#### The Commitment of Saudi Commercial Banks With the Requirements of the Internal Control Over E-Commerce Activities (From External Auditor Perspective)

Dr Mohamed Almoutaz Almojtaba Ibrahim<sup>1</sup>, Dr Neimat Mohamed Saeed Bushara<sup>2</sup>

 Department of Accounting and Auditing University, Taif - Saudi Arabia University, Nileen –Sudan
 Department of Marketing University, Taif - Saudi Arabia University, Omdurman Islamic –Sudan almoutazanab@yahoo.com

Abstract: This study aims to inspect the Commitment of internal audit units in the Saudi Commercial Banks with the control requirements on e-commerce activities, including administrative and legal requirements and the requirements of security, protection and technological requirements. Researchers have adopted on specialized literature review pertaining to accounting and e-business to formulate the conceptual framework. The data were collected through a questionnaire designed for this purpose and distributed to external audit offices to review Saudi commercial banks. The researchers distributed 50 copies; however there were 45 copies received and valid for analysis. Researchers have found a statistically significant relationship between internal control requirements in terms of administrative and technological requirements and the requirements of security, protection, and compliance with control over electronic commerce activities. Moreover, legislative and legal requirements for e-commerce activities in the Saudi commercial banks are still inadequate and there is no obligation to those requirements where you need those laws to keep pace with rapid developments in the area of electronic business development. In the light of the conclusions of the study, the researchers recommended that Saudi banks to develop regulatory systems to keep pace with the rapid developments in information technology and miscellaneous uses in banking industry, legal, structural and technical requirements of security and protection for electronic commerce activities. [Mohamed Almoutaz Almojtaba Ibrahim, Neimat Mohamed Saeed Bushara. The Commitment of Saudi Commercial Banks With the Requirements of the Internal Control Over E-Commerce Activities (From Auditor Perspective). Academia 2013:5(3):18-271 (ISSN 1553-992X). External Arena http://www.sciencepub.net/academia. 3

**Key words**: Internal control requirements, E-commerce, Legislative requirements control, The requirements of protection and security control, Technological requirements control, Administrative requirements control.

## 1. Introduction

The spread of electronic commerce and its practice by enterprises and entrepreneurs impose a set of challenges to internal and external audits in a similar way. Especially when the business risks resulting from exercise were taking into account as well as to strengthen confidence in the systems and methods, websites, Particularly since the belief in the idea of security of websites devoted to the exchange of information related to e-commerce is still surrounded by uncertainty and fear of inadequate security precautions designed to protect data across the Web, where it often may not match the internal control systems and security procedures followed in these facilities and developments in the area of electronic commerce. This Make auditors face significant challenges relating to development audit procedures when dealing with these changes, to allay these fears, (International Federation Of Accountants) issued statement No.9 (1013), on the impact of electronic commerce on the audit of the financial statements, which focused on the level of scientific knowledge to the references, and know-how, and risks of the customer, internal control and security considerations.

#### **1.1 The problem of the study:**

This study attempted to measure the compatibility of internal control systems currently applied in Saudi banks with internal control requirements on e-commerce activities from the viewpoint of the external auditor. It aims to answer the following questions (from the viewpoint of the external auditor):

- 1. To What extent do SCB be obliged to the legislative requirements for the control of electronic commerce activities?
- 2. To What extent do SCB be obliged to protection and security requirements for the control of electronic commerce activities?
- 3. What is extent of the obligation of SCB to the technological requirements for the control of electronic commerce activities?
- 4. What is extent of the obligation of SCB to the administrative requirements for the control of e- commerce activities?

## **1.2** Objectives of the study:

The aim of this study is to review the internal control requirements on e-commerce activities including: (legislative requirements and the requirements of the protection, security and technological requirements and administrative requirements) and measuring the commitment of Saudi commercial banks.

# **1.3 The significance of the study:**

This study is thought to be significant due to the following:

- 1. Description of the basic requirements for internal control over e-commerce activities and commitment of Saudi commercial banks from the viewpoint of the external auditor.
- 2. Description of the role of the external auditor in the control process on the work of the internal auditor regarding the electronic activities within commercial banks to ensure neutrality and independence.
- 3. Emphasizing the need for all control requirements for internal references to e-commerce activities such as requirements for protection and security and legislative requirements, technological and administrative requirements.

# **1.4 Hypotheses of the study:**

This study seeks to test the following hypotheses:

- 1. SCBs do not comply with the legislative requirements for the control of ecommerce activities.
- 2. SCBs do not comply with the requirements of protection and security for ecommerce activities control.
- 3. SCBs do not comply with the technological requirements for controlling the ecommerce activities.
- 4. SCBs do not comply with the administrative requirements to control over ecommerce activities.

## 2. Literature Review "theoretical framework":

Due to the continuing evolution in the concept of business and internal control concepts, many terms have emerged that must be completely understood and discriminated because it is associated with a research theme. In this regard the researchers provide the following procedural definitions of concepts:

 E-business: This concept was first introduced by IBM in 1977 to distinguish between e-business and e-commerce activities. IBM recognized e-business as an integrated and flexible access for distributing business value through distinctive link systems operations conducted through core business activities in a simplified and flexible using Internet technology (Amour, Daniel 2000). The concept of e-business using online techniques work and networks to develop existing business activities or to create a new default business activities (2000 Greenstein and Marilyn Fein man).

- E-commerce :The concept of ecommerce ad defined by Information Systems Auditing & Control Association (ISACA) indicate any trade done electronically between organization and clients, suppliers or common people who use internet service for this purpose )"(B to C) E-commerce Reviews 2003.
- 3. Internal control: A series of methods, procedures adopted by administration to exploit the supplies of banks adequately to protect against misuse, assuring accuracy and integrity of accounting entries. It includes four requirements — (the requirements of protection legislative and security. requirements, technological requirements, and administrative requirements). The international statement auditing ISA No. 1008 in paragraph (5) said: "internal control based on computer processing that help to achieve the overall objectives of internal control, both on manual procedures or procedures designed software and its impact on the environment of electronic information systems in the Organization (General controls) affect certain control on accounting or applications (application control). The above means that controls is divided into three main types: General controls, applied controls, end user controls (Mahmoud Anbar 2003). The study released by the Committee of the information technology Information of International Federation of Accountants Committee(IFAC) in February 2002 entitled E-Business and the Accountant indicating risks information technology environment of include:
  - a. Infrastructure Risk and inadequate procedures pertaining to security of information technology infrastructure.
  - b. Inadequate security procedures to prevent natural illegal access to sources of information.
  - c. Risks of inadequate information technology applications and processing controls input and output designed on applications of information technology), IFAC ITC, 2002).
  - 4. Electronic Data Exchange: It is the process of transferring data to and from the information system of electronic methods using the technology linkage between various electronic units.
  - 5. Internet: a global information network associated with the use of computers on a broad level, where the user is provided by a

great deal of information on all topics and fields.

- 6. Encryption: the process of encoding data in order to prevent people from looking at it without authority by using many complex codes that are hard to decode only through special programs.
- 7. Access to the network: a privacy level enjoyed by the user when accessing private data network.

# 2.1 Internal control requirements on e-commerce activities

# 2.1.1 First: security and protection requirements:

Basel Committee approved a set of requirements for security control electronic banking (Basel Committee on Bank Supervision):

- 1. Banks should take appropriate measures to verify the identity of customers who provided them with services online and the character of their authorization.
- 2. Banks should use methods of verification of the transactions and to promote (Non-Repudiation) and to determine accountability for electronic banking transactions.
- 3. Banks should ensure the availability of appropriate controls for authorization of access to electronic banking systems and databases and applications.
- 4. Banks should ensure the availability of appropriate actions to protect the credibility of data for electronic banking records and information.
- 5. Banks should ensure a clear validation of paths for all electronic banking transactions.
- 6. Banks should take appropriate measures to protect the confidentiality of information on electronic processes and these procedures must be consistent with the degree of sensitivity of the information to be transferred or stored in databases.

# 2.1.2 Secondly: technical and technological requirements

It is a set of software and hardware equipment and Internet sites, electronic business banking. The technological developments have increased the need to take advantage of these rapid developments of intense competition between banks, which kept pace with these developments to achieve competitive advantage and employing this technology and technical progress in favor of customer service. Therefore technical and technological requirements should be studied in terms of the availability of adequate infrastructure for the application of e-commerce activities at banks. It must apply many controlling measures on technology used in the work to ensure continuity of work optimally to minimize the possibility of failure or failures by conducting ongoing preventive maintenance operations (Al-' ammuri 2006).

# 2.1.3 Thirdly: legal and legislative requirements

Basel Committee approved a set of requirements for legal and reputation risks of electronic banking (Basel Committee on Bank Supervision). Some of these are:

- 1. Banks should provide appropriate information in their websites to allow potential clients to reach informed conclusions about the identity and legal status of the Bank before entering transactions conducted through electronic banking.
- 2. Banks should adopt appropriate measures to ensure fulfillment of the requirements of confidentiality of customer by country where bank products and services based on electronic banking.
- 3. Banks should effective authority and continuity of activity and contingency planning processes to help ensure the availability of systems and services through electronic processes.
- 4. Banks are required to prepare appropriate plans include responding to accidents and limit (control) and reduce the problems arising from unforeseen events (including external and internal attack types) that may hamper the supply of systems and services based on electronic banking.

# 2.1.4 Fourth: administrative requirements

It is represented in good planning and appropriate regulation, particularly the use of electronic commerce in business that eliminates many of the traditional functions of the separation of duties. Administrative requirements include description of Organizational structure and characterization of powers and responsibilities. The requirements define the action and separation of opposing positions in management of information systems and the formulation of supervision mechanism for board of directors and senior management on electronic banking (Basel Committee on Bank Supervision).

## **3**.Previous studies

1. The study by (Zhao Ning & others, 2004), focused on audit in ecommerce period where researchers confirmed that the audit has developed in many financial firms, especially after the lack of audit revenues period. As the result of this situation, the American Institute of certified public accountants (AICPA) had select continuing review process as a service needed for the development of audit companies. This has a positive impact and assists professional to move towards a positive trend of defining a general framework for the concept of ongoing external audit (Ning Zhao 2004).

- 2. (Nearon, 2000), dealt with the journey of Internet evolution's till it has been used in the area of ecommerce, and the size of this trade and great increase in media attention. But the review lists of e-commerce and the application of the General auditing standards (GAAS), face substantial challenges for accountants. Although he doubts the degree of application review criteria for planning, audit manual, and adequate professional training, independence and internal control considering they don't apply equally to electronic commerce under transfer data electronically, as applied in conventional audit. Invited researcher to develop these standards to suit the information technology, because the services provided by the assurances needed for rehabilitation of audited and offices mav affect the independence of reviewers (Bruce H. Nearon 2000). The researcher calls to develop these standards to suit the information technology. because the services provided by the audit offices needed for improvements and may affect the independence of reviewers (Bruce H. Nearon 2000).
- 3. Tucker, (2000) pointed to the impact of information technology on internal control and the methods used by the audit to examine of the internal control system and control of information technology is one of the important factors for review. It is also noted that the reviewers should use highly skilled persons who have absorption capacity when preparing reports (Tucker, George 2000).
- The study by (Lee & Mayer & Chen, 2001) has 4. focused on the impact of security control techniques in ecommerce, by studying the techniques of Authentication, encryption, and Electronic Payment Systems the Department of internal Security and Non-Electronic Payment Options. The study was conducted through a survey of students at three universities in different states in the United States. the study found that students who understand security techniques of business, but they are unfamiliar with electronic payment systems, and they Prefer to enter credit card information online when decide to purchase a

product through the Internet (Lee 2001 & Mayer & Chen).

- The (Jabali, 2002), studied the recent trends in 5. audit under technological variables in accounting information systems and indicate whether these trends positive or negative in the light of recent developments in information technology variables and what the size or orientation of the necessary developments and target in the audit, and the composition and qualify references to keep abreast of developments and changes in information technology systems, focusing in his study on the improvement of auditor. The study found that there is a real desire in development. The reviewers desire to develop their skills and abilities to cope with technological developments. Although there is still a considerable gap need concerted efforts until the upgrading scientific level profession. There are many topics that need further qualification and practice of external and internal auditors to keep abreast of developments, notably the electronic commerce. The researcher recommended that accounting curricula development, including adequate reference to different methods of information the technology and e-commerce systems, which will represent reality. Moreover, further theory and practice researches associated with information technology are recommended too to highlight the implications for audit (Jabali Mustafa, 2002).
- In his study, (kahosh, 2002), reviewed the 6. issues and legal requirements for Internet banking, and challenges facing this kind of work that requires the transfer of data by electronic means, and efforts at the international and domestic levels to overcome those obstacles. The research have concluded that electronic trading is growing through Internet invasion of all areas of daily life for individuals and institutions, as there is international attention on privacy data transmission by electronic means. there are countries like the European Union regard privacy data as the basic requirements of electronic commerce, dealing with external parties. There is no Arab country has laws on confidentiality and data privacy (especially data transmitted by electronic means). The research recommended that work should be as quickly as possible to establish National laws to assure confidentiality and privacy of data transmitted by electronic means (Nader kahosh 2002).

# 4. Data Analysis and Hypothesis Testing:

# 4.1 Methodology of the study:

# 4.1.1 Data sources:

The researchers adopted the literature review in the area of accounting and e-business for the formulation of conceptual framework. The Preliminary data were collected for the study through questionnaire prepared for this purpose to cover and answer the questions posed in the problem and hypotheses.

## **4.1.2** Population and the sample of the study:

The study population includes the external audit offices on commercial banks in Saudi Arabia where 100 questionnaires were distributed. The researcher Retrieved 96 copies and only 90 copies are valid and can be analyzed. Therefore the percentage of valid copies is 90%.

## 4.1.3 Statistical Methods:

The appropriate statistical analysis of the data has been used in this study. The substantive goals within the framework of this study have been reached as well. The level of significance was (0.05) of the corresponding trust level (95%). To interpret the results of tests conducted by researchers, the following are the most important statistical methods that were used:

# 4.1.4 Alpha Reliability Analysis:

Cronbach's Alpha Coefficient was used to measure the degree of reliability of the study sample to answers questions of the questionnaire. This coefficient depends on measure of the consistency of questionnaire and its ability to provide compatible results. Alpha can be interpreted as the correlation coefficient between the answers, thus alpha values can range between 0 and 1 and alpha value statistically acceptable is at least 60% of the results.

# 4.1.5 Descriptive statistics:

Some statistical methods that related to measurements of centralization and dispersion have been used. These methods include mean, Standard Deviation and The One-Way Analysis of variance. **4.2 General information:** 

 Table No. (1) Demographic data of the study sample

| CHARACTERISTICS                                   | CATEGORIES                | PERCENTAGE |
|---|---------------------------|------------|
| Bank Annual Age                                   | less than 10 years        | 16%        |
|   | 10-20 years               | 35%        |
|   | 20-30 years               | 27%        |
|   | Greater than 30 years old | 22%        |
| Number of years of application of e-commerce      | less than 3 years         | 18%        |
|   | 4-6 years                 | 22%        |
|   | 7-9 years 22%             | 31%        |
|   | Greater than 9 years      | 29%        |
| Average years of experience of workers in the     | less than 5 years         | 9%         |
| Internal Audit Department in the bank             | 5-9 years                 | 53%        |
|   | Greater than 9 years      | 38%        |
| The efficiency of workers in the Internal Audit   | Very Poor                 | 9%         |
| Department  | Poor                      | 9%         |
|   | Average                   | 31%        |
|   | Strong                    | 35%        |
|   | Very strong               | 16%        |
| The independence of the internal auditor          | Very Poor                 | 9%         |
|   | Poor                      | 20%        |
|   | Average                   | 42%        |
|   | Strong                    | 13%        |
|   | Very strong               | 16%        |
| The degree of familiarity with auditing standards | excellent                 | 7%         |
| adopted internationally                           | Very Good                 | 40%        |
|   | Average                   | 29%        |
|   | Good                      | 20%        |
|   | Poor                      | 4%         |

## 4.3 Preliminary data for the study questionnaire:

Preliminary data have been divided into several factors, some of these factors are linked to legal and legislative requirements, and each linked to the requirements of protection and security. And some are linked to the technological requirements and others associated with the administrative requirements. Moreover, other factors that may the extent of commitment to control e-commerce activities. The researchers have developed several questions on each of the factors. The above-mentioned results are as follows:

# 4.3.1 The factors of legislative and legal requirements:

Table (2) summarizes the results taken from the views of respondents. Each worker is indicated with arithmetic mean and standard deviation. The researchers study the degree of influence of special factors associated with all requirements, whether legal, legislative or protection and security. Also the researchers referred to a very great influence with the number 1 and the degree of influence of great with number 2 and degree of influence medium with number 3 and the degree of poor influence with number 4 and the degree of influence is very poor with number 5.

#### Table (2): the factors of legislative and legal requirements

| STATEMENTS   | MEAN | STANDARD<br>DEVIATION |
|--|------|-----------------------|
| The Bank provides appropriate information in its website to allow potential          | 2.20 | 1.14                  |
| customers to reach the identity of the bank and its legal status.                    |      |                       |
| The bank allows the customers to conduct financial transactions through electronic   | 2.38 | 1.15                  |
| banking to provide adequate safeguards for them.                                     |      |                       |
| The bank shall maintain the confidentiality of customer data from the legal aspects. | 2.27 | 1.03                  |
| The Bank is committed to legislation and regulations necessary to implement          | 2.24 | 1.03                  |
| e-business within the scope of Saudi law.  |      |                       |
| The Bank is committed to legislation and international laws concerning               | 2.36 | .98                   |
| e-commerce applications in banks.  |      |                       |
| Bank copes with the rapid developments in legislation on e-commerce                  | 2.67 | .90                   |
| The internal auditor is familiar with the basic criteria in determining the          | 2.71 | .99                   |
| Legislative and legal actions with regard to electronic banking.                     |      |                       |
| The bank provides the customer with clear legal texts and determines the nature of   | 2.78 | .85                   |
| the legislation of e-business.   |      |                       |
| The appropriateness of current legislation and laws for the control of e-business.   | 2.67 | 1.09                  |
| Bank is committed to perpetuating the records of electronic transactions             | 2.73 | 1.05                  |
| to identify clear Tracks for auditing used to settle conflicts.                      |      |                       |
| Bank is committed not to use customer information for purposes beyond what is        | 2.62 | 1.05                  |
| allowed Specifically for the purposes of or exceed what the customer has             |      |                       |
| authorized.  |      |                       |
| General average  | 2.49 |                       |

4.3.2 The factors of technological requirements:

Table (3) shows the same components as the previous tables which can be developed for descriptive decisions related to mean and Standard deviation. for each of the factors mentioned in the same table.

| FACTORS   | MEAN | STANDARD DEVIATION |
|---|------|--------------------|
| The bank infrastructure is appropriate for the practicing the         | 2.38 | 1.05               |
| activities of ecommerce.  |      |                    |
| The Bank uses sophisticated systems commensurate with the             | 2.31 | 1.00               |
| activities of e-commerce  |      |                    |
| The banking system provides   | 2.44 | 1.08               |
| high-speed access to the applications of electronic transactions.     |      |                    |
| The internal auditor is familiar with the nature of the work in       | 2.42 | 1.12               |
| electronic applications and heir trendiness in the bank.              |      |                    |
| Bank is committed to follow developments in hardware, software        | 2.58 | 1.16               |
| and techniques for e-commerce work                                    |      |                    |
| The current available software in the conduct of the audit process to | 2.58 | 1.10               |
| periodically and continuously.  |      |                    |
| General average   | 2.45 |                    |

## 4.4 The administrative requirements factors:

Table (4) shows the same components as the previous tables which can be developed for descriptive decisions related to mean and Standard deviation for each of the factors mentioned in the same table.

# Table (4): The administrative requirements factors

| Factors  | Mean | Standard Deviation |
|--|------|--------------------|
| Senior management h is committed to designing a system of administrative     | 2.53 | 1.04               |
| supervision with concerning e-commerce activities.                           |      |                    |
| Senior management is committed to the design and determines the policies and | 2.60 | .89                |
| methods for risk management control pertaining to e-commerce activities.     |      |                    |
| Senior management is committed to providing strategic plans for e-commerce   | 2.58 | .97                |
| operations.  |      |                    |
| The Bank has the experience and adequate managerial competencies to          | 2.76 | 1.15               |
| practice new electronic business or adopt new techniques.                    |      |                    |
| Senior management provides sufficient support for the development and        | 2.58 | 1.14               |
| utilization of modern techniques.  |      |                    |
| senior management Have high dynamic to oversee electronic commerce           | 2.62 | 1.05               |
| operations and rapid intervention to address any emergency problems.         |      |                    |
| Senior management is committed in audits of the essential aspects of Bank    | 2.44 | .94                |
| security control operations and accreditation                                |      |                    |
| Senior management is committed to ensure the adequacy of security controls   | 2.24 | .96                |
| and protection for electronic commerce.                                      |      |                    |
| senior management Provide comprehensive and continuous formulation           | 2.56 | .94                |
| process to support the adoption of new technologies in the banking industry. |      |                    |
| Senior management is committed to provide adequate autonomy of action of     | 2.38 | .96                |
| internal auditor regarding auditing  |      |                    |
| e-commerce activities.   |      |                    |
| Senior management is committed to the training and qualification of human    | 2.64 | 1.19               |
| resources to keep pace with rapid technical                                  |      |                    |
| developments regarding the work of the Bank electronically.                  |      |                    |
| General average  |      | 2.54               |

## 4.5 Inferential Statistic

This part of the research demonstrates test and analyze the hypotheses By reviewing the factors affecting commitment to e-commerce activities control and track the views of respondents, these factors have impact may have a direct relationship to the phenomenon. This impact is indicated by the view of the sample of the study. The research displayed the impact of various factors on phenomenon to control e-commerce activities. The inferential type of statistics is used to test hypotheses as follows:

## 4.5.1 The first hypothesis:

This hypothesis formed by statistical zero as follows:

Saudi commercial banks SCBs do not comply with the legislative requirements for the control of ecommerce activities.

Table (5) indicates using regression analysis to analyze the data associated with the commitment to control e-commerce activities with the dependent variable and the factors associated with legislative requirements as an independent agent to test the extent of the impact of the factors associated with legislative requirements to comply with control over electronic commerce activities. The value of testing is (2.454) and error amount 0.125. This explains the principle accept zero hypothesis and alternative hypothesis is rejected because the error amount greater than 0.05 level of significance (alpha value standard). This shows lack of commitment of Saudi commercial banks legislative requirements for the control of electronic commerce activities.

| sum    | Mean  | Calculated<br>F | sig  | Result           |
|--------|-------|-----------------|------|------------------|
| 1.869  | 1.869 | 2.454           | .125 | No<br>difference |
| 2.742  | .761  | -               | -    | -                |
| 34.611 | -     | -               | -    | -                |

Table (5) testing the first hypothesis

## 4.5.2 The second hypothesis

SCBs do not comply with the requirements of protection and security for ecommerce activities control.

The regression analysis is used in table number (6) in which the data associated with the commitment to control e-commerce activities with the dependent variable and the factors associated with security and protection requirements as an independent agent. They used to test the extent of the impact of the factors associated with protection and security requirements to comply with control over electronic commerce activities. The value of testing was (5,271) and error amount was (0.035). This explains the zero hypotheses

are refused to accept the alternative hypothesis because the error amount less than the level of significance 0.05 (alpha value standard). This demonstrates the commitment of Saudi commercial banks with protection and security requirements for the control of electronic commerce activities.

| Table (6) to | esting the | second hy | pothesis |
|--------------|------------|-----------|----------|
|--------------|------------|-----------|----------|

| Sum    | Mean  | Calculated<br>F | sig   | Result           |
|--------|-------|-----------------|-------|------------------|
| 3.632  | 3.632 | 4.763           | 0.035 | No<br>difference |
| 32.791 | 0.763 | -               | -     | -                |
| 36.423 | -     | -               | -     | -                |

## 4.5.3 The third hypothesis:

SCBs do not comply with the technological requirements for controlling the ecommerce activities.

With reviewing the table (7) regression analysis was used and the data associated with the commitment to control e-commerce activities was analyzed. The dependent variable and the factors associated with technological requirements were regarded as an independent agent to test the extent of the impact of the factors associated with technological requirements to comply with control over electronic commerce activities. The value of testing was (4.116) and error amount was 0.049. This explains the zero hypotheses that refused to accept the alternative hypothesis because the error amount less than level of significance (0.05) (alpha value standard). This results Demonstrates the commitment of Saudi commercial banks with the technological requirements for controlling the electronic commerce activities.

| Sum    | Mean  | Calculated<br>F | sig   | Result           |
|--------|-------|-----------------|-------|------------------|
| 3.190  | 3.190 | 4.116           | 0.049 | No<br>difference |
| 33.324 | 0.775 | -               | -     | -                |
| 36.514 | -     | -               | -     | -                |

Table (7) testing the third hypothesis

## 4.5.4 The fourth hypothesis:

SCBs do not comply with the administrative requirements to control over ecommerce activities.

With review the table (8) regression analysis was used and the data associated with the commitment to control e-commerce activities was analyzed. The dependent variable and the factors associated with technological requirements were regarded as an independent agent to test the extent of the impact of the factors associated with technological requirements to comply with control over electronic commerce activities. The value of testing was (4.349) and error amount was 0.043. This explains hypothesis is rejected and the alternative one accepted of zero because the error amount less than level of significance 0.05 (alpha value standard). this Demonstrates the commitment of Saudi commercial banks with the administrative requirements for control over electronic commerce activities.

| Sum    | Mean  | Calculated<br>F | sig   | Result           |
|--------|-------|-----------------|-------|------------------|
| 3.312  | 3.312 | 4.349           | 0.043 | No<br>difference |
| 32.750 | 0.762 | -               | -     | -                |
| 36.062 | -     | -               | -     | -                |

 Table (8) testing the third hypothesis

## 5. Findings:

In the light of the results of the statistical analysis of data for the study and based on the literature review and previous studies, researchers have reached the following findings:

- 1. Experience in internal audit section and competence have a significant impact on the control and reviewing activities on electronic processes and efficiency of the internal audit department personnel is strong enough to qualify them to achieve the required jobs.
- 2. The independence level of the internal auditor from the viewpoint of external auditor is average and below due to the influence of senior management on objectivity and independence. Therefore, an external audit process is needed for neutral opinion and objectivity of financial statements because these are the concern of Bank shareholders and customers and decision makers at the senior management level.
- 3. There is Suitable knowledge and interest to review global criteria used by auditors in commercial banks.
- 4. The commitments of banks with specific factors of legal and legislative requirements are inadequate due to the lack of keeping pace with legislation of rapid growth in e-business. There is no e-commerce so far of a comprehensive international legal framework and efficient infrastructure to support such framework.
- 5. The banks are significantly committed to the specific factors of protection and security. As a result these banks desire to provide maximum protection and security to achieve competitive advantages and prevent of the risks posed by e-commerce-related activities such as virus attacks and fraud information and hackers and unauthorized access.
- 6. The banks are significantly committed to technological requirements to keep pace with

any new technology in terms of hardware and software. That helps the banks c to provide high quality electronic services continually and ensure the obtaining of rapid updates in that area.

7. The commitment of banks to administrative requirements for electronic business was average for the inability of some departments to keep abreast with technological development in the field of electronic commerce besides the limitation of administrative policies and procedures related to the control of electronic business.

## 6. Recommendation:

Based on the foregoing findings the study recommends:

- 1. Commercial banks need to keep abreast of legal enactments relating to electronic business, especially domestic legislation and international legislation for competition among banks in the context of globalization and electronic commerce.
- 2. Departments of banks need to focus on policies, regulations and procedures concerning the work kept pace with the rapid development in information technology and the Internet and the need for structural change to keep up with the work the banks of these developments.
- 3. the need for continued attention in providing adequate infrastructure to implement programmes on e-business in terms of providing appropriate equipment and software for modern developments.
- 4. The banks need to keep pace constantly with security and protection that related to the security and confidentiality of electronic business information to protect the rights of customers, employees, shareholders and achieve competitive advantage, given the urgent need in this area.
- 5. Special budget for banks should be allocated to follow technological developments regarding e-business with the need to develop an apparent policy on the introduction of any new technology.
- 6. Continuous training of all workers in banks is needed. Particularly those working in internal audit unit, technologically and technically to keep up with developments in the area of electronic business. This enables the bank to keep abreast of developments relating to the work of the internal auditors and providing an encouraging environment to the so-called electronic audit.

## Acknowledgements:

The Authors would like to thank Taif University KSA for financial support. And grateful to the Department Accounting and Auditing, Nileen University, for support to carry out this work.

## **Corresponding Author:**

Dr Mohamed Almoutaz Almojtaba Ibrahim Department of Accounting and Auditing Taif - Saudi Arabia University, Nileen University Khartoum – Sudan. Telephone: +966565543572- +249915367788 Fax: +966-311-7932629 E-mail: almoutazanab@yahoo.com

## **References:**

- 1. The International Auditing Practice Statement (IAPS), 1013 1. Electronic Commerce: Effect on the Audit of Financial Statements ,March 2002.
- Amour, Daniel, the E-business revolution. Living and working in an Interconnected world, (NJ: Prentice-Hall, PTR Upper Saddle River, 2000). P7.
- 3. Greenstein, Marilyn and Fein man, Todd M ,.3. Risk Management, and control Electronic Commerce Security, )Boston: Irwin McGraw Hill, 2000 .(P.2.
- 4. Information System Audit and Control Association, "IS Auditing 4. guideline Business-to-consumer (B to C) E-commerce Reviews", 1 May 2003, P2. In web www.isaca.org/glossary.htm
- Mahmoud Anbar, "the successful transition of electronic business information magazine, ", no. 93, Syria, Damascus, p. 25-30 (6)6. IFAC, ITC, 2002, P3
- 6. Nong Zhao, tell, "Auditing in E-Commerce Era ," Information Management & 7.

Computer Security ,2004 ;Vol. 12 Issue 5, p389-40012 ,p

- Bruce H.Nearon, "Auditing E.Business,"The CPA Journal ,Vol70. .8. Issue 11, Nov 2000 pp22-24
- 8. Tucker, George, "IT and Audit", Journal of accountancy, 2000, Vol. 192
- Kuo Lane Chen, Huei Lee, And Bradley W.Mayer, "The Impact of Security Control on Business –to-Consumer Electronic Commerce." Human Systems Management ,20,2001 pp139-147.
- Al-Jabali, Mohamed Mustafa Ahmed, "recent trends in technological variables under audit in accounting information systems", Journal of Economics and trade, Ain Shams University, Cairo, first edition, 2002, p. p. 267-336.
- 11. Alfred Nadir kahosh, Internet banking (legal considerations), Conference on "banking operations between theory and practice", Faculty of law in cooperation with the Faculty of Economics and Administrative Sciences, University of Yarmouk, 22-24 December 2002, the Hashemite Kingdom of Jordan.Bank for international Settlement ,Basel Committee on Bank Supervision" 13. Risk management principles for electronic banking ,"pp12-18
- 12. Ahmed Abdullah al-' ammuri), the impact of electronic commerce on auditing-a field study in Yemen, unpublished MPhil, Damascus University, Syria, 2006, p. 100.
- 13. Alfred Nadir kahosh, op. cit., p. 56
- 14. Bank for international Settlement, Basel .Committee on Bank Supervision 16 "management principles for electronic banking", pp18-21
- 15. Bank for international Settlement ,Basel 17. Committee on Bank Supervision" management principles for electronic banking", pp8-12.

1/20/2013