THE ROLE OF CORPORATE GOVERNANCE IN CONTROLLING AC-COUNTING DATA IN THE FIELD OF E-COMMERCE

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─**Abstract**─

This research paper aims to determine the role of Corporate Governance (**CG**) in controlling and protecting the accounting data set (including its published financial statements) in electronic commerce activities. Due to the increased technology, change in which global business is done and the continuous revolution of Information Technology (**IT**), a significant impact on Accounting Information System (**AIS**) is very clear. The internet and e-commerce will only continue to grow if security is enhanced and mutual trust between companies and their customers is existed. Moreover, accountants are facing new challenges in the internet era which will expand their duties. The need for investigating this role is apparent due to the need for finding an effective solution for e-commerce problems which affect many systems such as: accounting, legal, and tax systems. To achieve the objective of this research, exploring the main prior studies in this field will be done in order to make the relationship of e-commerce accompanied with CG practices more understandable.

Key Words: *Electronic commerce (e-commerce), Accounting, Corporate Governance (CG)*

JEL Classification: *L81, M41, G34*

1. INTRODUCTION

   Most companies are using the internet in their daily businesses. The growth of using the internet for commercial purposes cannot be ignored. E-commerce is one of the outcomes of this growth. E-commerce becomes popular as it is easy and provides many benefits, e.g. reducing costs, improving the speed of transactions and allowing reaching customers in a remote place. But like any conventional business, e-commerce has also some inherent risks. One of these risks is the failure of protecting related data and information. Unlike traditional commerce, where policies, procedures and practices have been previously established to protect transactions and company assets, electronic information can be modified or even deleted without detection. CG can act as a tool to overcome or reduce these problems and to secure accounting information from being altered or omitted by any unauthorized party in order to ensure mutual trust between the company and its customers. This research is a review of the literature on the main variables of e-commerce.

1.1. Research problem

  Due to globalization and the increase of e-commerce nowadays, the desire of each company to improve its position compared to its competitors is increasing. In targeting online customers, trust plays a fundamental role in attracting customers and keeping their loyalty. In order to promote trust in e-commerce, users need to make sure that their companies are working for their best interests. Therefore, there should be set of principles and mechanisms that guarantee this trust. Moreover, *Social commerce* is gradually becoming the new face of e-commerce that involves using popular social media channels like Facebook and YouTube to promote the online purchase of products and services (Traver,2009). Accounting system is indispensable system in any organization. Ensuring their reliability and accuracy is very important. E-commerce is rapidly transforming the way accounting functions are performed. Therefore, accounting information which is published over the internet needed to be protected. There is a need for a system that can control and protect the accounting data in e-commerce also, can detect and quickly address problems before turning into crises. Based on the research problem, the research questions can be developed as follows:

- What are the challenges that accountants face in e-commerce?

- Whether CG is used as a tool for controlling e-commerce activities or not?

1.2. Research objectives

This research aims to find out the role of CG in e-commerce and their relationship with accounting. This could be achieved through the following sub-objectives:

- Discussing the concept of e-commerce and CG.

- Exploring the literature review of CG and e-commerce to reach the research gap.

2. HISTORICAL BACKGROUND

The objective of this section is to explore and discuss the main concepts upon which this research paper is developed.

2.1. E-commerce

There are many definitions of e-commerce, e.g. e-commerce can be defined as the process of exchanging goods or services through many electronic networks such as the internet. It also includes the entire online process of developing, marketing, delivering, servicing and paying for products and services.

Origin

 It is difficult to determine exactly when e-commerce began. In the late 1970s, a pharmaceutical firm named Baxter Healthcare initiated a primitive form of Business-To-Business (**B2B**) e-commerce by using a telephone based modem that permitted hospitals to reorder supplies from Baxter. Although e-commerce was a very recent phenomenon of the late 1990s, its history can be divided into three periods as follows:

E-commerce 1995-2000 (Innovation)
Prices would have to be very low to attract customers in this stage. Entrepreneurs expected that extraordinary profits would come, but after several years of losses.
E-commerce 2001-2006 (Consolidation)
 The emphasis here was on business rather than on technology. Brand extension became more important than creating new brands.

E-commerce 2006-Present (Reinvention)

E-commerce entered a third period in 2006 that extends till now and it is expected to continue in the future. It is a period of reinvention involving the extension of internet technologies, and social networks such as Facebook, Twitter and You-Tube. The following table summarizes the types of e-commerce according to (Traver, 2009)

Table 1: Types of e-commerce (Traver, 2009)

Types	Definitions	Examples
Business-to-Consumer (B2C)	The most commonly discussed type of e-commerce in which online business try to reach individual consumers.	Amazon, Global AdMart.
Business-to-Business (B2B)	In which businesses focus on selling to other businesses. It is the largest form of e-commerce.	Foodtrader, Supplier-Centric.
Consumer-to-Consumer (C2C)	Provides a way for consumers to sell to each other, with the help of an online market maker.	E-Bay Inc, Craigslist site, using of social networks like Facebook and YouTube "Handmade accessories and clothes groups".
Peer-to-Peer (P2P)	This technology enables internet users to share files directly without having to go through a central web server by using their personal computers.	BitTorrent software, Napster music file-sharing system.
Mobile Commerce (M-commerce)	Use of wireless digital devices to enable e-transactions. It is commonly used in Japan and Europe, It is expected to grow rapidly in U.S over the next 5 years due to the growth of smart phones.	Wireless mobile devices such as Personal Digital Assistants **(PDAs)** and cell phones.

2.2. Corporate Governance

There are many definitions of CG. But, generally speaking *CG* can be defined as a set of processes, customs, policies, procedures, and laws established by the company to govern and control its activities in order to achieve certain objectives.

Origin

There is no specific date or place to determine when and where CG started since it is a philosophical way of thinking. It had been started in different countries at different times. In France it started after the collapse of the Mississippi Company in 1720. In addition, the Great Depression in 1930 was a critical stage in the evolution of CG in many countries. Many events had increased the need for CG such as the bankruptcies of Enron and WorldCom in 2001, as well as corporate scandals, such as Arthur Andersen. Also, financial crisis in 2008 led to more focus on CG. Organization for Economic Co-operation and Development **(OECD)** had set some guidelines for e-commerce as showed in table 2

Table 2: Summary of OECD (1999) guidelines

Scope	General principles	Implementation	Global co-operation
They are applicable only to B2C e-commerce.	1-Transparent and effective protection. 2-Fair business, advertising, and marketing practices. 3- Full Online disclosures. a-Information about the business and transactions. b-Information About the goods or services. 4- Secure payment. 5-Dispute resolution. 6-Education and awareness.	1-Promote self-regulatory practices. 2-Promote consumers' participation in the development and implementation process. 3-Encourage technology development to protect and empower consumers. 4-Provide systems to handle consumers complaints regarding e-commerce.	1-Facilitate joint initiatives. 2-Make use of existing international networks. 3- Enhance consumer confidence by working hard and adapting the latest technology. 4- Co-operate and work towards developing agreements to solve the disputes due to the misconduct.

3. LITERATURE REVIEW

This section aims to examine and discuss the previous studies that investigated the research variables. The literature review can be divided as follows:

3.1. E-commerce and Accounting

- Ihan and Veyis (2003) argued that accounting systems that were previously performed manually can be performed by using computers. In addition, most companies have started to apply Just-In-Time (**JIT**) production system to have a competitive advantage. The aim of applying JIT production system was to minimize all inventory levels and deliver goods and services to customers in time.

- Hicks (2004) investigated e-commerce and its impact on the accounting profession. She argued that e-commerce were increasing due to the increase of websites and conducting business online. The findings indicated the role of accountants and internal auditors in the new environment also, in enhancing the organization's performance and finally concluded that the increase of e-commerce would happen only if there was a mutual trust presented in proper security and privacy.

- S. Bansal (2006) discussed critical issues related to e-accounting. A questionnaire was distributed over Indian accounting professionals. The findings indicated that e-commerce accounting issues range from those related to measurement and recording to those related to disclosure and reporting. The findings also, showed that website development cost should be considered as capital expenditure, whereas cost of operating a website should be considered as revenue expenditure. The guidelines were inadequate not only for the changing role of accountants in e-commerce, but also in the matter of disclosure.

- Alex Kogan (2009) addressed the future of accounting profession in the internet. The findings indicated that although internet would facilitate accounting practices and enable online auditing, risks would present new challenges to accountants. Disclosure changes both in scope and frequency, deeper financial statements, with drill downs and user based presentation pushed the limits of the current standards and acceptable practices.

- Alsharayri (2011) examined the effect of e-commerce on Accounting Information System (**AIS**) development in Jordan. A questionnaire was

distributed to a number of accountants in different hotels. The findings indicated that accountants in Jordanian hotels had positive attitudes towards information technology, and they were using internet in accounting works. They agreed also that hotels used e-commerce and they got customers orders online.

• Majed Alsharayri (2012) investigated the extent of programs sufficiency that auditors use in e-commerce. A questionnaire was distributed to a sample of external auditors. The study concluded that auditors were facing many challenges in e-commerce. Also, it addressed the importance of ready-made software in the process of auditing e-commerce operations.

Prior studies related to e-commerce and accounting examined the impact of e-commerce on accounting, the changing role of accountants and auditors in the internet era. Despite the challenges faced by them the studies did not provide solutions for accountants and auditors to overcome these challenges to help users in making their decisions.

3.2. E-commerce all over the world

• Elgawady (2005) investigated the impact of e-commerce in Egypt and US. The methodology of the study analyzed the differences between Egypt and US in handling e-commerce activities and examined the statistical results of using the internet in developed and developing countries. The findings indicated that as e-commerce was rapidly growing in US in Egypt the case was completely different.

• Slyke (2005) investigated how customers perceived e-commerce differently in India and US. In order to reach the aim of the study, diffusion of innovation framework to compare consumer attitudes towards e-commerce in US and India had been explored. The findings indicated that growth of e-commerce was increasing in developed countries. But there were some barriers of e-commerce e.g. local conditions and national cultures.

• Elbeltagi (2007) addressed how cultures could affect the use of internet. The study was an exploratory study showed that there was a great potential for e-commerce in Arab world and particularly in Egypt. The results indicated that cultural differences should be considered in the implementation of e-commerce as for example many Egyptians used to buy things on cash rather than using credit or

debit cards. In addition, more governmental initiatives to promote e-commerce in Egypt should be done.

Most previous studies related to e-commerce all over the world concluded that there are many differences among countries in adopting e-commerce due to various factors e.g. culture, trust, network infrastructure, privacy, customer awareness, information efficiency, and governmental initiatives.

3.3. E-commerce and Corporate Governance

- Rong Ruey (2001) argued that establishing control among all e-commerce participants is necessary. For example, online auctioneers must be aware of their customers as many unauthorized persons may cheat them on the trading platform also, may use data for unrelated purposes. It was believable that these difficulties arise from a lack of trust in control mechanisms. The results indicated that better design with appropriate assurance services led to the growth of e-auction industry.

- Dahiyat (2011) explored Jordan Electronic Transactions Law No.85 of 2001 and determined whether this law gave due attention to consumer protection in an online environment. This law was adopted in order to accommodate the challenging aspects of e-commerce. The examination of this law however did not paint a positive picture of the future of e-commerce in Jordan.

- Luis V. Casaló (2011) examined the relationship between trust and consumer commitment in Spain. Specifically, the results showed that consumer trust was influenced by perceived website usability and reputation, by the consumer satisfaction. The study also indicated that consumer trust had a positive effect on consumer commitment.

- Nabizadeh (2012) created a conceptual framework for developing trust in

e-commerce. For this purpose, e-commerce concepts and different mechanisms

for enhancing trust were investigated. The results indicated that successful adoption of e-commerce led to main changes in industry and its competitive space.

- Tapas K. and *et.al* (2012) argued that privacy and trust were the most important factors in e-commerce.They investigated three dimensions of e-commerce: nature of e-commerce, importance of trust and security, and under what mechanisms e-commerce can be secured enough to guarantee customers participation. The study addressed that in spite of the ease of e-commerce there were less participation of people.

The literature review showed that there is a shortage in studies which discussed the CG as a main variable of e-commerce however; the majority discussed some procedures to measure the trust in e-commerce. It was revealed that the greater the customer's trust in e-commerce, the greater his or her participation.

4. SUMMARY AND CONCLUSIONS

The role of CG in improving the performance of traditional companies has been examined over the past years. However, limited studies examined its role in e-commerce companies. It has been discovered that till now there are no appropriate definitive rules and regulations that govern e-commerce in developing countries. In addition, regarding accounting profession, due to the growth of e-commerce, accountants are facing new challenges which will expand their duties and they have to be proactive to overcome these challenges.

It is clear that e-commerce accompanied with effective CG practices can play an important role in handling not only accounting issues but also other issues such as: tax, security, privacy and legal issues. Finally, after analyzing the research problem, its variables and literature review it is clear that manipulation of e-commerce information will remain and cannot be eliminated completely due to new techniques discovered by hackers. Simply, it is a matter of ethics and behaviors.

5. RECOMMENDATIONS

- Government should play a critical role in increasing customer and corporate awareness of e-commerce. Also, in securing e-transactions and e-payments.

- Accountants and auditors should be provided with suitable training to advice management about the best profitable way to enter into e-commerce world.

- Social networks are effective channels for promoting e-commerce. These channels are used by most internet users, so if companies make use of them, it will be faster than any media used in promoting their products and services.

- OECD guidelines for other types of e-commerce rather than B2C should be established. In addition, appropriate guidelines for handling taxes issues in e-commerce should be developed.

6. FUTURE RESEARCH

Investigating the role of applying CG in e-commerce companies empirically is necessary. In addition, investigating whether CG traditional mechanisms are suitable for e-commerce companies would be an interesting idea for future research.

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