

Implementation of e-commerce in developing countries: impact and its limitations-Albanian Case study

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Abstract

The implementation of Electronic Commerce (hereinafter referred to as "e-Commerce") in developed countries has been proven as an indisputable potential to ameliorate the efficiency and productivity in different areas, therefore, its implementation is attracting significant attention in developing countries. Despite its opportunities established in developed countries, there were many doubts about the e-commerce implementation in developing countries. That reluctance is heightened by the limited number of studies on e-commerce and the lack of legislation. This paper aims to contribute on filling the research gap by highlighting the e-commerce implementation in Albania as a developing country, its importance, the level of trust, its benefits, its positive or negative impacts and its limitations. This study will be continuously and accordingly updated with new evidence based on research results, along with future developments of Albania's economic, political, social and demographic environment. This is because different areas represent different infrastructure and different social and economic characteristics, different levels of trust on transactions, different attitudes towards institutions. We have also take into consideration that different communities have different attitudes toward the acceptance and developments of e-Commerce system. In this paper, we present a comprehensive approach to e-commerce, concentrating specifically on Albanian case. Firstly we analyze the current situation of e-Commerce. Secondly we pay attention to the benefits and legal strategies for its implementation. The third step consists in presenting the relevant objectives. We believe and insist that the development of e-commerce in developing nations, - including Albania, has a positive perspective, if the government, companies and the public can better understand and implement e-Commerce.

Keywords: e-commerce, m-commerce, e-tailing, cybermall.

Introduction

Even nowadays, long after the emergence of the so-called "dot.com"/"Internet Revolution", electronic commerce remains relatively new, being developed and altered constantly in the business management space and the information technology. There have been and will constantly be discussions on the electronic commerce. There are always doubts, confusion and misunderstandings about this topic as a result of the difference in achievements in the countries where this form of commerce has been implemented.

Electronic commerce or E-commerce, based on ICT bears an extraordinary potential to improve the global trade efficiency and to integrate the developing countries in these developments. As a consequence, a considerable rise of e-commerce has been taking place in developed countries in the last two decades as well as in its implementation in the developing countries (UNCTAD 2011). The successful adoption

of the ICT in e-commerce is absolutely dependant on the way it has been applied by the implementers and also on the scale of the satisfactory results of the coordination of technology-implementer. It is not accidental that the implementation of the technology has not been always successful in the developing countries. Moreover, while earnings have been gained thanks to the ecommerce from organizations in developing countries, skepticism still prevails on the importance and the benefits of e-commerce in the developing countries.

The awareness and implementation of the ICT including e-commerce is becoming a vital component of development even in the developing countries. Alternatively this enables the developed countries to accomplish more efficient trade relations with the developing countries. The number of internet users' world-wide is increasing significantly and this has affected the rise of chances for e-commerce both on the regional and global realm.

Nevertheless, besides the constantly higher number of internet users, there are other numerous elements that influence the acceptance and the progress of e-commerce in the developing countries.

Objectives and methodology

This research study aims to review the e-commerce concept and its application in the social and economic infrastructure of Albania at its actual stage of development, the government policies, the legal basis and the level of acceptance of e-commerce by the Albanian internet users. It must be highlighted that the figures of internet users and above all of e-customers are encouraging. In 2005 according to the "The Networked Readiness Index Rankings 2005", Albania ranked 106 with -1.04 points, whereas the "The Networked Readiness Index Rankings 2010-2011", ranks Albania in the 87th place or the 23rd place on global standing (within income group).

To accomplish the objectives of this research study, a questionnaire with 80 questions in Albanian language was developed. The questionnaire was formulated with questions that gathered information on demography, the internet usage and e-commerce (type of purchase, the means used for the purchase, the client's experience during the transaction, and the client's perception for the e-commerce in Albania). A total of 80 inadvertent individuals were selected in different institutions and companies to answer the questions that might be considered the "first adopters" of any novelty in the developing countries.

This is related to the fact that the first element in the adoption of e-commerce is culture and also to eliminate as much as possible the problems that the interviewed target group might experience with the infrastructure that could influence to the reliability of the survey.

E-commerce: the definition and essential concepts

Various literatures offer various definitions for the e-commerce. In a broader meaning connotation, e-commerce includes any form of transaction of exchange of information applied with the usage of ICT (Whitely, 1998). The definition of e-commerce entails

also the transfer or the exchange of services and or the information through the computer networks including internet, extranet and intranet (Turban et al. 2006). Turban entails services such as online support to the clients, the exchange of business documents through internet or other private networks. As a consequence of its wide coverage, e-commerce is also referred to as e-business (Barness & Hunt, 2001). Some definitions of e-commerce that are frequently quoted in the media are:

- E-commerce - the place where business transactions are conducted through the means of telecommunication, especially through Internet;
- E-commerce - describes the purchase and the procurement of products and services including information through computer networks with Internet;
- E-commerce - is related to electronic business;
- E-commerce is defined as the accomplishment of a financial transaction electronically;

The wide realm of business activities related with e-commerce has created a series of terms and phrases to describe the phenomenon in different business sectors. Some of these terms focus on online business sites purchases. Since the transactions were conducted through internet, terms such as I-commerce (Internet commerce) and Web-commerce were widely spread, but currently not as much. Other terms that have been used to describe the online retails include also e-tailing, virtual-stores or cyber stores. A grouping of these virtual stores has been called "virtual shopping center" or "cybermall".

Although the term e-commerce is relatively new, in fact it dates back four decades ago. The first application of the e-commerce is said to have been applied in an electronic transition in 1948 in a Berlin flight. At the beginning of the '70-ties there are records of funds transfers electronically among financial institutions (Johnston, 1998). Another indicator is the use of the ATM -s launched at the beginning of the '80-ties. Later on, the electronic date exchange was recorded in (EDI) 1980 to enable a wider application of e-commerce in all industries. This enables business companies to exchange documents electronically through computer systems (Johnston, 1998). In 1990, internet was commercialized by presenting the term e-commerce.

Internet and the World Wide Web facilitated the implementation of e-commerce which has recognized substantial growth in recent years. McKay and Marshall (2004) introduce the growth phases of the e-commerce. This model consists of momentous phases: brochure, interactive, e-Commerce and e-business.

As a first step, companies start with a static presence on internet introducing the company activities in the form of a brochure. During this phase, the organizations use internet only to provide information to the public, where communication and typical information is the presence of the contact details, product information, services, information of shareholders, employment opportunities, etc.

The interactive step is the qualitative phase of change where companies interact through internet. Besides obtaining information on the organization, the customers offer personal reactions and on occasions also order online. An interactive webpage offers personalized information to customers. Anyhow at this phase, the transactions are not completed online.

At the e-commerce phase, the customers may conclude transactions online and the

organization is able to manage the business on a 24/7 basis and organize its logistic activities in an efficient manner. At this stage, emphasis is placed in the internal integration where companies integrate their online system with their internal IT system in order to manage their business activities.

The final phase of external integration is the harmonization of the e-Commerce and e-business.

Companies at this stage have consolidated their internal and external cooperation at different stages of business.

The criteria for the evaluation of the e-commerce

It is important to identify the main leading elements of e-commerce to facilitate a comparison between different countries. These main leading elements may be measures against a number of criteria that highlight the phases of development of e-commerce in different countries. The criteria to be used for determining the level of development of e-commerce, from the macro point of view are the following:

- Political factors - including the role of the government for the establishment of the legislation, initiative and financing to support the usage and development of e-commerce and ICT;
- Social factors - which include the level of development and progress in the ICT education and training, which will enable both potential purchasers and the vendors to understand and use the most recent technology;
- Economic factors - including the overall economic situation and the trade power of the country together with the contributing elements;
- Likewise, there have been identified other interactive elements at the company/institution level that are influenced by the macro-environment and the e-commerce, which encompass:
- The organizational culture - research & development approach (R&D), which entails the readiness to renew and use technology to achieve the company's objectives;
- Commercial gains - with regards to the cost reduction and improvement of efficiency, both elements that influence the financial performance of the company/organization;
- Qualified and dedicated staff - that comprehends that the company and the staff are ready and capable to implement the new technologies;
- The needs of the client and the supplier - seen from the viewpoint of demand and offer for the product and the service;
- Competition - by making sure that the company would have this competitive advantage in the market to achieve and preserve the leading role in the market.
- Two very important elements in the implementation of the e-commerce are:
- Technological factors/infrastructure - the level of development of the telecommunication infrastructure that offers the use of advanced technology for the business community and the consumers, hardware and software, the distribution system and that of delivery of the "product and service";
- Security - (trustworthiness in transaction) - which is identified as a critical matter

that companies face in the instantaneous acceptance or not of the e-commerce. This matter is closely related to the culture of the society due to the tardy opening towards the global market. This element is viewed as a long-term impediment for the implementation of the e-commerce not only for individual clients but also as a determining element in the success or failure of online trade.

Study case "Albania"

After the '90-s, Albania was swept by a wide range of economic, political, social and demographic changes. Globalization and Albania's membership in a series of international political and economic organizations, the decentralization and opening towards the market economy, guaranteed continued progress in all spheres including that of Information Technology, as a consequence of the pressure from the Albanian and international investors to be competitive in the market.

It is important to estimate how the recent changes influence the approach of Albanian companies towards e-commerce, because it is believed that competition plays a decisive role on the progress of ICT. Just like the other countries of the South-Eastern Europe, Albania, despite the acceptance of the importance of the electronic communication, until 2000 paid a small amount of its Gross Internal Production to the implementation of the ICT and had scored very low in the Network Readiness Index 2005, ranking in the 106 position out of 115 states, lower than all the other countries in the region, while the statistics of The Network Readiness Index Rankings 2010-2012, rank Albania in the 87th position out of 138 countries, while it positions the country 23rd in the global ranking for the income.

The progress regarding the increase of internet users indicates amongst other things an increase of the awareness of the public for the gains and the possibilities offered by the ICT. At the same time, there is a growing tendency for the usage of the IT and communication by the business companies, especially the big ones. However, the diffusion of internet in Albania remains still behind the European level (63%) and one reason for that is the low level of IT knowledge as well as of the awareness about the profits offered by the use of technology and the information technology. The measures to include the ICT education in schools have been accompanied with plans for the education of the wider public so that it becomes a user of electronic information and services.

In order to achieve a high level of acceptance for the e-trade, some legal basis is required which have been adopted or should be amended such as the law for electronic trade, the electronic signature, the electronic documents, the security, etc. Actually, the law No. 9880 dated 25.2.2008, "For the electronic signature" has been adopted. According to the commitments for the SAA, the legal framework for the e-trade was concluded in mid 2009.

The IT level of development is also conditioned by the adoption of the necessary pertinent legislation. Until now, there have been drafted and approved in line with the commitments in the SAA, a series of important laws in the field of IT:

- Law no. 9880, dated 25.2.2008 "For the electronic signature";
- Law no.9887, dated 10.3.2008, "For the protection of personal records";

- Law no.9643, dated 20.11.2006, amended, "For public procurement", that enables electronic procurement;
- Law no.9723 dated 3.5. 2007, "For the national registration center";
- Law no.9918, dated 19.5.2008, "For the electronic communications in the Republic of Albania";

In the field of cybernetic crime, Albania has signed and ratified the Convention for the Cybernetic crime in 2002 and has ratified in the Criminal Code also the Code of the criminal Procedure of this convention.

The adoption of the legal framework in the field of the ICT in accordance with *acquis communautaire*, with the international conventions and the agreements accepted by the Republic of Albania are constantly paid close attention to. Specifically, the legislation in the IT field includes:

- The protection of the private data and the intellectual property, the data basis and the insurances of the data privacy;
- The protection from cyber crime;
- The e-business (e-commerce; e-documents; e-signature; e-payrolls);
- The legislation for the e-communication and the pertinent regulatory framework; etc.

The entire legal regulatory system is clear and guarantees consistency in the development of e-commerce. Further completion and improvement of the ICT legislation are intended for the accomplishment of the government objectives for bringing this legislation in line with the EU standards.

The number of PCs per 100 inhabitants has increased from 0.5 in 2002 to 1.2 in 2005, therefore an increase of about 2.5 percent, according to the estimations of the INSTAT. The total number of PCs in the country was estimated to be 85.000 in 2005, where over 50% of them were property of the business companies and public administration.

- According to non-official data from some Internet Service Providers, the index of the increase of the number of internet users in the recent years is estimated to 40%-50%. Irrespective of this indicator, the biggest clients and their users remain the state institutions and the big business companies;

- The number of registered domains is increasing constantly. The total number of registered active domains until the end of 2007 is 729;

According to Internet World Stats at the end of 2011, Albania had round 332 thousand dedicated IPs, round 1,441,928 internet users in comparison to 2,994,667 inhabitants with a level of penetration of 48.2%, thus ranking round 0.3% of the European users.¹

The survey data

As indicated above, the interviewed were selected in different regions, both males and females, working in different institutions or companies who had different levels of professional education. The participants in the survey were asked for information in regards to the use of internet, the use of e-commerce, way of payment, holding of credit cards and if they had ever bought any product online via e-commerce during a period of 6-12 months.

Table 1: Demographic data about the participants in the survey

¹ <http://www.internetworldstats.com/images/world2011pie.png>.

Gender	Education	Age	Organization
Male Female	Univers Pas/Unive #	25-30 30-40 mbi 40	Shteteror Privat
37.8% 63.2%	64% 18% 18%	21% 56% 22%	48% 52%

- 54 from 84 participants or 68% said that in the period they were asked, they have competed at least one online purchase. They had paid with credit/debit cards (the latter for some banks that allow the online purchase).

- 78.4% of the participants said that in their household they possess one credit card (wife or husband) and only 18% of them possess more than one credit card. 54% of the participants in the survey were holders of a personal credit card. 100% of the participants were holders of a debit card.

- 68% of the participants had made online acquisitions of products that cannot find in the Albanian market, while the other part was buying online for discount prices. 32% had bought flight tickets online; (Table 1)

- 36.1% were using their cards in the local market (supermarkets, fashion boutiques, etc) by using their credit/debit card. 64.5% of them were using the credit/debit card to eliminate cash in their pockets, 32.2% for quick service, and 3.3% for other reasons (undefined). (Table 1)

- 87.8% were buying online using their credit/debit card numbers directly, 12.2% had a PayPal account.

- 38% of the participants were using Web Pages recommended by colleagues and friends for online purchases, 52% from internet search for the product they wanted to purchase or for the service, 10% for other reasons; (Table 1);

- 83.2% of the participants were always suspicious before the first purchase fearing they might become victims of online cyber crime;

- 44.2% had no information about the security of the Web Pages for online purchases, 37.6% had asked for information from various sources about the security of online purchases, and 18.2% were not concerned about security (Table 1).

Conclusions and recommendations

Albania has no experience with research studies that address the e-commerce matters. This study finds that elements that influence the e-commerce are: culture, purchase security, information and infrastructure. Furthermore, it finds that although a developing country, the Albanian government has invested sufficiently, while private companies in infrastructure.

The largest parts of the holders of credit cards are representatives of organizations (owners or top management) or those that have guarantee from the company that has employed them. The other part hold sufficient savings accounts to guarantee the limit of the credit card.

However, much more remains to be done in regards to the culture of the citizens for the e-commerce and its advantages, as well as for the security of the online purchases. The global economy and the growing tendency for electronic transactions make it more indispensable the investment in infrastructure of e-trade.

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