importance of availability of modern accounting systems in the process of data entry, processing and extraction results are allowed audited and oversight is the best, work accuracy and efficiency in the insurance companies Jordan, in the presence of a computerized accounting systems leads to improved accounting internal control quality, the standard deviation has reached full field (0.47), and this shows a lack of dispersion in the study sample answers.

- Discussing and analyzing the results of a sample survey on trends in the field of the level of information technology that is used in accounting internal control process in the Jordanian insurers tools (technological control tools).

Results The mean and standard deviation and the relative importance of trends in the study sample on the field (providing technological control tools).

**Table (6)**

	Paragraph	mean	s.d	Sig
1-	The implementation is designed in a way it can be brought in and control of the Department of Internal Control	3.98	0.74	High
2-	Internet is provided for the implementation of all internal and external company transactions.	3.81	0.63	High
3-	The implementation of processes within the company using the joint action groupware software systems.	3.75	0.65	High
4-	Available in the company's internal communication works to disable the functioning of the network.	3.71	0.56	High
5-	The development work in the accounting department systems using cash counting devices and detecting counterfeit currency.	3.68	0.53	High
6-	The activation of the accounting control system in the company through the transfer of accounting records electronically.	3.64	0.47	Med
7-	The matching account balances using the corresponding statements extracted from the computerized systems electronically.	3.58	0.71	Med
	Total	3.69	0.63	High

Illustrated by the above table that the sample of high school on the field provides methods of surveillance technology in the accounting internal control process trends, and more paragraphs acceptance was the paragraph which states that, "The implementation is designed in a way to be brought and control of the internal control department," where the mean was her (3.98), and the standard deviation (0.74), and this shows that the internal accounting control process activated through the availability of means and tools of information technology that electronically transmit information to the accounting oversight and private.

As for the field in general, the arithmetic mean of the responses of the study sample was (3.69), and this shows that the company's management provides the means of control serve the internal control of accounting through the mail checking and the use of the Internet and the use of some, for detecting fraud in the currency and other means of accounting control technological devices , while the standard deviation was (0.63), and this shows a lack of dispersion in the answers of respondents.

- Discuss and analyze the results of the study sample about improving the quality of internal control directions: the results of the arithmetic mean and standard deviation of the relative importance of the study sample directions around the area (to improve the quality of accounting internal control).

Table (7)

	Paragraph	mean	s.d	Sig
1-	Use of internal control process accounting various information technology tools.	3.84	0.56	High
2-	There are specialists in information and private accounting systems interested in developing internal control systems.	3.80	0.66	High
3-	The reports issued by the accounting internal control section describes the shortcomings and weaknesses in the system .	3.76	0.41	High
4-	There is clear evidence accounts and take into account the principle of relative importance and can make sure the accounts contained therein easily.	3.67	0.87	High
5-	A periodic review of the accounting information systems to check the level of accuracy.	3.56	0.74	Med
6-	Concerned with the internal control department of internal control with the latest bulletins issued by international commissions.	3.51	0.47	Med
7-	Concerned with the internal control department developed a computerized accounting systems continuously	3.47	0.46	Med
	Total	3.71	0.44	High

It is seen from the above table that the study sample and accept a high improved accounting internal control quality as areas that have been mentioned earlier, has come the most palatable paragraph is paragraph which states that "the accounting internal control process that uses various information technology tools", Where the mean was her (3.88), which is part of the high level of acceptance, and the standard deviation was (0.56), this paragraph and indicate that the improved accounting internal control quality is enhanced by using information technology tools.

Accounting control results based on annual financial reports, these reports must be accurate and this requires precision equipment and Internet connection with related parties, and hence the improvement of the quality of accounting internal controls require information technology in process control tools. As for the field in general, the arithmetic mean of the responses of the study sample was (3.71), and this shows that the company's management recognizes the importance of the use of information technology tools in accounting internal control process and that these tools check the quality of the audit process, while reached the standard deviation (0.44 ), and this shows a lack of dispersion in the answers of respondents.

**Fourth: hypothesis testing**

- Test the hypotheses of the study, which states that "there is no impact statistically significant level provides information used technology tools in accounting internal control process (computerized accounting systems, technological tools regulator) in the Jordanian insurance companies to improve internal accounting control quality.

To test the hypothesis the main and sub-hypotheses, it was Simple Regression test preparation, as the independent variable is the information technology tools used in internal control and operation of the variable is to improve the quality of internal accounting controls.

Table (8)

Variable	Mean	S.D	$\beta_i$	F value	Statistical Significance
The level of availability of computerized accounting systems	4.12	0.47	0.223	6.66	*0.000
The level of availability of internal control tools technological accounting.	3.69	0.63	0.312	7.34	*0.000
The total area of information technology tools	3.77	0.45	0.212	7.67	*0.000

- Statistically significant at the level ( $\alpha \leq 0.05$ )

Table above shows the results of simple regression of the impact of the use of information technology tools in

their internal controls to improve the accounting control quality in the Jordanian insurance companies section analysis, it was found that there is the impact of a statistically significant level and there is a significant effect on information technology tools in improving the quality improvement of the internal control Reaching the level of influence (.212) and explains that the increase by one degree in the level of the presence of information technology tools leads to improved accounting internal control quality level (0.279) degree, and confirms the value of the F value (7.67), which was statistically significant at the level of (0.05). as well as the value of (T), and the level of significance (0.000) based on the above, the main hypothesis is rejected and the acceptance of the alternative hypothesis, which states that, " There is a statistically significant effect of the tools of information technology used in the internal control process to improve the quality of accounting control in the Jordanian insurance companies ".

#### **Results of the study and its recommendations:**

- The study found the following results:

1. There is a high level of use of IT tools in the internal control department to improve the quality of accounting control in the Jordanian insurance companies.
2. There is high interest in the provision of computerized accounting systems and the provision of other IT companies in Jordan Insurance Tools.
3. There is a trace of the use of information technology tools in the internal control department To improve the quality of accounting internal control in the Jordanian insurance companies, This effect was through:
  - There is the effect of the level of the existence of a computerized accounting systems to improve the quality of accounting internal control in the Jordanian insurance companies.
  - There is impact on the level and the presence of information technology tools to improve the quality of accounting internal control in the Jordanian insurance companies.

**The recommendations of the study:** The study recommended the following.

1. The need to adopt the Jordanian insurance companies, such as international monitoring bulletins report coso internal control.
2. The need for compliance with all accounting internal control procedures, especially concerning the next asset purchase.
3. The need for the commitment of the administration with the exception of the regulatory actions refined and routine and reliance on internal control of accounting better than currently exists.

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