Evaluation of The Effect of Using Computer Audit Systems on Audit Quality

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Abstract

This study aims to examine the use of computer audit systems on the quality of audit operations in small, medium and large enterprise. In order to collect data, a researcher-made questionnaire containing 15 questions with 7-grade Likert scale was used. The reliability was assessed using Cronbach's alpha that was obtained 0.85 for this test. In order to check the content validity, the questionnaire was reviewed by supervisors and advisor and also several specialists in the fields of accounting, management and economics. The results show that the auditing software of organization has poor effectiveness in terms of quality for small enterprise, but it has quite appropriate and appropriate effectiveness for medium and large companies, respectively. In general, it is concluded that the use of auditing software in audit operations of small, medium and large enterprises promotes the quality of audit operations. The results also suggested that there is a direct relationship between the size of audited firms and the effectiveness of computer auditing software on the quality of audit operations; so that the larger are the audited firms, the effectiveness of computer audit software on the quality of audit operations also increases.

Keywords: audit, computer audit systems, audit quality.

Introduction

IT has had an impact on all aspects of today organizations' operations, but accounting information has been changed more than anything. In the past, the audit process was manually done and a lot of time was spent on the audit. But the auditors' use of computer techniques has caused them to get the same process with higher speed, efficiency and quality and also save time and money. Audit firms should also utilize new methods such as computer software along with economic development in the countries. The use of software allows auditors to get the help of computer in the fields such as preparing audit worksheets, collecting forms, documenting audit affairs and etc. with the hope of promoting efficiency, effectiveness and quality of audit operation and saving costs by reducing the time (Islami Bidgoli and Zarei, 2013).

On the other hand, economic development and the need for annual audit of financial statements have expanded the audit activities and increased the competition among audit firms. Therefore, audit firms are looking for new ways to reduce the finished cost of audit contracts and increase its quality. In this regard, we can see the design of software helping the audit operation and increasing the efficiency, effectiveness and quality. However, there are barriers to the mechanized use of audit operation which are noted in the following (Deltaz et al., 2014):

1.   High costs of mechanization
2.   Ambiguity about the advantages of using systems
3.   Auditors' insufficient knowledge about software systems

Given the expansion of auditing computer systems, research in this area has been conducted in the world. The results show that many auditors are not familiar with the updated systems and will not use the audit software. Other auditors who have tried this method have also experienced costly failures, so that they do not want to experience it again. The causes are explained as follows (Lewis, 2005):

1.   Lack of cost effectiveness
2.   Technical complexity
3.   Lack of adequate training experience
4.   Employer's concerns of information security

Ultimately, we can imply to undeniable impact of computers in the area of accounting and audit operations that have been further extended in the last century; so that the previous methods have been totally transformed. However, it has been also due to high current costs, high initial investment, hardware complexity of computers, disinclination of small and medium and some large enterprises to use computers, and in some cases not allowing the use of these systems (Furman, 2006).

Therefore, according to the research conducted and the issues mentioned, this study seeks to find the impact of using computer audit systems on audit quality.

Framework of the study

Since computers have played an effective role in information processing, auditors had to do audit practices in the increasing environment of information. Thus, we can observe that the audit practices and methods have been influenced and changed. Given the increasing effect of audit firms' report on the financial market stability, extensive efforts have been undertaken in the recent years to promote the effectiveness of audit operation. In this regard, some techniques and tools have been designed with the aim of increasing the audit operation quality; thereby auditors can do the auditing process with the help of computer which are called audit computer techniques (Mehrani and Naeimi, 2015).

In order to assist auditors in performing the audit of financial statements in IT environment, many accounting and auditing associations and authorities have issued statements and guidelines. For example, in 1948, American Society of Certified Accountants published Statement No. 48 of Auditing Standards entitled the impact of computer processing in examining financial statements. The statement encourages auditors to use audit computer techniques (Song et al., 2007).

Audit and the need for deployment of computers

The type of audit considered in this study is addressing financial statements of a company by an audit firm. This type of audit is to inspect the accounting records and other evidence underpinning the financial statements. The auditors never comment about the quality of financial statements without inspection.

Computers has become a tool that can perform routine accounting tasks with unprecedented speed and precision. Computers made it possible to provide information that cannot be provided in the past because of time and high cost. When the employer prepares and maintains accounting records by a complex computer system, the auditors often find the use of computers useful and necessary to perform many procedures (Meigs et al., 1996).

The necessity to utilize computer in audit has been stated in International Audit Standards that obtaining some information required without the help of computer may be difficult or impossible in some of accounting systems in which computer systems are used for applied important processes (International Committee of audit procedures, 2006). Davis et al. (2011) also believe that some audit practices would be difficult or impossible without the use of computers. They argued that all computer database records can be technically printed and audited without computer, but it is often impossible due to the high volume of information. Manual audit of such a volume of information will face with barriers in terms of time and workload.

Different ways of audit

Auditors can carry out the audit in two ways (Ansari and Shafie, 2009):

Accounting by bypassing the computer

First the input data enters to computer and output is obtained, then the output is compared with the expected output. In this method, computer is seen as a black box. Also, in this way, auditors audit the accounting systems information manually with traditional methods. The main advantages of this method include (David et al, 2012):

- ✓ low cost
- ✓ the need for technical skills in low level
- ✓ easy understanding for all users

Internal auditing computer systems

Learning more about the use of computer in auditing has made the auditors of the new era to utilize client system introspection approach instead of bypassing it. Therefore, in cases where controlling input, output and processing information is performed within computer systems, auditors should test the controls directly to detect their effectiveness. This use of computers for auditing computer systems is called internal auditing computer systems (introspection). In this way, auditors can audit the information of client's accounting system using computer techniques. This adds to the savings audit time, because the inspection of electronic documents spent less time than paper documents. Internal auditing computer systems can be done in various ways; some of these ways include (Li et al., 2007):

Experimental data technique

In this method, auditor creates a number of virtual transactions to test the controls that allegedly exist in the application system. While processing this information, the auditor should observe the result of controls on the information. Based on the results of the experimental data, the auditor can assess the effectiveness of controls. Researchers reported the use of this method in audit. For example, a research by Stanford Research Institute shows that 26.6% of the enterprises studied have used this method.

Parallel processing technique

In this method, a set of company information is reprocessed using a program controlled by the auditor; the auditor's processing results are then compared with the results of system operations. It is important that the audit program should include all of management controls; and all data processing results and enterprise system error list should be similar to parallel processing results (Chen and Hope, 2011).

Joint experiment equipment technique

In this method, which is also known as small company technique, the auditor embodies a virtual set of information such as specification of a number of virtual employees in the salary system to be processed with the actual data. The auditor could assess the effectiveness of any system control by changing the information. This technique is an effective tool to audit complex systems and it is also used in the field auditing online systems. Research conducted indicates this

technique is used less than experimental data technique and general audit software. For example, a research by Stanford Research Institute shows that only 5% of the enterprises studied have used this method.

Types of computer audit techniques

Computer audit techniques are divided into two groups (Dong, 2015):

1.   techniques used to audit computer systems.
2.   techniques used to analyze the data.

On the other hand, some of computer audit techniques directly examine the system and some other indirectly by the analysis of processed data. It should be noted that computer audit techniques can be used to implement both content tests compliance tests.

Benefits of using computer techniques in audit process

Over the past years, the compilation board of audit standards affiliated to AICPA has paid much attention to the impact of information technology on the audit. The board has published Auditing Standard Statement No. 94 entitled the impact of information technology on the auditors' assessment of internal controls in the process of financial statements audit. Some important aspects of Statement No. 94 are as follows (Lee et al., 2007):

•   the impact of information on internal controls
•   the attitudes of auditors to IT
•   the types of the information technology controls which are important in the audit
•   the use of skilled people by auditors
•   the auditor's understanding of the financial reporting process

The above statement recommends the increasing use of technology in audit operation. Special considerations in applying the ISAs argue that the effectiveness and efficiency of audit procedures may be increased by using computer-assisted audit techniques. PACUIT scholars believe that computer audit techniques enable auditors to direct the audit process effectively with high efficiency and quality as well as lower costs of content tests. They also believe that computer audit techniques improve audit efficiency and productivity so that these techniques allow auditors to collect the necessary evidence to audit with the help of computer (Sajjad and Naseh, 2014).

Therefore, auditors see computer audit techniques as a means to improve audit efficiency and quality. You can prepare computer worksheets instead of manual worksheets using these techniques. This has led to:

•   Save the cost of paper. With an overview of the manual system, we realize what a large amount of costs are spent for paper, copies and prints.
•   Reduce the storage space. In this regard, we should mention the costs of rent for paper storage.

• prevent from useless move of worksheets with computer and web-based access to the worksheet spreadsheets.

• Avoid risks such as theft, fire and .... using computer worksheets.

Association of Chartered Accountants in England and Wales in one of its publications has mentioned the benefits of using computer. Other researchers have also pointed to cases in their studies which are as follows (Bavvd et al., 2014):

1. improvement in the auditor's judgment and quality: The major benefit of the use of information technology for audit firms is improved quality of the audit.

2. Improved Competitive situation: associates and managers of six large audit firms in their interviews have emphasized on maintaining the competitive position with other institutions.

3. increased quality and reduce cost of the audit: IT Briefing Journal of Association of Chartered Accountants in England and Wales wrote that the ultimate goal of computerizing the audit for many auditors is to improve the quality and cost.

In general, the purpose of computerizing the audit is to enhance audit quality and efficiency and reduce the cost of audit risks, improve response time and reduce the level of technical knowledge necessary to carry out the audit task; so that younger staff can take over the tasks currently carried out at expensive rates by senior staff. Aybj (2001) argues that in case of using computer-assisted audit, audit firms can save at least 10 percent of the audit time. In general, the benefits of using computer audit techniques are as follows:

• it is possible to improve the audit quality and time.

• auditors access to the knowledge of modern technologies.

• automated controls can eliminate repetitive operations of audit process.

• computer can perform sorting, searching, and calculations for large amounts of information within a few seconds.

On the other hand, new information technologies have removed or reduced some of the inherent risks of manual system. Three examples are mentioned below (Arabmazar Yazdi, 2001):

o **Human error**: the role of human in the composition of resources used in manual system is critical and outstanding. While most machine systems tend to use the automated resources. Unlike humans, computers do not go wrong in the operations and calculations defined. Errors in the manual system such as an error in the summation of an invoice, an imbalance in the accounting entry and … have no way to technology-based systems.

o **Lack of consistency**: the risk of problems arising from the lack of consistency is very high in manual systems. But consistency is considered as an advantage in machine systems. Computers perform all similar calculations and operations in a certain and uniform way based on fixed and predetermined programs and guidelines. So there would be no deviation of the procedures defined and explained in these systems.

o **Motivations for misconduct and breach of trust among human factors**: computers are never motivated for misconduct or breach of trust while the personnel and users of the system may do such actions by considering the interests of their own.

The risks arising from the use of information technology

New information technology due to its specific characteristics underlies new risks for the organization and inherent characteristics of machine systems have practically created new threats to enterprise resources, especially their valuable information resources. In this section, we refer to some of these cases (Lee et al., 2007):

Concentration of data

Large amounts of data are recorded and stored in a variety of media such as disk and tapes very compactly. This causes some risks including:

o   easier theft of concentrated information
o   possibility to remove all information

Accuracy of calculations

The problem of 2000 is an example of the problems that may happen in the future. This problem was a result of saving in registered double-digit year instead of four-digit numbers. Many expenses were spent to investigate and remove this threat. Other dates may create similar problems.

Computer virus

It is a computer program that enters to the computer when connecting to networks or receiving data or program via other devices and causes all kinds of faults by subverting the computer system.

Industrial espionage

It includes unauthorized intrusion into the system to obtain confidential company information.

Sabotage of the information

 It includes operations such as manipulation of enterprise's information pages on the World Wide Web or importing offensive content on those pages.

Methodology

The present study is an applied research in terms of objective. In terms of data collection, it is a descriptive (non-experimental) research. The study is a survey and case study from another perspective. After studying various books and articles and interviewing scholars and auditors, the present study aims to investigate the audit quality in the procedures related to audit software. Then, a questionnaire was designed to investigate this objective. However, the scholars believed that the effect of organization's audit software on the audit quality may vary with respect to the size of audited firm. For this reason, the audit firms in this study were categorized in three small,

medium and large enterprises with respect to the volume of accounting and audit operations. The effect of audit software on each of three categories has been examined separately. So the respondent auditors were asked to answer the questionnaire attention to each of these three categories. Thus, a main question and three secondary questions were proposed for this study:

o **The main question**
1.   Is the use of computer audit systems significantly related to the audit quality of companies and institutions?
o **The secondary questions**
1.   Is the use of computer audit systems significantly related to the audit quality of small companies and institutions?
2. Is the use of computer audit systems significantly related to the audit quality of medium companies and institutions?

3. Is the use of computer audit systems significantly related to the audit quality of large companies and institutions?

A review and evaluation of the studies on the issue gives an assumed answer to the questions and the following hypotheses were made:

o **Main hypothesis**
The use of computer audit systems is significantly related to the audit quality of companies and institutions.

o **Sub-hypotheses**
1. The use of computer audit systems is significantly related to the audit quality of small companies and institutions.

2. The use of computer audit systems is significantly related to the audit quality of medium companies and institutions.

3. The use of computer audit systems is significantly related to the audit quality of large companies and institutions.

Time and Territory of research
Time scope

The present study aims to investigate the effect of using computer audit systems on the audit quality of firms during 2001 to 2004 when the audit operation was carried out manually and during 2013 to 2015 when the audit process become automated.

Territory

The scope of this study is small, medium and large companies and economic organizations that performed the audit operations manually during 2001 to 2004 and automatically during the years 2012 to 2015.

Limitations of the study

Some limitations of this study are as follows:

1. Since the information of questionnaire is written, the results have inherent limitations of written questionnaire.

2. As the above-mentioned organizations have attempted to mechanize their operations by auditing software in recent years, little experience in the use of this software is considered as a limitation of this study.

Research population and sample

Total number of respondent auditors who were eligible was 109. In this study, the sample size is selected based on the population. Due to the small number of population in this study, all the population has been used for data collection. In fact, there is no sampling in this study and census method was used to collect data. Therefore, since the population of these questions is classified based on three small, medium and large categories, of 109 responders, 27 were small firms 43 medium-sized firms and 39 large-sized.**Data collection method**

In order to examine the effects of using computer on the audit quality, a self-made questionnaire consisting of 15 questions was designed and delivered to the auditors of all three types of companies (small, medium and large). The answers were in the form of Likert 7-points scale including very appropriate, (equal to 3), appropriate (equal to 2), slightly appropriate (equal to 1), unchanged (equal to zero), slightly inappropriate (equal to -1), inappropriate (equal to -2) and very appropriate (equal to -3). After compiling the draft questionnaire, were tired to determine the validity and reliability. In this study, Cronbach's alpha was used to determine the reliability of the test. For this purpose, an initial sample consisting of 35 questionnaires was pretested ad then using the data obtained and with the help of SPSS the confidence coefficient was calculated 0.85 using Cronbach's alpha. Also, given that the research questionnaire was standard, it was revised and content validity by supervisors and advisor and several specialists in the fields of accounting, management and economics.

Data analysis

To analyze the data collected from questionnaires, descriptive statistics and inferential statistical methods were used.

Descriptive statistics: a set of concepts and methods employed to organize, summarize, prepare tables, graphs and a description of data is called descriptive statistics. In general, descriptive statistics represent an abstract and image of the data with the help of figures and diagrams.

Inferential statistics: in inferential statistics, researcher is always dealing with sampling and selecting a small group called sample from a larger group called population. The researcher estimates and predicts the characteristics of the population using the data obtained (Khaki, 2007).

In this study, Kolomgrov-Smirnov test is used to test the data normal distribution, Pearson Correlation coefficient has been also used to test the hypotheses.

Results
Descriptive statistics
Demographic variables

In order to analyze the data, at first the descriptive data on demographic variables of the study including education level, audit category, experience of audit and auditor's familiarity with the audit software are investigated. The results of the descriptive statistics analysis are reported in Table 1.

The results showed that out of 109 participants (total of all three types of small, medium and large enterprises) responded to the questionnaire, 18 people have master's degree, 86 bachelor's degree, 3 associate's degree, and 2 high school diploma. In terms of discipline, 101 people have studied accounting, 3 managements and 5 economics. The audit category of 11 people was manager, 21 supervisors, 24 senior auditors and 53 auditors. In terms of audit experience, 44 people have less than 5 years, 24 people 5 to 10 years, 35 people 10 to 15 years, and 6 people over 15 years of experience. And finally in terms of familiarity with the audit software, 16 people were highly familiar, 29 people familiar and 64 people modestly familiar.

Table 1: Frequency distribution of the demographic variables of respondents

Variable	group	Enterprise			Total
		Small	Medium	Large	
Education	Master	3	8	7	109
	Bachelor	23	32	31	
	Associate degree	1	2	0	
	Diploma	0	1	1	
Discipline	Accounting	24	41	36	109
	Management	2	0	1	
	Economics	1	2	2	
Audit Category	Manager	4	3	4	109
	Supervisor	4	9	8	
	Senior Auditor	7	9	8	
	Auditor	12	22	19	
Experience in audit	Less than 5 years	10	18	16	109
	5 to 10 years	6	9	9	
	Between 10 and 15 years	9	14	12	
	More than 15 years	2	2	2	
The auditors' knowledge of audit software	too much	4	6	6	109
	much	6	11	12	
	Average	17	26	21	

Questions

The results of the descriptive statistics analysis of the questionnaire separated by small, medium and large enterprises are presented in Table 2.

Table 2. Descriptive statistics analysis of the questionnaire

		Small		Medium		Large	
		Mean	S.D	Mean	S.D	Mean	S.D
1	Help the beginner staff to have more mastery on the entity	0.96	0.96	1.12	0.93	1.28	0.85
2	Help to do more detailed analysis of audit	1.07	0.90	1.00	1.10	1.18	1.22
3	Help to select better samples	1.04	0.84	1.63	0.89	1.87	0.85
4	Help to increase discovery of the bugs related to the client's internal control system	0.15	0.36	0.30	0.59	0.41	0.71
5	Help to increase discovery of the problems in each account	0.63	0.82	0.93	0.92	1.13	0.94
6	Help to increase discovery of the problems in financial statements	0.62	0.74	1.00	0.90	1.24	0.98
7	Help to collect evidence with more quality	0.38	0.68	0.43	0.82	0.45	0.85
8	Help to plan and perform the audit more effectively in future periods	1.00	0.98	1.14	0.89	1.53	0.94
9	Help to increase discovery of the client's inadvertent errors (negligence and malpractice)	0.54	0.69	0.74	0.79	0.82	0.76
10	Help to better monitor the quality of audit	1.08	0.83	1.62	0.72	1.58	0.78
11	Help to the more effective management of the audit (audit division)	1.19	0.88	1.43	0.82	1.58	0.82
12	Help to reduce the audit risk	0.62	0.92	0.93	0.99	1.05	0.97
13	Help to reduce the errors discovered at later audit stages	0.64	0.69	1.00	0.82	1.13	0.89
14	Help to further promote the professional training of auditors	1.08	1.03	1.14	1.01	1.42	1.09
15	Help to access and search the client's company information as soon as possible	1.70	1.08	2.05	0.89	2.21	0.85

Question one: Help the beginner staff to have more mastery on the entity. The mean of answers was close to 1 (slightly appropriate); thus, the status of automated system compared with the manual system has become more appropriate in all three levels of enterprises. For example, embedding an accounting system in the software and its uniformity in all companies makes beginner employees more familiar with accounting system.

Question two: Help to do more detailed analysis of audit. The mean of answers was close to 1 (slightly appropriate); thus, the status of automated system compared with the manual system has become more appropriate in all three levels of enterprises. For example, the ability to import data to EXCEL in the software and analysis in EXCEL environment can help auditors.

Question three: Help to select better samples. The status of automated system compared with the manual system has become more appropriate in small and medium enterprises. This status has become more appropriate in large enterprises.

Question four: Help to increase discovery of the bugs related to the client's internal control system. The mean of answers was close to 1 (slightly appropriate); indicating that the audit software operates weakly in discovery of the bugs related to the client's internal control system. So we can say that the status of automated system compared with the manual system has been unchanged.

Question five: Help to increase discovery of the problems in each account. The mean of answers in small and medium enterprises was less than 1 (slightly appropriate), indicating that the audit software operates weakly in discovery of the problems in each account. Also, as the mean of answers in large enterprises was close to 1, the status of automated system compared with the manual system has become more appropriate.

Question six: Help to increase discovery of the problems in financial statements. The mean of answers in small enterprises was less than 1 (slightly appropriate), indicating that the audit software operates weakly in discovery of the problems in financial statements. Also, as the mean of answers in medium and large enterprises was close to 1, the status of automated system compared with the manual system has become more appropriate.

Question seven: Help to collect evidence with more quality. The mean of answers was close to 1 (slightly appropriate); indicating that the audit software operates weakly to collect evidence with more quality in all three levels of enterprises. So we can say that the status of automated system compared with the manual system has been unchanged.

Question eight: Help to plan and perform the audit more effectively in future periods. The status of automated system compared with the manual system has become a bit more appropriate in all three levels of enterprises.

Question nine: Help to increase discovery of the client's inadvertent errors (negligence and malpractice). The mean of answers was close to 1 (slightly appropriate); indicating that the audit software operates weakly in discovery of the client's inadvertent errors (negligence and

malpractice). So we can say that the status of automated system compared with the manual system has been unchanged.

Question ten: Help to better monitor the quality of audit. The status of automated system compared with the manual system has become more appropriate in all three levels of enterprises.

Question Eleven: Help to the more effective management of the audit (audit division). The mean of answers is in the range of 1 (slightly appropriate) and 2 (appropriate); thus, the status of automated system compared with the manual system has become more appropriate in all three levels of enterprises in terms of helping the more effective management of the audit.

Question Twelve: Help to reduce the audit risk. The mean of answers in small and medium enterprises was less than 1 (slightly appropriate), indicating that the audit software operates weakly to reduce the audit risk. Also, as the mean of answers in large enterprises was close to 1, the status of automated system compared with the manual system has become more appropriate.

Question Thirteen: Help to reduce the errors discovered at later audit stages. The mean of answers in small enterprises was less than 1 (slightly appropriate), indicating that the audit software operates weakly to reduce the errors discovered at later audit stages. Also, as the mean of answers in large and medium enterprises was close to 1, the status of automated system compared with the manual system has become more appropriate.

Question Fourteen: Help to further promote the professional training of auditors. The mean of answers was close to 1 (slightly appropriate); thus, the status of automated system compared with the manual system has become more appropriate in all three levels of enterprises.

Question Fifteen: Help to access and search the client's company information as soon as possible. The status of automated system compared with the manual system has become more appropriate with respect to access and search the client's company information as soon as possible in medium and large enterprises. The status of automated system compared with the manual system has become slightly appropriate in small enterprises. It should be noted that employing the client's audit system in the audit software and its uniformity can be effective in all enterprises.

Data normality test

After examining demographic variables, Kolmogorov-Smirnov test was used to assess the hypothesis of normal distribution. This test is mentioned in Table 3 and examines normal distribution of the data analyzed at 95% confidence. Given the significance level obtained for different groups that is greater 0.05, it can be said that the null hypothesis on the data normality was confirmed. Therefore, our distribution follows the normal curve. Thus, parametric tests can be used for further data analysis.

Table 3: Normal distribution of research variables at 95% confidence

Indicators Research	Samples	Obtained significance level	Normality
Audit quality in small companies	27	436/0	normal
Audit quality in medium companies	43	357/0	normal
Audit quality in large companies	39	203/0	normal

hypotheses test
The main hypothesis

The use of computer audit systems is significantly related to the audit quality of companies and institutions.

Table 4: Pearson correlation test for the main hypothesis

| Variable | Audit quality of enterprises | |
	Pearson correlation coefficient	significance level
The use of computer accounting systems	0.738	0.041

According to the figures in the table, Pearson correlation coefficient between the two variables (the use of computer audit systems and audit quality of enterprises) is 0.738 which is significant at 0.041 and there is a positive direct relationship between the two variables. The alternative hypothesis of research on the relationship between " the use of computer audit systems and audit quality of enterprises" is confirmed. The intensity of the relationship between the two variables (0.738) is at a medium level.

The first sub-hypothesis

The use of computer audit systems is significantly related to the audit quality of small companies and institutions.

Table 5: Pearson correlation test for the main hypothesis

| Variable | Audit quality of small enterprises | |
	Pearson correlation coefficient	significance level
The use of computer accounting systems	0.519	0.034

According to the figures in the table, Pearson correlation coefficient between the two variables (the use of computer audit systems and audit quality of small enterprises) is 0.519 which is

significant at 0.034 and there is a positive direct relationship between the two variables. The alternative hypothesis of research on the relationship between " the use of computer audit systems and audit quality of small enterprises" is confirmed. The intensity of the relationship between the two variables (0.519) is at a lower than medium level.

The second sub-hypothesis

The use of computer audit systems is significantly related to the audit quality of medium companies and institutions.

Table 6: Pearson correlation test for the main hypothesis

Variable	Audit quality of medium enterprises	
	Pearson correlation coefficient	significance level
The use of computer accounting systems	0.682	0.012

According to the figures in the table, Pearson correlation coefficient between the two variables (the use of computer audit systems and audit quality of medium enterprises) is 0.682 which is significant at 0.012 and there is a positive direct relationship between the two variables. The alternative hypothesis of research on the relationship between " the use of computer audit systems and audit quality of medium enterprises" is confirmed. The intensity of the relationship between the two variables (0.682) is at a higher than medium level.

The third sub-hypothesis

The use of computer audit systems is significantly related to the audit quality of large companies and institutions.

Table 7: Pearson correlation test for the main hypothesis

Variable	Audit quality of large enterprises	
	Pearson correlation coefficient	significance level
The use of computer accounting systems	0.971	0.008

According to the figures in the table, Pearson correlation coefficient between the two variables (the use of computer audit systems and audit quality of large enterprises) is 0.971 which is significant at 0.008 and there is a positive direct relationship between the two variables. The alternative hypothesis of research on the relationship between " the use of computer audit systems and audit quality of large enterprises" is confirmed. The intensity of the relationship between the two variables (0. 971) is at a high level.

Conclusion

The results indicate that the audit software operates weakly with respect to the audit quality in small enterprises. It has slightly appropriate and appropriate effectiveness in medium and large enterprises, respectively. In addition, it is concluded that the use of audit software in the audit operation of small, medium and large enterprises promotes the audit quality. The results also indicate that there is a direct relationship between the audited firm size and the effectiveness of computer audit system on the audit quality in such a way that the larger are audited firms, the effectiveness of the software on the audit quality will be increased.

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