# THE POTENTIAL OF E-COMMERCE IN DEVELOPING COUNTRIES; STUDY CASE: ROMANIA

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Abstract: The Electronic Commerce (EC) has affected the global economy in many different ways. First of all, it has affected the information technology, and all the economic sectors, and most importantly, e-commerce has enhanced the productivity growth worldwide. The impact of e-commerce on developing countries could be even stronger than that on developed countries because the scope for reducing inefficiencies and increasing productivity is much larger in the developing countries. The current research investigates the reasons why Romania is one of the last countries concerning the adoption level of EC in the European Union. Although EC has received significant attention in many countries, in developing countries such as Romania there has been some doubt about the relevance of e-commerce. Currently, there are still a limited number of studies on e-commerce adoption in Romania.

JEL classification: O29, O33, O52

Key words: (e-commerce), electronic commerce, (IT) information technology, (GDP) gross domestic product, developing countries, Romania

### 1. Introduction

Presently the electronic commerce is not only a communication environment, but also an important mean of conducting consumer transactions, a global market, becoming an essential element in organizational competitiveness worldwide. The electronic commerce becomes a more and more attractive alternative for consumers, often being considered more comfortable than the traditional commerce, which is associated with crowdedness, traffic or lack of time.

The electronic commerce is still in a novice phase in Romania, and attracting the youth and especially the students towards using this channel of sales must represent a priority for all online units. To accomplish this, an elaborate study is necessary, considering both the determination of behavioural specifics of the targeted segment and the optimal strategies for engaging it in the online buying process. The current research aims to outline the importance of developing a market for the electronic commerce in Romania, as an important solution to the open competition existing on the large economic market of the European communities.

To address the gap in the literature regarding e-commerce adoption in Romania, this study aims to assess the adoption of e-commerce in Romania, as an example of a developing country, and its relevance by assessing the adoption level, benefits experienced and problems encountered due to e-commerce adoption. The current study is a research in progress, which presents and discusses the findings conducted so far, identifies changes

that will be required for broader acceptance and diffusion of e-commerce in Romania and proposes approaches that businesses can use to enhance this development.

### 2. OBJECTIVES

The objectives of this article are to establish the place and role of e-commerce in the new economy, the present state of electronic commerce in Romania compared with other EU countries, the reasons for which the implementation of e-commerce in Romania has been difficult and developing e-commerce strategies adjusted to the specifics of the Romanian consumer's behaviour. The objectives can be resumed to identifying:

- 1. The potential benefits of E-commerce in developing countries, particularly Romania
  - 2. The present state of electronic commerce in Romania.
  - 3. Barriers against using e-commerce in Romania.
  - 4. Country-specific development strategies.

#### 3. METHODOLOGY

The present article is divided into two parts. The first part is a critical review of the specialized literature, while the second one consists in an empirical research.

Considering the extraordinary spreading of the electronic commerce globally, its indisputable economic advantages and the encouraging initiatives of ICT (Information and Communication Technologies) and EC (Electronic Commerce) at an European level, it is necessary to evaluate the reasons why there is such a strong disparity between Romania and other members of the EU and through which methods we can overcome this disparity and line with the EU standards. The analysis of similarities and differences is particularly important because it represents the starting point to understanding and foreseeing the development of the EC market in Romania.

In order to determine the specific reasons for which EC development is still slow in Romania, an empirical research was developed, with the purpose of identifying the main barriers against EC adoption by a target group that uses the Internet frequently.

The data for this research has been collected through questionnaires given to the students of the University of Craiova, FEAA, who possess general knowledge of economy and of EC and New Technologies.

The questionnaire was designed to collect information about the students' attitude towards e-commerce and about their experience with online buying. In addition, the research sought to identify the influential elements regarding the decision of online buying. The questionnaires were distributed to a total number of 200 respondents, randomly selected. They are students with ages between 18 and 24 years old, with economy as the main object of study and different specialties. Two questionnaires were designed: one for the respondents who never purchased anything online and one for respondents who had experience with buying online.

#### 4. ANALYSES

#### 4.1 Critical review of the literature

One of the most important benefits of e-commerce is exceeding the traditional limits associated with restricted access to information, high costs when penetrating a new market and isolation from potentially new markets.

Businesses all over the world can benefit from Electronic Commerce techniques. They can use these techniques to find new customers – and partners or suppliers – domestically and internationally, to serve current and new customers better, hence offering more value to them, to improve the efficiency of their business processes and to offer entirely new services and products – even start entirely new businesses.

It is an understood fact that electronic commerce does not serve all sectors of the economy to the same degree or in the same way. What it does is to convert and support those areas that manufacture products or offer services which can be used or distributed electronically. These areas of economy enclose consulting services, education, financial services and in some cases, even government services. Of critical importance to many developing countries is the tourism industry, which is for quite some time revolutionized by the Internet and the large amount of websites that help tourist choose their destinations, accommodation, transport and even leisure activities. All the information needed by a potential consumer can be electronically shared. Naturally, the other sectors of economy, which deal with heavy products or fragile ones, are not excluded from the e-commerce revolution. These sectors benefit from the electronic commerce through the possibility of fast communication with suppliers and customers by placing orders, offering customer support and even setting prices. Such an example would be the florist industry, which has very fragile and perishable products, but still uses e-commerce tools well adapting to electronic auctions between buyers in Amsterdam and sellers worldwide (including East Africa).

The innovation literature uses a theoretically-eclectic approach, which combined with the theories of competitiveness and the socio-technical ones, proposes a framework of e-readiness and e-commerce success, in regard to developing countries. This framework is discussed in Molla (2002) and Molla and Licker (2002).

The success of e-commerce depends on a number of variables, of which are mentionable the success of development, cost saving, communications improvement, marketplace performance and overall satisfaction. The success of development refers to making an assessment of whether or not e-commerce projects have been completed within budget and time. Reducing costs in reference to operation and marketing costs include rent, staff, purchase, payment processing, circumventing intermediaries and customer interactions management.

According to a publication<sup>2</sup> e-commerce accelerates global commercial trend by removing the boundaries facing international trade. It benefits from economic advantages such as market expansion, reduction of product source prices, promotion of productivity, reduction of transaction costs and inflation, lowering uncertainty, sharing market information, and aiding in distribution channel efficiency and plays a vital role in an endogenous economic growth. "E-Commerce can be a source to improve domestic economy, rapid globalization of production and development of available technology"<sup>3</sup>.

The specialized literature on E-Commerce in developing countries has often made the assumption that the access to Internet increases EC in such countries. Nevertheless, most of these developing countries encounter several barriers in developing E-Commerce

<sup>&</sup>lt;sup>1</sup> - Judith E. Payne – E-Commerce Readiness for SMEs in Developing Countries, Academy for Educational Development – Washington DC

<sup>&</sup>lt;sup>2</sup> - Molla, A., Taylor, R. & Licker, S - The Electronic Journal of Information Systems in Developing Countries

 $<sup>^3</sup>$  - Sheth, J. N., & Sharma, A., (2005). - International e-marketing: Opportunities and issues. International Marketing Review

such as the lack of infrastructure, educational or cultural barriers, environmental factors or even basic resources.

According to several studies conducted by Eurostat<sup>4</sup>, in the last ten years the information and communication technology (ICT) has known a wide spread due to both the price dropping and to accessibility. In 2007 the number of Internet connections grew significantly, 54% of the EU households registering, and the number kept growing, reaching 65% in 2009. The highest percentage was registered in Holland, where 90% of the households had Internet access, while the lowest number was registered in Bulgaria – 30%. The same number was registered in Romania, but a year later it reached 40%.

With respect to EC, before the research-study in 2009, only about one third (37%) of EU population had ordered goods and services online. After 2009, a 5% increase was registered, compared to the precedent year. It is worth mentioning that the percentages within the countries of EU are very scattered. Romania ranks last, levelling with countries such as Greece, Lithuania and Bulgaria, where not more than 3% of the population shopped online in 2009.

Further studies<sup>5</sup> assert that electronic commerce and its related activities over the internet can be the engines that improve domestic economic well-being through liberalization of domestic services, more rapid integration into globalization of production, and leap-frogging of available technology. Considering the fact that e-commerce embodies the markets both at domestic and global level from the very beginning, bringing trade issues related to electronic commerce to term will request self-inspection of key domestic policies, especially when it comes to distribution, telecommunications and financial services. As a result of the fact that these areas are fundamentally important to the modern economy, easiness in this sector will return to the form of economic well-being, compared with liberalization in more narrowly focused sectors.

The same author notes that "Electronic commerce is a shorthand term that embraces a complex amalgam of technologies, infrastructures, processes, and products. It brings together whole industries and narrow applications, producers and users, information exchange and economic activity into a global marketplace called <<th>Internet>>>. There is no universal definition of EC because the Internet marketplace and its participants are so numerous and their intricate relationships are evolving so rapidly. Nonetheless, one of the best ways of understanding EC is to consider the elements of its infrastructure, its impact on the traditional marketplace, and the continuum of ways in which EC is manifested. This approach shows clearly how EC is intricately woven into the fabric of domestic economic activity and international trade"<sup>5</sup>.

## 4.2 Research on the use of e-commerce in Romania

As we related in the Methodology section, an empirical research was developed, in order to determine the specific reasons for which EC development has such a slow growth rate in Romania.

<sup>&</sup>lt;sup>4</sup> - Information society statistics at regional level – March, 2009

<sup>&</sup>lt;sup>5</sup> - Catherine L. Mann's - Electronic Commerce In Developing Countries – Issues for Domestic Policy and WTO Negotiations

A series of hypothesis were issued for validation, in order to determine if the behaviour of the Romanian consumer is compatible with the one observed in the European statistics<sup>6</sup>:

Hypothesis.1.The main barrier in online purchasing is the consumers' desire to benefit from the pleasant experience offered by the traditional stores.

Hypothesis.2. Approximately 50% of the respondents doesn't need the products or services offered online.

Hypothesis.3.The lack of trust regarding online payments security and personal information represent important barriers against the decision of online purchasing.

All the information was collected and summarized into histograms:

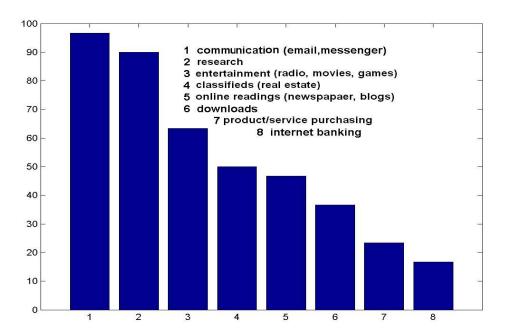


Figure 1. The main activities conducted on the Internet

As seen in the diagram above, the target group's main activities on the Internet are email communication, chatting and information research. The online product purchasing and the internet banking are ranked as last, registering less then 25% of the total.

We stated before that one of the most important barriers in online shopping is the impersonal nature of online stores compared to the pleasant experience offered by the traditional ones. The histogram below describes the reasons for this preference.

The respondents mostly stated as a reason the ability of actually seeing the products, touch them and maybe try them, which also meant a pleasant experience that they could share with friends or family. Most of them agreed on the fact that they could not entirely trust the characteristics described on the internet. Only a small part of the respondents appreciate the fact that the range of products is larger in traditional stores or that these offer assistance when purchasing.

<sup>&</sup>lt;sup>6</sup> - Information society statistics at regional level; March 2009

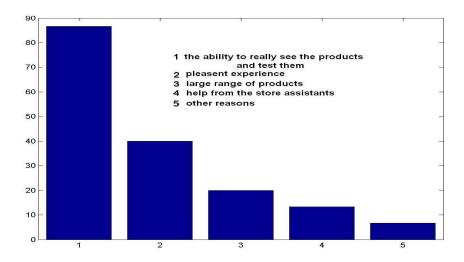


Figure 2. Reasons for which people prefer traditional stores

This barrier of online stores' impersonal nature is one that can be overcome by using marketing strategies to provide great satisfaction to the online consumer. To this regard, the online marketing strategy should be mainly focused on the client, and not on the product<sup>7</sup>. In order to create a connection between the user and the vendor and to offer a stronger shopping experience, several tools are used, such as behavioural targeting, advanced search options, product recommendations, 3D product viewing and building users communities. Even so, the Romanian consumer remains unassertive to the idea of online purchasing, still considering it impersonal.

One possible strategy to diminish or even eliminate this preconception is creating an interactive online experience, in order to enthuse the customer through innovative tools and a brand new experience. To this scope, we could use the new concept of "Social Commerce", considering the fact that the respondents stated that the main activity on the Internet is to socialize. The concept of "Social Commerce" is a way of helping consumers connect where they shop and to shop where they connect. The PR Manager of Facebook UK & Ireland, Sophy Silver, called social commerce one of the most important trends of 2011(4). She admitted the importance of friends' recommendations when deciding to buy and the easiness with which the experience of group shopping can be reconstructed through social commerce.

Besides the pleasant experience offered by the traditional stores, another important reason for preferring traditional shops was the ability to test the products. This was stated as the main reason for which the respondents claimed not to shop online.

<sup>7 -</sup> Justin Foster, Founder & President, Video Commerce Consortium - Building an Effective Video Commerce Strategy

<sup>&</sup>lt;sup>8</sup> - Paul Marsden - Emerging Trends in Social Commerce- What's working and why

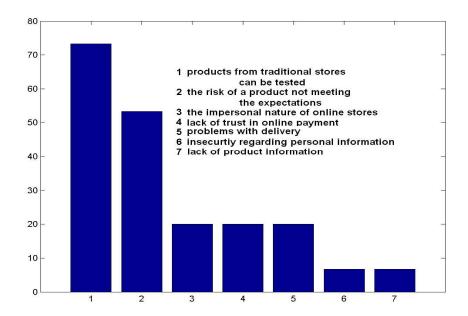


Figure 3. Reasons for not shopping online

Overcoming this barrier is highly necessary and a potential strategy is implementing advanced systems of product visualization, in such manner that the created image should be as close as possible to reality. One of the most relevant concepts in this matter is "Video Commerce", its significance being supported by numerous examples which prove that an online video content efficiently influences the buying decision. Several online stores that used videos as merchandising tools have registered sales increase from 10 to 250%, depending on the implementation method.

The product presentation videos offer a clear, reliable image, emphasise the product materiality and provide the possibility for the user to give a more precise evaluation. The benefits of video implementation on product web pages or on advertising banners are various: optimization of the search engine, attracting more traffic for affiliate marketing, creating an innovative shopping experience and providing convincing descriptions of the products.

Although so far our research showed solid barriers for e-commerce in a developing country such as Romania, we also addressed the little use of online commerce that is currently registered. We analysed the incentive of online purchasing and the analysis showed that saved time and low prices represent the main stimulus in online purchasing. The convenience of this type of commerce and the larger range of products were also listed as important reasons.

<sup>&</sup>lt;sup>9</sup> - Justin Foster - Building an Effective Video Commerce Strategy

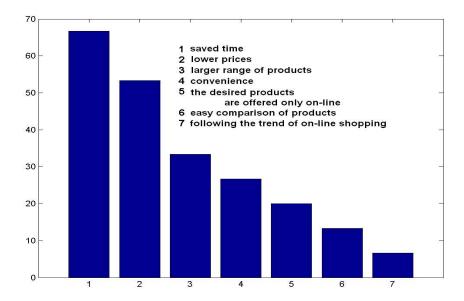


Figure 4. Incentives for online purchasing



Figure 5. Criteria of selecting online stores

The results of the research show that the first criteria of selecting online stores for the targeted group is the price of the products, followed by the delivery time and recommendation from friends. The study also outlines the fact that the media promotion of the online stores is not a significant argument for choosing a store.

The study's results prove that the Hypothesis number 1 is confirmed for the studied sample. The second Hypothesis however is invalid – None of the respondents stated that they have no need for the offered products or services, but claimed as a second barrier the risk of getting a product that does not fit or that they cannot use. The third hypothesis is confirmed, as the lack of trust in online payment and the security of personal information are mentioned as important barriers within the sample group.

Trusting that the suppliers and the buyers keep their word represents a key ingredient for a functional market. This topic is so much more ticklish when it comes to electronic markets, where transactions tend to be scattered geographically and anonymous (6). The online stores must adopt a feedback encouragement policy from existing consumers, their comments having a great impact on the decision-making process.

A balance should also be set between the solicitation of personal information and the degree of personalization of the website. The more information is asked, the lower the consumer's trust will be (2).

Online stores in Romania must concentrate their efforts to create a positive reputation and a stronger brand, as customers' trust is influenced by these factors. In the development process of an online branding strategy, the consumers represent the centre piece. In this way, the store's purpose is to enhance the perception of the consumer about their brand. The next steps are essential in the development of the online branding strategy: the website's design and structure must be exciting for the consumer; the website must emphasise the key features of the identity, personality and brand image; the website must have a positive impact on the brand image and enhance its value<sup>10</sup>. It is equally important to make direct proposals, which, in less than 3 seconds, must communicate to the client the return on invested capital in a simple and clear way (4). Nevertheless, online communication must go through the same steps as classic advertising: drawing attention, stimulating interest, desire, trigger the purchasing<sup>11</sup>, but the online message must be focused on visual impact, because of the peculiarities of the online behaviour.

## 5. CONCLUSIONS

To conclude, the behaviour observed in Romania is different than the one specific to the EU and this can also be explained by the recent history of the country. While in the Western countries the population has had contact with ordering products from catalogues such as Quelle and Neckermann for over twenty years, in Romania purchasing a product without actually seeing it is a relatively new concept, thus explaining the reluctance of the Romanian consumer towards e-commerce.

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<sup>&</sup>lt;sup>10</sup> - Uche Okonkwo – "Luxury Fashion Branding, Trends, Tactics, Techinques"; Palgrave Macmillan; 2007

<sup>&</sup>lt;sup>11</sup> - Tudor Nistorescu; Dumitru Constantinescu – "Corporate Economy"; Universitaria Publishing, Craiova 2010

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