

The Impact of E-commerce on the Audit Profession in Jordan

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Abstract

This study aims to identify the extent of the impact of E-commerce on audit profession in Jordan. For purpose of this study, researcher selected a random sample consist of (80) auditors licensed practicing auditing in Jordan. Researchers used statistical methods such as frequency distributions and means and test one sample t-test.

The study found the need to define the auditors of E-commerce and its institutions and its requirements so that auditors deal with this type of activity efficiently and effectively, and the need for increased training of scientific, practical and technological auditors will positively reflect on the process of checking e-business processes, and the need of specialized courses in the audits E-commerce by the Jordanian Society of Chartered Accountants, as well as the importance of educating auditors by E-commerce dangers and how to deal with during the audit process.

Keywords: E-business, E-commerce, audit profession.

Introduction

The auditing profession was the professions that are related to the particular needs of human profession developing accounts through the ages associated with the development of economic life in communities and institutions and of developments that have accompanied globalization and economies winepress emergence of the concept of E-commerce and related this concept, the activities and operations and establish accounting entries to these processes and thus the need to sift through those processes to establish the facts of the financial situation of the project.

Importance of the Study

The auditing consider the mean instrument through which the reader of financial statements can verify their validity, reliability, and with the complexity of the business and diversity increasing the importance of the auditing profession as a means for many users of financial statements to achieve its goals and objectives, and later complications and developments faced by businesses in the current century commerce electronics, the importance of this study in trying to answer the following question , Is e-commerce has affected the auditing profession?

The Objectives of the Study

The main objectives of this study are f:

1. Verification the extent of E-commerce impact on auditing profession in Jordan.

2. Definition and requirements of E-commerce.

Problem of the Study

The problem of this study represents to know the extent of E-commerce impact on auditing profession in Jordan.

Study Hypotheses

H01: There is no statistically significant impact of E-commerce on the planning of the audit process.

H02: There is a statistically significant impact of E-commerce on the essential measures for the audit process.

H03: There is a statistically significant impact of E-commerce on the auditor's report.

Methodology of the Study

In order to achieve the objectives of the study and test hypotheses, the researcher used the descriptive analytical method, has been concentrated sources of this study are as follows:

1. Secondary sources include books, articles and scientific research and official documents.
2. Primary source: represent in collection from Questionnaire distribution questionnaire has been designed for the purpose of measuring the hypotheses of the study.

Statistical Methods

For the purposes of achieving the objectives of the study and test hypotheses, the researcher used several methods and statistical methods, which were represented in the frequency distributions and means and one sample T-test.

Population and Sample of Study

Study population Consists of all auditors licensed to practice auditing profession in Jordan and nearly (503) auditor, and for purposes of implementation, random sample were selected consisting of (80) auditor, have been distributed (80) questionnaires were retrieved (72) equal 90%

Determinants of Study

So that we can disseminate the findings of the study should be pointed out that the most important determinants are:

1. Lack cooperation of the majority of auditors with the researcher during the application of the study, have been overcome by demonstrating the importance of the study and their role in their success in the case of cooperation .

Previous Studies

1. Study (Glover, and Ijiri, 2000) entitled: "Revenue Accounting" in the Age of E-Commerce: Exploring Its conceptual and Analytical Frameworks ".

The purpose of this descriptive study to look at the principle of recognition of revenue along with the theoretical framework of accounting in light of e-commerce; where study discussed in depth the historical cost basis used in the light of traditional commerce and had become useless in light of e-commerce.

It should be noted that the study has discussed the conceptual framework of accounting designed by the Financial Accounting Standards Board of America (FASB), along with the procedures of U.S. Securities Commission (SEC).

The survey has produced a number of results, the most important can be summarized as follows:

1. There is a significant weakness in the traditional accounting not consistent with the requirements of e-commerce, especially in the absence of standards or principles or concepts to identify mechanisms of recognition of revenue through the e-commerce.
2. The conceptual framework in current form has been designed in a traditional commerce, within factors available for documenting the documentary, so it is unable to keep up with e-commerce operations.
3. As the U.S. accounting standards prepared on the basis of the conceptual framework designed for traditional commerce, these standards may not be able to achieve its goals in the processes of measurement in e-commerce.

Based on previous results the study had recommended that this recommendation is essential addressed to the Financial Accounting Standards Board of America and the U.S. Securities Act, that they will cope with the age of E-commerce, and a re-examination, drastically both the conceptual framework of accounting and accounting standards; and focus primarily on mechanism of recognition of revenue under the commercial environment lacked documentation documentary is almost complete.

2. Study (Pathak, 2002) entitled "Tale of Compatible Twins! Success of E-Commerce & Information Systems / Internal Auditors "

The purpose of this study conducted a descriptive based on the views of other scholars in previous studies, multiple in Canada, to examine the role of internal auditor in the accounting information systems in light of e-commerce, focusing, primarily on the role of the Internal Auditor with only the exclusion of the role of external auditor, that the Internal Auditor is responsible for assessing direct and control system to give us any suggestions for improvement performance.

The study reached a number of important results can be summarized as follows:

1. Can the internal auditor succeed in checking this type of operation, tracking e-commerce operations in accordance with the mechanisms used in some development projects such as this type of commerce.
 2. Any internal auditor exercise this kind of work must have the characteristics of technology and high technology.
 3. That there is a positive relationship between the effectiveness of internal control from the perspective of auditors and the success of e-commerce.
 4. There is a high understanding by senior management for this type of auditing.
 5. The international audit bodies have a significant role in the rehabilitation this kind of auditors.
 6. One of the negative aspects facing auditors is the complexity of E-commerce that is audited.
3. Study (Pathak, 2003) entitled: "A Model for Audit Engagement Planning of E-Commerce".

The purpose of this study through interview and auditors to cooperate with some specialists in the E-commerce in Canada, to achieve two main goals, namely:

1. Show the factors and determinants that affect the success of the audit planning process in light of e-commerce.
2. Building an integrated model for planning the audit process in light of e-commerce based on the success factors, and in accordance with International Standards on Auditing.

One of the main findings of this study, divided according to objectives of study into two parts as follows:

A. Success Factors of the Audit Process in Light of E-Commerce are

1. Understanding the required audit process.
2. Intensive training for auditors of e-commerce.
3. The need of a cumulative experience of the auditors of e-commerce.
4. Should enjoy auditor e-commerce should enjoy technical skills and high technological.
5. Available all of various auditing tools and systems supporting them.
6. Available self auditor ability to govern vocational specialist.
7. The ability of auditor to adapt audit planning procedures in line with the second part of this study on the proposed model.

B. Proposed Model

The study to develop a model proposed mainly explains the process of linking planning mechanism, auditing through the renewal of each the audit requirements for the system and audit requirements for the network and audit requirements of the database and audit requirements of auditing, and then connect all those requirements in the planning mechanism, auditing each type of hand, and to clarify how the procedures you must follow to achieve this with an explanation how the interdependence of all requirements, planning and procedures in achieving the audit cycle as a whole.

4. Study (Pathak, 2006) entitled: "Audit Resource Planning Success in B2B E-Commerce Engagement: An Empirical assessment of Theorized Constructs, Manifest Variables measurement and second Order Factor Model"

This study aimed to review the complexities of e-commerce in the techniques of auditing in general. Especially on the relationship between ERP Audit and sources of qualified people to audit this kind of operations. Where this study attempted to create a conceptual framework shows the audit planning process in light of e-commerce.

The study focused on one type of operations carried out through e-commerce (B2B) processes that take place between commercers through E-commerce.

The study carry out number of important findings can be summarized as follows:

1. Proposed a model for a special audit of e-commerce transactions that are carried out according to (B2B) in line with the American project Canadian Joint.
2. From the basic conditions for applying this model to be an auditor that works which are eligible for a very high technical expertise associated with accumulated through intensive training.

The success of such a model depends on a number of factors, important and necessary, which is the cornerstone of its implementation, namely the absolute authorities of the auditor client model together with the absolute powers of the administrative authority governing the location of the company.

5. Study (Pathak, 2006) entitled: "Empirical Assessment of Effective E-Commerce Audit ".

This study aimed to determine the impact of some electronic auditing factors to determine efficacy of the process of auditing e-commerce, where the study design to identify specialized and distributed to the auditors of e-commerce in Canada, contains carries five hypotheses of the President, with reference to the objectives of the study focused mainly on one type of e-commerce (B2B) is the sale of products from one dealer to another dealer through e-commerce.

The most important results of this study include:

1. That there is a positive relationship between the success of the process of auditing and updating of e-commerce management experiences entrusted with the development of regulations, the evidence that more modernize the management of systems development, successful electronic auditing more often.
2. That there is a positive relationship between information management experiences, management experiences, contacts and e-audit so that whenever they experience the largest information management, increased efficiency in checking mail.

3. That there is a positive relationship between management telecommunications, and the ability of the electronic auditor to give an opinion on the e-effective manner similar to the previous result.
 4. There is a positive relationship between audit technology-mail checker and the auditor ability to give an effective resolution, that is, the more he enjoyed Checker backlog of e-commerce expertise will contribute by making its ability to give an opinion Okburaly effective professionally.
 5. That there is a positive relationship between technological experience of the auditor and the success the audit process, that is, whenever the auditor has a high technological experience, the success of the audit process more.
6. Study (Aumari and Almutaz, 2007) entitled "The impact of E-commerce on the business planning review." A field study on Audit Firms in Saudi Arabia.

The purpose of this field study to identify the impact on the planning review process transformation facilities from traditional to e-commerce system, and the significance of this impact; and how there were significant differences between the views by the personal characteristics of the sample of auditors involved in this study.

Note that this study was conducted in Saudi Arabia and the total sample size consist of main audit eight offices.

The study revealed that e-commerce is a contemporary phenomenon trans part of business performance from traditional methods to technical methods, and this has created a kind of new procedures that need a lot of research to take root and become familiar, and are dealt with in ways that make them more accessible and more legitimate.

The Main Findings of the Study Include

1. E-commerce affecting the business environment, and therefore the audit criteria in view of the strong correlation between business operations and accounting, where it is believed that the e-commerce impact on accounting and auditing standards leading to the change in the accounting systems used, as well as other issue could lead to increased audit work through the e-commerce, where it was common in the past in audit practice, that auditor is carrying out a review following the method of final review, which usually begins their main task after the end of fiscal year companies. But through E-commerce conditions it is necessary to resort to continual review.
2. The emphasis on audit planning and e-commerce as a main aim, which includes the practices of auditor in the early stages of the contracting process, one of the most important stages of the review process if it is implemented professionally and economically, as well as to control the time allocated and the specific cost.

The auditor must understand the client and the type of industry and the circumstances surrounding it, which needs to be understood by all members of audit crew.

According to above we Can summarized, auditor must obtain a full understanding of the client activity.

- Limited impact of the new electronic system on planning audit process.
- the difference personal characteristics have no impact on different responses of participants in the research.

Theoretical Framework

The Definition of E-commerce

E-commerce is a new concept describes the process of the sale or purchase or exchange of products and services and information through computerized networks including the Internet. There are several points of view in order to define this word:

- The world of communication known as e-commerce as a means to deliver information, services or products via telephone lines or through a computerized network or through any technical means (Abu Fara, 2002).
- From a business point of view is the process of applying technology in order to make commercial transactions take place automatically and fast (Serafi, 2005).
- While you know that the services of E-commerce as a tool to meet the demands of corporations and consumers, and managers in reducing the cost of the service and improve the delivery of service (Belkacem, 2002).
- Finally, the online world define E-commerce : door open for the sale and purchase of products and services and information through the Internet (Obu fara, 2002).

Requirements of E-commerce (Turban, 2004)

To become commerce available over the Internet in any society it is necessary to provide a suitable environment, as well as the requirements to achieve them. In this section we will deal briefly with these requirements in accordance with the following divisions:

A. Electronic infrastructure, including supporting infrastructure of e-commerce and contract business dealings via Internet. Among the most prominent component of this infrastructure information and communication technology (ICT) sector and include the networks of telecommunications and telecommunications equipment, fax, fixed telephone and mobile, as well as computers and software applications and operating and support services, technical, and human capital used in business and e-commerce, as well as to the availability of productive sectors of information technology. These components provide an environment of electronic infrastructure which helps the spread of Internet use and create a suitable environment for E-commerce.

The spread of Internet access a major factor in e-commerce, because it serves as the channel e-mail or market in which such transactions and commerce exchanges. The spread of the Internet depends on the availability of essential elements by the availability of personal computers and mobiles, and access to the Internet through knowing of users numbers, participants and potential users of the Internet.

B. Legislation and regulations for E-commerce: include legislation, laws and rules that fit with the nature of commerce via the Internet. These legislations represent legal and regulatory framework that ensures the continuation of E-commerce and protect the rights of the parties collaborating. Also provides the legal framework to create legal tools suited to the electronic transactions, such as the means of contracting over the Internet or via e-mail, and the conditions required for this, and solve conflict E-commerce, whether in society or whether they are between parties in different countries, as well as dealing with the proof means of conflicting commerce parties via the Internet. It also includes issues such legislation on intellectual property rights, and cyber crimes and to identify the concept of damage and destruction caused by these crimes, and dealing with electronic signatures and the positive version and acceptance electronically.

C. Availability human resources: This is a component of the success of e-commerce in any society; these include human resources professionals in IT and communication networks, the Internet and software applications related to commerce online. On the other hand e-commerce requires the so-called readiness mail (E-Readiness) any ready community desire to use and practice of commerce via the Internet.

And the incidence of e-readiness of a society through the development of the quality of the educational systems and expand opportunities for community members to make use of it to become a society with knowledge of technology culture, as well as to provide opportunities for institutions and educational institutions and schools to use information and communication technology, and adapting curriculum with technical knowledge.

The Characteristics of E-commerce (Almutalqha, 2008)

Can identify six main characteristics as follows:

1. The Disappearance Paper Documents in Commercial Transactions

Electronic transactions characterized that there are no paper documents reciprocal in transactions, since all of the correspondence between the parties to transactions conducted electronically without the use of any papers, which is consistent with the purpose of e-commerce is the creation of community transactions paperless, , which raises the issue of electronic evidence and its impact as an obstacle to growth of E-commerce.

2. Inability to Identify Contractors

The Internet provides business sector manage transactions efficiently from anywhere in the world, so that the center of company information can be found in any place without affecting the performance, but may for this separation spatial between the parties of electronic transactions did not know all the information core from each other as in traditional commercial transactions, where one of them not know the financial position and whether it has reached the age of maturity or minus eligibility.

3. Products Delivered Electronically

Internet allowed the possibility of delivery of some products electronically, such as computer programs, musical recordings, videos, books, papers and reports online, as well as some services such as consulting medical or engineering, which creates a challenge for the authorities where there is not yet agreed mechanisms for digital products subject to customs or taxes, as vendors that can be used to evade the payment of customs duties and taxes by not recording these transactions in the books of the official accounting.

4. Absence of Direct Relationship between the Contracting Parties

Spin bargaining and negotiations between contract parties in the contract to agree on details of the contract to be concluded between them, may require the contract one session or several sessions until agreement on the terms and details of the contract, but in the decades of e-commerce do not have a council held in the traditional sense, the seller may be in place and the buyer had put away the thousands of miles away, has a different time schedule as well as between buyer and seller place.

The human factor May miss completely, computers based correspondence between them is what is known as contracting agent E, which prompted some to suggest that e-commerce have a negative impact on social relations between individuals as a result of the absence of intimate relationships between contractors, where everyone can get the essential needs of food, clothing and other through the Internet and even without leaving home.

5. The Presence of the Electronic Mediator

The electronic mediator between contract parties is a computer and related network of international contacts that you move the expression electronically for each of the contracting parties at the same moment, in spite of separated spatially, usually the e-mail reached at the same moment to the other

party, unless there has been a malfunction in the network or the collapse of it may not get the message or reach false or illegible, and may arise in the responsibility of Internet service provider for non-arrival of the message or it arrives late or arrive in time, but there by mistake or misrepresentation.

6. Speed in the Completion of Business Transactions

E-commerce effectively Contribute in the completion of commercial transactions between the parties speedy as business transactions without the need to move the parties and having met in a particular place and in the provision of time and effort and money.

7. Collective Interaction between Several Parties

Collective interaction that is, one of transaction parties can send an email message to an unlimited number of recipients at the same time and without the need to re-send it every time in this area provide Internet Unlimited Potential for interaction of collective individual and group, something that is unprecedented in any precedent interactive tool.

Field Study

Characteristics of Study Sample

Table (1) shows the auditor accountants characteristics, the majority of them have bachelor with (92,5 %), also this major is accounting with (88.75%) , the experience of study sample is very good , (68.75%) of sample experience between 6 year and more and in average 11 year.

Table 1: Sample distribution according to Demographic characteristics

		No.	Percentage
Education level	Secondary school	-	
	diploma	-	
	Bachelor	74	92.5%
	High studies	6	7.5%
Specialization	Accounting	71	88.75
	Economy	4	5
	Business	4	5
	Other	1	1.25
Experiences	Less than 5 year	25	31.25
	6-11	15	18.75
	11-15	25	31.25
	More than 15	15	18.75

Study Results

The first field: the impact of E-commerce on the planning of the audit: To measure the degree of E-commerce planning on the audit process, has been extracted means and standard deviations of the respondents answers to the paragraphs of this area, with consider the mean from (1-2.33) is low, means between (2.34-3.67) medium, and the means over (3.67) a high degree. The following table shows these results:

Table 2: Means and Std of E-commerce on planning audit process

No.	Field Paragraph	Means	Std.	Degree
1	E-commerce leads to increase available time of auditor and required implementation	2.42	0.86	low
2	E-commerce leads to increase number of auditor and required assistants to implement audit process	4.4	0.82	high

Table 2: Means and Std of E-commerce on planning audit process - continuous

3	E-commerce leads to increase available required rehabilitation in auditors	4.23	0.95	high
4	E-commerce leads to necessity of planning documentation such as in planning stage or through implementation	4.19	.94	high
5	E-commerce leads to increase cost that auditor paid and salary received	4.12	0.81	high
Total degree		3.87	0.72	high

Table No. (2) showed that the impact of E-commerce more than what it would be to "increase the number of auditors and assistants needed for the completion of the audit process," which got the highest mean (4.40), which more than (3.67), which indicates that the degree of presence is high. We note through the above table that all items have been high with the exception of the first paragraph, which states that E-commerce will lead to increase the time available to the auditor and the required implementation, this is a normal situation because of the complexity of e-business processes and thereby increase the requirements for an audit of this operations.

The second field: the impact on the implementation of the audit process: The following table shows these results:

Table 3: Means and Std of E-commerce on implementation audit process

No.	Field paragraph	Means	Std.	Degree
1	E-commerce leads to increase control systems tests	4.04	0.98	High
2	E-commerce leads to increase essential procedures	4.00	0.75	High
3	E-commerce leads to increase analytical procedures	3.85	0.83	High
4	E-commerce leads to increase design accountants tests	3.81	1.06	High
Total degree		3.925	0.7	High

Table No. (3) Show that "E-commerce will lead to increase control systems tests, where it obtained the highest mean (4.04), which is higher than (3.67), which indicates that the degree of impact is high, and notes from the table that all paragraphs got a high score.

The third field: the impact on neutral opinion of technical auditor: To know the reasons that prevent the detection of fraud and errors by the Audit Office, has been extracted means and standard deviations of the respondents answers to the paragraphs of this field, and the following table shows these results:

Table 4: Means and Std of E-commerce on auditor report

No.	Field paragraph	Means	Std.	Degree
1	E-commerce process leads to change in report form of accounting auditor	2.04	0.87	Low
2	E-commerce process leads to change in report content of accounting auditor	1.69	0.93	Low
3	E-commerce process leads to change in basic components of accounting auditor	1.69	1.12	Low
4	E-commerce process leads to change in report elements of accounting auditor	1.65	1.13	Low
5	E-commerce process leads to change in opinion types of accounting auditor	1.58	1.06	Low
Total degree		1.73	0.67	low

Table number (4) show that there isn't impact of E-commerce on the auditor's report where all the paragraphs had mead less 2.33.

Hypothesis Testing

For the selection of hypotheses, the researcher will be accepted or rejected, the base the following resolution:

Accept the null Hypothesis (Ho), if the value of (T) computed less than the T tabulated, and we reject the null Hypothesis (Ho) if the value of T computed larger than T tabulated.

First hypothesis: There isn't statistical significance of E-commerce on audit planning process.

t-computed	t-tabulated	t-sig	Null hypothesis Ho result	mean
24.17	1.96	0.00	Refuse	4.0544

One Sample T-test have been using and according to the results in the previous table that the value of T calculated (24.17) more than the value of tabulated and on the basis of a decision, we refuse the null hypothesis (Ho) This means that there is impact of E-commerce on audit planning process.

Second hypothesis: There isn't statistical significance of E-commerce on audit implementing process.

t-computed	t-tabulated	t-sig	Null hypothesis Ho result	mean
12.792	1.96	0.00	refuse	3.5895

One Sample T-test have been using and according to the results in the previous table that the value of T calculated (12.792) more than the value of tabulated and on the basis of a decision, we refuse the null hypothesis (Ho) This means that there is impact of E-commerce on audit implementing process.

Third hypothesis: There isn't statistical significance of E-commerce on the auditor's report.

t-computed	t-tabulated	t-sig	Null hypothesis Ho result	mean
1.5157	1.96	0.00	refuse	3.545

One Sample T-test have been using and according to the results in the previous table that the value of T calculated (1.5157) lower than the value of tabulated and on the basis of a decision, we accept the null hypothesis (Ho) This means that there isn't impact of E-commerce on the auditor's report.

Conclusions

The main findings of this study can be summarized as follows:

1. The study sample recognized that the majority of study hold a bachelor's degree (92.5%) and major in Accounting (88.75%) and enjoyed this sample experience a good one about ten years old, which confirms the sample being subject to the purposes of achieving the objectives of this study.
2. There is impact of E-commerce on the planning audit process, according to researcher view that this result is logical based on that activities of electronic are new pattern, and this requires non-traditional plan as well as the complexity of the processes and this requires the use of a greater number of auditor in addition to the rehabilitation more of auditors.
3. There is impact of E-commerce on the implementation audit process, which these operations are not unusual, therefore need wide effort in audit process and to obtain as much evidence as possible to confirm these operations.
4. There isn't impact of E-commerce on the auditor's report where the criteria for the preparation of the report are govern the auditor's report and any modification in the standards would entail an amendment in the auditor's report.

Recommendations

At the end of this study, the researcher recommends the following: -

1. The necessity to teach auditors e E-commerce and its principles and its requirements, so that auditors can deal with this type of activities efficiently and effectively.

2. Increasing the scientific and practical training and technological rehabilitation to auditors, that will positively reflect on the process of auditing e-commerce processes.
3. Holding specialized courses in audits of E-commerce by the legal Jordanians Association Accountants.
4. Advise auditors about risks E-commerce and how to deal with during audit process.

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