

Considerations Of E-Commerce Within A Globalizing Context

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ABSTRACT

The objective of this work, is to analyze the meaning of electronic commerce in our days taking into account the information technologies; it also will analyze their adjustments, their trends and applications of the same, in the Business to Consumer Relations (B2C), Business to Employee (B2E) and Business to Administration (B2A), Consumer to Consumer (C2C), Citizen to Government (C2G), Business to Government (B2G) and, Business to Business (B2B), as well as how information systems have been very useful to reduce costs, getting technology to change from being an operating support tool to become a strategy one, to increase the sales volume and the profits of the business as a result of this. The trend being taken by businesses and consumers has increased the participation of the companies which apply it in a comprehensive manner, since they reach international markets, while also face another kind of competition that takes place in a global market. We conclude that electronic commerce will remain a tool of great importance to efficiently manage the chains of supply between businesses and consumers through the Internet which allows an integration to reduce costs of ordering, distribution, administration and delivery of input materials.

Keywords: E-Commerce; Globalization; Consumer and Internet

INTRODUCTION

To understand the concepts and ideas in this study, it is necessary to start from the basis and to define some concepts that will serve as a framework for analysis.

According to Daniel Cohen and Henry Asín (2000) E-commerce can be defined as "the application of technology for the automation of transactions and business workflows, better known as workflows". Another definition of e-commerce is the one presented by José Camilo Daccach (2000) which reads "...they are all activities aimed to the generation of an economic transaction (money exchange from one person/company to another)". Specifically, these are commercial activities carried out by electronic means of automatically and almost in real time.

E-commerce can be classified as follows: Business to Consumer (B2C), Business to Employee (B2E) and Business to Administration (B2A), Consumer to Consumer (C2C), Citizen to Government (C2G), Business to Government (B2G) and the Business to Business (B2B).

Since early 1990s, Commerce has advanced in attracting people, which has increased the commercial activities carried out by electronic means in an "automatic" way. The process takes place when a person over the Internet identifies the product or service she/he wants and automatically pays for it through the same electronic system. This model has become the new way of doing business, of selling products and services, by reaching beyond the barriers of distance with only one computer that has an Internet connection.

According to Manuel Trincado (2000), the Internet phenomenon, entered our lives and gradually evolved, that who does not want to admit this, will simply remain behind.

This study aims to analyze the meaning of electronic commerce today taking into account the information technologies; it will also analyze its adjustments, its trends and applications of the same.

LITERARY REVIEW

For Robert J. Carbaugh (2004), the first influence, and perhaps the deepest, is technological change, which happened at the end of the 18th century.

Globalization (also called worldization, mainly in the European framework) is a concept which refers to the integration of commercial markets, the internationalization of production processes and capital, and the widespread use of technologies; it refers also to the instantaneous transmission of information and the increasing role of transnational conglomerates.

The Organization of the United Nations (ONU) identifies globalization as a global interdependence, which is defined in the cultural, social, political and economic processes so that events, decisions and activities in different parts of the world are mixed to create definitive changes in individuals, communities and companies, in various places on the planet. (ONU)

Globalization is facilitated by unions and interconnections of institutions that perform local practices which are projected in social relations in a comprehensive manner, transcending States-Nations, thus forming the modern world system. Berumen (2002).

For Robert J. Carbaugh (2004) the first wave of global integration took place between 1870 and 1914. It was driven by a decrease in trade and new technology barriers that lowered the costs of transport, as it would be the case from sailing ships to steam boats and the arrival of railways.

The second wave of globalization, which took place between 1945 and 1980, was the reduction in the cost of transport, which continued promoting the growth of trade, i.e., productivity increased, so did the per capita income for the developed countries, but developing countries, as a group, were left behind. The most recent wave of globalization, which started in 1980, was marked by the movements of international capital.

Globalization, as we have seen, is not something new, as it appears since 16th century, but yes, it is multifaceted and has an economic, political, social and cultural impact. Legal thinking seems to be in a similar situation to the one at the end of the second decade of the twentieth century economic thinking, it is before the challenge of finding alternatives, to confront the paradigmatic exhaustion of its main theoretical and analytical models, before the onslaught of new forms of organization that the process of globalization has brought.

The multiplication of revindications (from those of transnational nature or *supra-national* legal orders) relativize the apparent autonomy or sovereignty of the role of the State-Nation; which still has as main feature, *territoriality*, understood as a privileged unit of interaction between individuals, which are organized in multiple ways (small shops, businesses and institutions) to meet all kinds of needs of existence.

It is important to expose the problem that has led to the transnationalization of the regulation of State-Nation, as well as the apparent dilemma between what is national and what is transnational. Thus it is necessary to show the relationship between State and markets, as well as the historical background of the *lex mercatoria* and what this means, as a basis or starting point, from which the lex could emanate as belonging to the so called global capital, and exhibit the problem situation that must cover what can be termed as "*neoderecho*" (*new law*), Arellanes, (2005).

Globalization impact: the transnationalization of the State-Nation regulation, as a starting point, takes the effects that globalization has brought over the global society and how, this world today, in no way is similar to the simple sum of National States, necessarily, an effort to reconstruct the theoretical-methodological analysis body must be made so we can interpret this world which has changed with respect to the law.

The internet is a network, or a set of computer intercommunicated networks at a global level for the communication of data, such a network is present in over 80 countries and consists of about two million computers and over 20 million users taking part in all kinds of institutions, whether research, teaching, government or commercial ones. Flores, (2009).

The author Julio Tellez Valdes (2009), in his work *Informatics Law*, tells us that the origin of the Internet in Mexico dates back to 1987. The Internet is a network of networks. If we attempted to draw it, it would surely be presented in a distributed networked format of countless nodes interconnected without a center, as its own nature. In addition, it is globally accessible and its agencies and protocols are universal.

Internet, according to Kenneth, (2009), is an interconnected network of thousands of networks and millions of computers that link businesses, educational institutions, government agencies and individuals. The history of the internet can be segmented into three phases: The first covering from 1961 to 1974, characterized by the fundamental building blocks and made up of hardware and software. The second stage, from 1975 to 1994, it was used by large institutions such as the Department of Defense and the National Foundation of Science NSF. The third phase, from 1995 up to this date, is characterized by marketing; government agencies encouraged private corporations to take and to expand the internet as a local service to citizens, families and individuals from around the world.

According to Pew Internet & American Life Project, (2007), 69% of Americans in 2007 used the Internet (approximately 117 million people), and 59% send emails; these figures reflect that there are more and more users of the internet, thus, the lower the costs of computers the greater the number of users.

There is a bond between the Internet and globalization, though neither the Internet nor globalization is something new; the Internet dates back to 1961 and globalization dates back to the 16th century, both have been evolving in different periods. The Internet covers three stages, the first, called innovation; the second institutionalization and the third; marketing. While globalization also involves three phases, the first from 1870 to 1914, driven by a reduction of tariff barriers and the use of new technologies that reduced costs of transport; the second ran from 1945 to 1980 and was characterized by trade in manufactured goods, the third started in 1980, up to the present day, and its heyday was in the movements of international capital, i.e. the Internet and globalization, together, explain how they have been evolving: first when reducing the costs of both the goods and services offered by the companies; second, when increasing productivity, since a new genre of trade was introduced when developed countries started getting specialized on economies of conglomerates; however, it is worth mentioning that developing countries were neither part of the growth of global production nor of services trade; and third when international banking activities increased. Today we can say that the use of this type of technologies, such as the Internet, allows both companies and financial institutions to move large monetary amounts, as well as goods or services, lowering costs and allowing substantial profit in globalized economies.

In a Globalized world E-commerce is defined as any form of commercial transaction in which the parties communicate each other via computers or any mobile device.

The electronic commerce (*e-commerce*) term, to the World Trade Organization (WTO, 2010) is:

"A new sphere of goods trade that cross borders by electronic means." In general it is the production, advertising, sale and distribution of products through telecommunications networks. "The most obvious examples of products distributed electronically are books, music, and videos sent through telephone lines or the Internet."

"E-commerce is basically the use of networks (Internet) to perform all activities involved in the management of business: to offer and demand products and services, to seek partners and technologies, to make negotiations with its counterpart, to select the most suitable transport and insurance, to perform banking transactions, to pay, to charge, to communicate with vendors of the company, to collect orders, "that is to say, all the operations required by trade. "The Government of each country will do its purchases and bids, tax clearance, formalities, payments and collections by using the network ". Elizondo, (1999).

The meaning of the term "electronic commerce" has changed over time. Originally it meant the facilitation of commercial transactions electronically, such as the Electronic Data Interchange (EDI), used at the end of the 70s, to electronically send various documents, for example, orders of purchase or invoices.

This is important because today the commercial interrelationship between economies occurs in large quantities, both financial and monetary, and e-commerce has been increasing in the economies inserted in the globalized world, it is no doubt a key factor in the economic growth of countries. So, one can conclude that electronic commerce is any commercial act that aims to exchange, the purchase and consumption of goods and services through electronic means.

METHODOLOGY

Use the general methods of research such as: historical method, it will be applied to know the origin and evolution of electronic commerce, to substantiate the various documentary techniques of electronic commerce, to establish the limits and scope, such as security and reliability in the use of electronic commerce, and the deductive method will help to perform, and take as a basis, the principles and general knowledge about e-commerce. The same trends will be analyzed by using the inductive method.

DEVELOPMENT

The first e-commerce applications started in 1970, with innovations in the transfers of electronic funds in the markets of capital and money, which are traded on stock markets and this, today, is the most important and fundamental electronic market for transactions happening there. However, these applications were used only by financial institutions, and some corporations; in the 1980s, a new electronic exchange was born, not only with financial applications, such as the internationalization of stock markets in the world and their commercial interactions, but with the access to national and international e-commerce for all types of consumers. In 1990 e-commerce rapidly expanded due to software development.

It is important to define that software "is the intangible part of a computer, consisting of the logic equipment, and these are the programs executed by a system; it includes symbolic and executable forms for such programs", Flores, (2009), besides being influenced by the great competition among businesses, in such a way that users of e-commerce use it more and more. This process has been evolving, achieving that e-commerce starts to increase in 2000, both in the number of users and the volume of sales, thus achieving the consolidation and the opportunity for development and growth in most areas, such as Marketing, Computer Science, Behavior and Psychology of the Consumer, Finance, Economics, Accounting, Auditing and Administration. Electronic commerce is developing at a rapid pace, agencies, companies and individuals looking for the future of commercial transactions, sources of information, raw materials, services, and communication in the world of the Web and the Internet. Business activities that are carried out on the Web have been important for electronic commerce because it has allowed to increase the volume of sales, as well as the number of users that perform commercial transactions in this environment. The Web was developed over the years from 1989 to 1991 by Doctor Tim Berners-Lee, who created a computer program that allowed to link formatted pages stored on the internet by using key words (hyperlinks). Marc Andreessen created the first graphical Web browser, which made it possible to graphically view documents on the Web, and created the possibility of the universal computer in 1993.

The key concepts you need to be acquainted with, and to understand, the Web are:

- Hypertext: a form of applying format to pages with embedded links that connect documents together, and which also link pages with other objects.
- HTTP: the protocol used to transmit Web pages through Internet
- HTML: it is the programming language used to create most of the websites and which offers designers a fixed set of tags used to format a Web page.
- XML: it is a more recent marking-up language which allows designers to describe the data and information.
- Web server software: allows a computer to send Web pages written in HTML to client computers requesting this service by sending an HTTP request.

- Web client: are computer devices attached to the Internet, capable to make HTTP requests and to display HTML pages.
- Web browsers: which show websites, and which also have additional features, such as e-mail and news groups. Kenneth, (2009).

The Web is strongly expanding in the volume of goods, services and information exchanged on the Internet and the trend indicates that it will be doubled and that it will even come to its triple in a short term.

It is very common in the environment of small and large businesses, as well as in both private and public agencies to develop activities on the Web. In some cases, even Micro and Small traditional Businesses lose their customers by not accessing the e-commerce game. This activity will continue to develop and, as a result, many agencies will be forced to use the Internet as a way to grow.

It is important to define the concepts of e-commerce. The author July Téllez Valdés (2009), in his work “Derecho Informático” (*Informatics Law*), affirms that in order to define electronic commerce, it is necessary to analyze it separately. The word Commerce refers to an increasingly larger series of activities that take place in open networks, purchase, sale, trade, advertising and transactions of any kind that lead to an exchange of value between two parties. *Electronic* means global infrastructure technologies and Informatics networks, as well as telecommunications which allow the processing and transmission of digitized data. This author thinks electronic commerce is the transaction or exchange of business information based on the transmission of data on networks such as the Internet. In this sense, the concept of e-commerce not only includes the purchase and electronic sale of goods, information and services, but also the use of the network for activities before or after the sale. The authors Kenneth C. Laudon and Carol Guercio Traver (2009) define electronic commerce; as the use of the Internet and Web to do business, i.e., they are commercial transactions with digital capacity among organizations and individuals. Those operations carried out in a digital manner include all transactions mediated by technology, which involve the exchange of value (money) among organizational or individual limits for products and services.

José Antonio Vila Sobrino (2007) provides that electronic commerce is any form of trade in which computer networks are used as a means of communication among the different agents involved. Rafael García de Polo (2007) says it is the electronic information data interchange corresponding to a transaction of economic content, not limited only to transactions over the Internet, but also covering those using means such as fax, telephone, television, electronic payment systems and other similar mechanisms. E-commerce basically consists of the exchange of commercial information through the transmission of data over the network. Both the purchase and the prior actions, whether dealing with advertising or searching for information, are considered electronic commerce activities. Today, e-commerce features never-seen-before opportunities that serve to take advantage of the process of the markets globalization, which are transformed rapidly and consistently; they become intensely competitive and productive, in order to face this fundamental change States must internationalize themselves to respond to changes in the globalised world and to get consolidated, this due to the economic, political, social and cultural interplay of globalized economies. The proliferation of businesses and consumers has diversified this new reality to be adapted to the needs of the market, which has its own characteristics, advantages and disadvantages and which is classified in different models, among which are:

B2B E-Commerce

E-commerce B2B (Business to Business) is the business oriented between the various companies operating over the Internet, it arises from the need for interactions between companies, customers, partners and business partners who work through the connection of their Intranets, or better known as

Extranet, giving way to a developed company concept that covers different areas of a business.

Within the B2B electronic commerce we can distinguish three modes:

- The market controlled by the vendor looking for buyers.
- The market controlled by the buyer in search of suppliers.

- The market controlled by intermediaries who pursue an agreement between buyers and vendors.

B2B e-commerce has been a great technological advance, a number of features are required for optimal performance:

- Experience in the particular market.
- The offer must be an added value.
- To avoid production, logistics and distribution failures.

The advantages and features have turned B2B trade into an option with increasingly more followers:

- Reduction of costs.
- Expansion of market.
- Speed of operations.
- Centralization of supply and demand.
- Information on buyers, vendors, products and prices in a common place.
- Greater control of purchases and sales.

B2C E-Commerce

Business to Consumer (B2C) E-commerce (NAC for its initials in Spanish) defined as "the use of the Internet technologies for transactions among companies and customers," the business is directed from companies to the consumer.

The most notable advantages of B2C e-commerce are:

- Faster and more comfortable purchase.
- Updated offers and prices.
- Web integrated customer service centers.

Inconveniences, as in any transaction, also exist. The consumer must pay particular attention to the security in the purchase. Within this, there are different types of e-commerce:

- On-line intermediaries: Those companies that facilitate transactions between buyers and vendors in exchange for an economic percentage as payment.
- Models based on advertising: Where companies have websites of an inventory, which they sell to the interested parties.
- Community-based models: The companies empower users to interact around the world in similar areas of interest.
- Models based on fees: In this case the company charges a subscription fee to view its contents.

E-commerce B2A

Business to Administration E-commerce (B2A) is a service offered by management companies and to citizens, also, so that the administrative procedures over the Internet can be done.

There are obvious advantages to companies:

- Considerable savings of time and effort.
- The possibility to download forms and models of administrative procedures.
- 24 hours a day availability.
- Updated information.

B2E E-Commerce

The following trend arose because of security problems, which made companies use technologies, not on Internet anymore, but inwards over an Intranet to have a greater control and security in their transactions with which Business to Employee (B2E) appears, or business model to employee, where basically transactions are carried out through an Intranet between the company and its employees.

B2E e-commerce offers significant advantages:

- Lower costs and bureaucracy.
- Online training.
- A greater quality of internal information.
- Teams of collaboration in the web environment.
- Quicker integration of the professional in the company.
- Support for management.
- Internal E-Commerce.
- *Fidelity* of the employee.

C2C E-Commerce

Consumer to Consumer E-commerce (C2C) is the type of trade which is carried out among consumers, either through the exchange of electronic mail or via technologies P2P (*peer to peer*), which is used to download content such as music, movies, etc., without having a primary server. One of the most common strategies of the C2C Commerce for Internet is defined by that type of business which aims to facilitate the marketing of goods and/or services between individuals. Well known examples are *e-bay* or *mercadolibre.com*.

C2G E-Commerce

Citizen to Government electronic commerce (C2G) relates the consumer with the government, facilitating the electronic exchange of transactions between citizens and public administrations. Some of the most common services are:

- Information.
- Participation of citizens.
- Payment of taxes and fees.
- Suggestions and claims.
- Input and/or output through registration.
- Various services, such as employment, assistance to the taxpayer, health or education.

B2G Commerce

Business to Government E-commerce (B2G) seeks a better optimization of the processes of negotiation between business and government. Its application is intended to websites specialized on public administration. In them, official institutions have the possibility to contact with their suppliers, with the possibility to group offers or services.

ADVANTAGES OF THE ELECTRONIC COMMERCE

- It facilitates the purchase of used articles and/or surpluses.
- It facilitates the incorporation of small vendors in the market.
- It facilitates the purchase of rare or special items.
- It is a factor of growth in the market.
- It breaks geographical barriers.

DISADVANTAGES OF THE ELECTRONIC COMMERCE

- The service to the buyer may be of low quality.
- The received article may differ from the exhibited one.
- Potential for various forms of fraud.
- Problems to get the product to the buyer.

MODES OF PAYMENT IN ELECTRONIC COMMERCE

- Personal checks
- Bank transfers
- Credit cards
- Credit card through intermediaries (PayPal)

The commercial transactions are carried out by electronic means, optical media or any technology that allows to communicate the terms of the contract which provides the reliability in the confidentiality of the personal data of the buyer, such as its address, bank cards data, etc. as well as the quality assurance and that the product purchased will be duly received in time and form, besides the interactivity, or possibility of a dialogue, as well as the reception of news content, or existing legal regulation in this respect.

In 1999, the Member States of the Committee on Consumption Policies (CCP) of the Organization for Economic Cooperation and Development (OECD), among them Mexico adopted the text of the guidelines for the protection of consumers in the context of electronic commerce. This document contains a series of recommendations to member States in order to achieve that the suppliers of goods and services over the Internet comply with the provisions of the laws of consumer protection and thus ensuring that the cyberconsumers will receive the same level of protection when performing commercial "on line" transactions the same as in a traditional way. Similarly, in these commercial transactions the consumer is protected by the Federal Law on Consumer Protection, since it contains specific provisions on electronic commerce. In 2000, some amendments were made on the text of this law to introduce these benefits. By also reforming the Code of Commerce in the field of Electronic Commerce published on the Official Journal of the Federation on May 29, 2000, where the expression of consent by electronic means is regulated, through electronic means, the electronic document and its probative value.

The new meaning of the information and the widespread use of electronic networks, place considerable demands of adaptation to the legal system, that go beyond the updating of specific sectors affecting the system as a whole, therefore Immateriality, characteristic of the information in the digital environment. From Miguel de Asencio, (2005). This has resulted in the need to adopt measures to ensure an adequate coverage: the acquisition of software tools for the management of network, firewalls (specialized programs on the protection of networks and systems), and audit software; the development of plans of both physical and logical security and the corresponding policies; according to Cannady, such networks will even be able to detect machines that illegally monitors the network traffic to capture and use as own information such as numbers of credit cards, passwords and other confidential data. The novelty is that neurological networks will detect this type of machines without their operators notice this.

In some countries there are many legal restrictions for electronic commerce, and this stops the evolution of the development of applications and the implementation of security software for online business.

CONCLUSIONS

For what has been analyzed above we come to the conclusion that globalization and the Internet are not something new, as globalization appears since the 16th century and the Internet since the 1960s, today the world's economies are interrelated in commercial, financial and political, fields. This interrelationship is an important factor of the world's economies to achieve a greater economic growth. Globalization has taken advantage of the development of new technologies, giving a chance for all users to globally perform transactions over the Internet, to be part of the elements that characterize the processes of production and marketing of the so-called new economy, i.e. E-Commerce. Legal norms and the collaboration of all stakeholders, especially the suppliers and applicants are

required to take full advantage of the benefits that this generates. It is of the utmost importance that businesses realize that their business strategy must be linked to the information technology; otherwise it will be very difficult to compete in a global marketplace where these tools and processes which use them are in a constant change. It is vital that companies have human capital to help them properly interpret the information provided by the technological tools. It is essential that consumers are cautious when performing a partial or total payment for goods and services on Internet, to ensure an effective purchase or transaction, to know the legal protection, rights and obligations in an electronic business relationship.

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Ley federal de protección al consumidor
Ley de instituciones de crédito
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