Using Information Technology among Auditors in Jordan

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Abstract
As Information Technology (IT) become crucial part of daily process in each aspect of the life, the autoing process show big shift using IT software. This research studies the actual use of IT by Jordanian auditors. The study sample is 100 auditors' external and internal auditors in many positions in different firms in Jordan. The study found high use of IT in the auditing process by auditors in Jordan with continuous development of the process by use new IT software and skills. Despondences show high agree on questions regarding acquiring new skills of IT to be used in auditing process , which is natural when all auditing process use IT with continuous development of the IT used. This research used questionnaire of four parts regarding the use of IT in the auditing process, development of IT, acquiring new IT skills, and the actual effect of IT on the auditing process. The result show big agreement on the fact that IT does affect the auditing process, which comes naturally, because most of the auditing process today done by the use of the IT financial software and other IT tool.

Keywords: Auditors, Financial Information System, E-Commerce, Information Technology

I.   Introduction

Audit is playing an important role in developing and enhancing the global economy and business firms. When accounting provides information, auditing is coming to confirms reliability of the information provided according to the standards worked by. The challenges facing auditing are different today because of the rapid advancement in information technology (IT). Firms depend today on IT in conducting their day-to-day operations, which means changes in the nature of the work and the business relationships. Changes happened by the use of internet, real-time accounting systems, electronic commerce (e-commerce) and using websites and social media to disclose financial information. This leads to an increasing need for new IT audit techniques (Kotb and Roberts, 2011; Wanger, 2001). The investment of IT is on high-rise due to the real benefits gained by this use. Report of the InformationWeek magazine 2102, revealed that, IT investments in the banking and financial industries accounted for 8.7 and 9.0 per cent of firms' annual revenues in 2011 and 2012.
Today, all accounting process needs the use of computers and accounting software. The main reason for more complixed software used today is because of the changes happened in the profession of accounting and auditing, thus more security and protection needed. The size of today's companies and their tasks and operations also means the need for advanced software. (Enofe et al., 2012). IT has transformed the audit process from traditional audit to IT audit.

Audit firms put big investments into IT and developed tools that are technology dependent to give bigger and faster results during the auditing process. Smaller audit firms may not be able to compete with these large firms on IT investments (Janvrin et al., 2008). Using advanced technological tools today is what affecting the profession of auditing today. In developed countries and regions like the Middle East its necessary to reach for best technological tools also and use it for better results.

There is a lack of studies conducted on the use of the IT on auditing profession in Jordan and the impact it leaves on the practices of the profession. Thus, this paper will try to study the use of IT among the practices of auditing in Jordan and the impact as they see it.

II. Theoretical background

Organizations give more and more attention and value towards a standardized companywide system, and by doing this, information technologies force the role of auditors to change. Auditors must prepare to deal with challenges due to changing information technologies (Bahador & Haider, 2012).

IT affects the abilities of businesses because it increases the ability to store, capture, analyze and process large amounts of information. For the auditing profession the case is the same as auditing need big amount of information to process, and IT help in as the planning process, evidence collection, the knowledge necessary to perform the audit work, the risks encountered by the auditors as well as the adopted auditing techniques (Wanger, 2001). The main purpose of the audit is to assure outsiders that the financial statements are free from material misstatements; the value of an audit depends on the outsiders" ex-ante perception of the probability that the auditor will discover the breaches or errors in the reporting system and on the probability that the auditor will report the discovered breaches or errors.

The wide use of IT led to the move of most of the companies around the world to the automation of accounting information systems (AIS) to be able to compete in a world need for speed and precision. The starting of any auditing process, the auditor can use many computing platforms that are available today .When auditors plan for the work, they also need to consider several audit factors such as the data transmission errors and intentional data manipulation (Rezaee and Reinstein, 1998). According to (Al-Laith, 2012), auditors can gather evidences that can be generated electronically which a real easy process is saving time. Large amount of data can be collected from large databases through data mining text mining, and continuous monitoring (Hunton and Rose, 2010).

It is also clear that data management and change is much easier when it electronic than written on papers. As evidence is available electronically in most cases today, auditors may not be able to detect the intended manipulation of the data and so, they should conduct a test of controls (Rezaee and Reinstein, 1998). In addition, editors using electronic software should know that electronic business (e-business) transactions could be manipulated intentionally or unintentionally in any part of the process (Majdalawieh and Zaghloul, 2008). With all benefits come with the use IT, such as reducing costs, accelerating sales and other benefits, the use of IT increase risks as virus attacks, hacking and having easy access to data by unauthorized people.

Fraud is one of the risks caused by the use of IT, and occurs when no necessary security tools are in place (Abu-Musa, 2004; Pathak, 2004). Also, the growth of the internet and the new ways of conducting business electronically are driving the demand for other assurance services such as WebTrustand, SysTrust (Arens et al., 2013).

When using IT by auditors, they have at least average IT knowledge that gives them the ability to complete the audit work. As most of the records of transactions are in an electronic form then auditors today should have knowledge to be able to manage these transactions and read them. Auditors must have knowledge also of issues as information security and electronic document management, as also wireless technology and authentication technologies (Petterson, 2005). The knowledge also of technical skills is required to manage and handle all process in auditing done electronically. Auditors have to work in an IT environment and to adjust to all changes and developments happen during the practice of auditing. (Han et al., 2015; Janvrin and Wood, 2016). Auditors should see the use of IT as

advantage to the practice, and develop the new skills, which improve the quality of the results obtained.

III.   Previous studies

Menna, Mohammad and others 2017 did a study (The implication of information technology on the audit profession in developing country: Extent of use and perceived importance). The study aimed to explore the impact of implementing IT on the auditing profession in a developing country. The study conducted in Egypt. Survey of 112 auditors, representing three of the Big 4 audit firms as well as ten local audit firms in Egypt, is used to gather preliminary data, and semi-structured interviews are conducted to gather details/qualitative-pertained information. The study results indicated that auditors' perception regarding client's IT complexity is significantly affected by the use of IT specialists and the IT expertise of the auditors. The study also showed that the new audit applications' importance and the extent of their usage are significantly affected by the IT expertise of the auditors. The results also reveal that the auditors' perception regarding the client's IT is not affected by the control risk assessment. Also the study showed that the auditors find that the uses of audit applications as well as their IT expertise are not significantly affected by the audit firm size.

The study of (Kirsten Kolk,2017), aimed to examine the relationship between the role of auditors and information technology, a survey has been developed and sent to all auditors working within EY Netherlands, which comprises in total 1382 auditors of whom 216 auditors completed the survey. In addition, five interviews were scheduled and analyzed to further corroborate the findings of the survey. The results of this thesis show that information technology changes the tasks performed by auditors, security compliance privacy assessment and organizational structure. In addition, the level of usage of information technology by auditors is high.

The study of (Diane Janvrin, James Bierstaker, D. Jordan Lowe,2008), the aim of the study is to address regulator concerns about barriers to entry in public accounting and to advance auditing research, we examine whether audit IT use and perceived importance of IT varies by firm size. A field-based questionnaire was used to collect data from 181 auditors representing Big 4, national, regional, and local firms. The results indicate that auditors extensively use a variety of audit applications including analytical procedures, audit report writing, electronic work papers, Internet search tools, and sampling. Auditors perceive several applications as important (e.g., fraud review), but use them infrequently. In addition, IT specialists use is infrequent, even by auditors who examine clients with complex IT. Finally, findings suggest that audit IT use and perceived importance vary by firm size.

IV.   Methodology

Research hypothesis

This research develops the four null hypotheses as the following:
1.   IT is not used in all auditing process
2.   Auditors do not develop their auditing process by using IT
3.   IT doesn't affect Auditing process
4.   Auditors don't acquire new IT skills

Study Sample

As this study employs the quantitative method, survey has been chosen for data gathering purpose. Thus, a questionnaire containing items on the use of IT in auditing, the development of the process, the effect of IT on the quality of the auditing process.

The sample contains 100 auditors working in private or public sector, all practicing auditing in the time of the study. The fifth Likert scale was adopted, and items grading was done as follows: strongly agree and strongly disagree.

Instrument reliability testing
Cronbach was used to check the reliability of the instrument, and because it had a value of more than (-0.60) it can be deemed acceptable statistically (Sekaran 2003), and the closer the value is to 100% the higher the degree of reliability on the study's tool.

Study's tool and its dimensions	Reliability coefficient
IT used in Auditing	0.76
Auditing development using IT	0.71
IT affect Auditing process	0.80
IT skills acquiring	0.69
Reliability	0.82

V.   Analysis and Results
This section presents the results of the study.
Demographic data analysis

statement	Number	Percentage
Scientific qualification		
Diploma	20	20%
Bachelor	55	55%
Master	15	15%
Doctorate	10	10%
Expectancy/Years		
Less than 5 years	0	0%
5-10 years	69	69%
10-15 years	20	20%
More than 15 years	11	11%
Gender		
Male	89	89%
Female	11	11%
Career center		
Prime audit team	77	77%
Senior auditor	12	12%
Auditor	10	10%
Auditor assistant	1	1%

Most of the despondences are males (89%) and having 5 to 10 years' experience (69%), with the high percentage of bachelor degree holders (55%).

This study uses the paragraph averages, rank (importance of the paragraph), and standard deviations to indicate the importance auditing procedures of using IT on Auditing.

Respondents' means and standard deviations

Item	M	Std	Relevant significance	Level
IT used in Auditing	4.287	0.60	1	High
Auditing development using IT	3.905	0.51	3	High
IT affect Auditing process	4.00	0,633	2	High
IT skills acquiring	4.00	0.633	2	High

Hypothesis testing

For the first hypothesis "IT is not used in all auditing process ", I used T, test. As per the table, four illustration results show that the T value was higher than its tabulated value hence a rejection of the first hypothesis and its sub-hypotheses.

Hypothesis	T	FD	SIG	RESULT
IT is not used in all auditing process	103	69211	0.00	REJECTION

For the second hypothesis "auditors do not develop their auditing process by using IT" .As per illustration in the table, the results indicate that the T value is higher than its tabulated value hence the rejection of the second hypothesis.

Hypothesis	T	FD	SIG	RESULT
Auditors do not develop their auditing process by using IT	103	64411	0.00	REJECTION

For the third hypothesis "IT doesn't affect Auditing process" .As per illustration in the table, the results indicate that the T value is higher than its tabulated value hence the rejection of the third hypothesis.

Hypothesis	T	FD	SIG	RESULT
IT doesn't affect Auditing process	103	59344	0.00	REJECTION

For the last hypothesis "auditors don't acquire new IT skils" .As per illustration in the table , the results indicate that the T value is higher than its tabulated value hence the rejection of the last hypothesis.

Hypothesis	T	FD	SIG	RESULT
auditors don't acquire new IT skills	103	65322	0.00	REJECTION

VI.   Conclusions

As most of auditors are using IT software in auditing process, Jordanian auditors using them also to achieve better results, and develop skills for using these software. This study found that auditors use IT in all auditing process , and they find that IT affect the process of auditing , which means they will try to acquire more skills to keep up with IT development that happen in their firms. The study found that firms that despondences work in are developing their process by using IT systems and software for better results. The results show in this research that the IT is an important aspect of auditing process among Jordanian auditors, and there is big need for acquiring IT skills with the development of the IT software for auditing which Auditors in Jordan see it as very important. Results in this research show no indication of low IT skills among auditors as despondences answers were clear indication of continuous development of auditing by the use of IT and the need for more skills to go

with these development. No indication of risks by using IT , as the study didn't focus on measurement of risks in using IT in auditing process, and focus instead on the actual use of IT in the auditing process by Jordanian auditors.

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