

## **DIAGNOSTIC ANALYSIS OF ELECTRONIC COMMERCE IN ROMANIA**

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### **Abstract**

*The paper examines the evolution of electronic commerce by product group (IT, electrical and electronics, the art products, on food and beverages, textiles and leather on the distribution of information, cosmetics) in online stores. We conducted an analysis of the electronic stores regions, the volume of transactions counties. Delimit more strengths and weaknesses of e-commerce in our country, namely: online stores have specialized departments serviced by specialists in informatics, has implemented the Electronic System of Public Procurement, the number of online stores is increasingly higher, but there is a lack of a national strategy for the development of electronic commerce, the low level of e-banking services, limiting sales online in Romania. Electronic commerce is used by all walks of life, many branches of commerce presents developments described in the paper based on the analysis of statistical data in a positive trend, sometimes with large increases specific to the emerging markets.*

**Key words:** *e-commerce, online commerce, online store, e-business*

**JEL classification:** L81, M15

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### **1. Introduction**

In 1994, when the Internet became wide accessible, was not planned that e-commerce will be of major importance in the economy. It took four years for security protocols (like HTTPS) becoming sufficiently advanced and

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accessible. For the development of electronic commerce currently represents debut appearance in 1960, a set of standards Electronic Data Interchange (EDI), used for electronic transactions<sup>2</sup>. In the ninth decade developing commercial transactions closed networks, where the emergence of electronic mail in 1990 it produced Internet revolution.

E-commerce means the process of purchase/sale or exchange of goods, services, information, using a computer network, including Internet. It is defined as a "modern equipment business, which addresses the needs of organizations, traders and consumers to reduce transaction costs along with improving the quality of goods and services and increasing the speed of delivery".<sup>3</sup>

Electronic Commerce (E-Commerce), the concept of the Organisation for Economic Cooperation and Development (OECD), is running a business through the Internet, sale of goods and services taking place offline or online and is reflected in all software processes and the necessary commercial processes business to function solely or primarily by using the digital data streams.

The complexity of these processes, enables and requires a review of electronic commerce in four aspects, namely<sup>4</sup>:

- Considering the way of providing information, products, services, payments, using digital phone lines, computer networks or other electronic means;
- In terms of business processes - is a technological application and data pointing toward automating business processes and workflow;
- In terms of services or facilities provided - it is a tool that meets the needs of companies, consumption and management in order to reduce costs and increase the quality of goods and service speed.

The Internet allows not only adherence to classical principles to achieve commercial acts but particularly their improvement. Addressing trade in this modern vision is not just the buying and selling of goods and services but it must be considered in the context of forms of commerce, electronic services that support e-commerce, especially e-banking and all other forms of relationships financial, educational, social and even communication or

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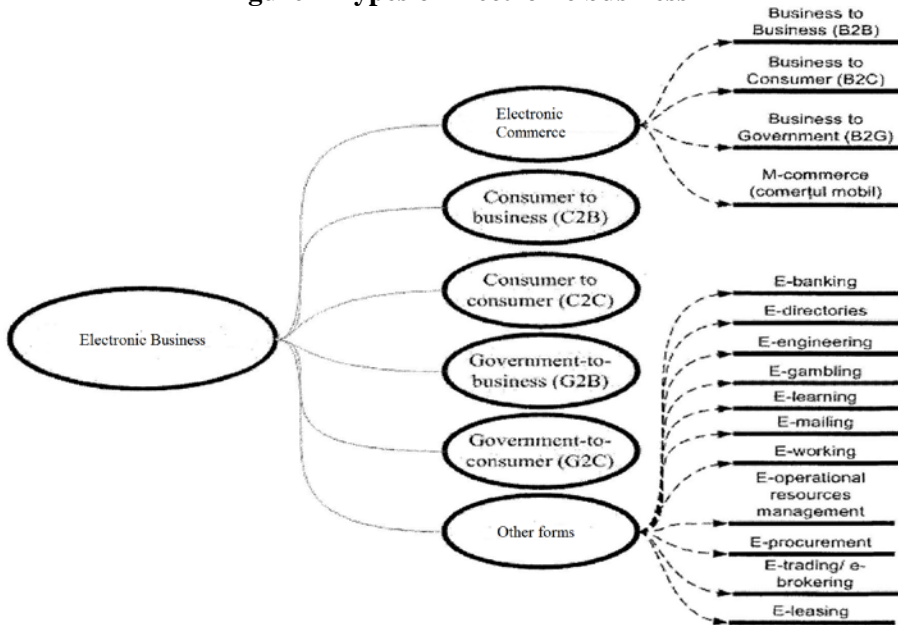
<sup>2</sup> <http://www.anisp.ro/istoric.php?id=13>

<sup>3</sup> Roșea I.G., *Comerțul electronic*, Editura Economică, București, 2004

<sup>4</sup> <http://informatica.ase.ro/site/A140301/cap2.htm>

teleworking. A positioning of the electronic business electronic commerce as a whole is shown in Fig. no. 1.

**Figure 1 Types of Electronic business**



All these forms of electronic business have made the significant changes in the business environment in particular by removing geographical barriers and opening new channels of communication, collaboration and coordination between consumers, merchants and business partners. This background has caused businesses to add a new prefix are becoming e-business, e-commerce trade and migrate to Internet became the scene to conduct the marketing (e-marketing).

## 2. Diagnostic Analysis of Electronic commerce in Romania

Diagnostic analysis of electronic commerce in Romania is required to predict the development of this complex area. Far from that the analysis that is proposed still is a totally enlightening and I think that probably few specialists could conduct a detailed analysis and timely, this is not because there would

be the necessary competence but because the development of electronic commerce and everything related with informatics and web technologies are now as complex as it is dynamic and interdependent. Despite these arguments, I tried to outline some of the most important strengths and weaknesses of a diagnostic analysis on e-commerce, an area so exciting for any commerce graduate and technology enthusiast largest IT. It would be interesting structure on the following subdomains:

**a. E-commerce stores**

**The online store** is virtual correspondent entity's real selling our products and services ensures the interaction between the bidder and the customer has grown rapidly since the advent of the concept and managed to penetrate the entire market for goods and services. Online shop can be considered an e-shop that contains a catalog of products or services with technical descriptions and commercial managed by a management system databases dealing with storing and manipulating data, and provides access to the information desired by the client. Medium variant of an e-shop offers opportunities for taking orders (via e-mail or interactive forms completed directly on the website of the seller) and extended version adds the possibility of making online payment through various means of payment.<sup>3</sup> The SBA Agency (Small Business Administration) in the US identifies three types of commercial Web sites based on their content can be: the booklet, pre-trade and e-commerce.

Between 2008-2010, a time of international financial crisis, increasing operating online stores was over 50% per year. The arguments and the factors behind this trend were: use of web technology that has become a phenomenon with explosive growth; availability of Internet use regardless of age, education, professional category and position etc; enlarging the product portfolio in electronic stores; the availability of online services in terms of cost; improving Internet payments etc. Thus, in 2010 in Romania there is an electronic shop at 24,000 inhabitants, namely over 875 online stores. The largest increase was noted from online stores with software - from 8-132 - shops with art products, from 12 to 60 stores and mobile stores and video equipment - over 300% and those who sell computers and accessories - 150%.

In terms of share of online stores and products marketed in 2008, computers and accessories segment with a share of 17.32%, emphasizing the trend in 2009 to a level of 24.44 %, and in 2010 reaching a share of 41.74%.

**Table 1 Evolution of the number of online stores by product between 2011-2014 in Romania**

<b>Online stores</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Computers and accessories</b>	75	154	365
<b>Laptops</b>	12	124	201
<b>Networking</b>	7	113	190
<b>Software</b>	8	132	195
<b>Phones</b>	21	85	247
<b>Music</b>	15	49	40
<b>Movies</b>	5	7	28
<b>Books</b>	46	93	96
<b>Home appliances</b>	25	60	139
<b>Sport articles</b>	16	33	44
<b>Audio equipment</b>	7	118	246
<b>Video equipment</b>	3	77	251
<b>Art</b>	<b>11</b>	12	60
<b>Pharmaceutical</b>	15	32	53
<b>Car's accessories</b>	5		105

*Source <http://www.izzisale.ro/Studiu-eCommerce-ANC.pdf>*

***b. Category of offered products***

In 2010 Internet sales leader in IT category represents laptop, which sells 23% of online stores in Romania, and traditional stores was offering similar products or components or computer software.

Besides these types of goods is an increase in both the number of product communications or telecommunications even if the range of products offered is limited. Prevailing sales of mobile phones, tablets Ipod, Iphone in over 20% of online stores in Romania.

A segment with an upward trend is the electronic products and appliances that although a feature that hampers online sales - weight and volume - the frequency of purchases of this kind in housekeeping them in Romania and development of logistics centers and distribution makes this type of products are always dynamic online market. Thus it is noted that TVs are sold in over 80% of online shops profile, other types of products being found in about 30% of the total.

**Table 2 Distribution structure on IT products available in online stores in Romania**

<b>Category of products</b>	<b>Stores</b>	<b>Percent</b>
<b>IT Stores</b>	365	41,71%
<b>Computer accessories</b>	241	27,54%
<b>Toner and Ink</b>	154	17,60%
<b>Copy machines</b>	127	14,51%
<b>Printers</b>	201	22,97%
<b>Laptops</b>	201	22,97%
<b>Memory cards</b>	204	23,31%
<b>Monitors</b>	197	22,51%
<b>All in One</b>	158	18,06%
<b>Software and games</b>	195	22,29%

The largest increase took an art shop, due to changing lifestyles of a class of consumers, but not far from jewelry stores and even ceramic. An upward realized and selling embroidery and paintings whose customers are generally from abroad.

Although the specifics of this type of goods is one that fits very well on the traditional type of trade or on the modern type supermarkets and hypermarkets, the products food grade soars more charts of products sold through online stores be it sweets, drinks and pick up the much appreciated abroad ([www.muraturiasortate.com](http://www.muraturiasortate.com)) and even cooked meals delivery service. The business model adopted by these stores, targeting home delivery products in a very short time, especially sweets for events.

A revival experienced online shops offering textiles and leather, especially branded ones, a phenomenon considered by many experts as one specific period of crisis. The following table notes that most online stores are products specifically intended for women, 57 and 24 specific clothing stores sell women's shoes.

**Table 3 Distribution structure on textiles and leather goods in online stores in Romania**

Types of goods	Number of stores	Percent
Textiles and shoes	93	10.36%
Women's clothing	57	6.51%
Men's clothing	47	5.37%
Children's clothing	43	4.91%
Women's shoes	24	2.74%
Men's shoes	22	2.51%
Children's shoes	16	1.83%
Underwear	17	1.94%

With trade online information products are the most important selling books. The sales volume of books through online stores has increased or doubled, even during the crisis in 2008-2010.

***c. Distribution electronic stores regions***

A diagnostic analysis on e-commerce in Romania must include an analysis of the geographical distribution of online stores. Statistics show that Transylvanian shops in the area have the highest volume shopping while Bucharest totaling 15% of online transactions in Romania. An interesting trend is the creation and development of electronic stores in the counties of less developed areas. Consequently, it is noted that 2011 was the year of online shopping in Romania, shops online turnover increasing by more than 130% over the previous year. Obviously, this average growth is exceeded by many districts in areas already traditional in the development of electronic commerce, namely Transylvania and Banat, but also some counties that feels increasingly developing online stores like Calarasi and Braila, with over 278% , 233%. Specialized sites, such as okazii.ro show an increasing number of customers in rural areas and a permanent increase in the number of customers, only this site with over 3300 monthly clients who visit it.

A further diagnostic analysis after the total volume of transactions through online stores show that Bucharest holds a significant share of the online shopping- and three counties, namely Cluj, Constanta and Timis same percentage as capital sums. Percentages are approximately equal Iasi, Brasov, Prahova and Bacau and surprisingly with a rate of over 2% appear as Neamt counties or Maramures.

E-Commerce market in Romania has evolved by 20% in 2014, the durable goods segment first exceeded 1 billion euros, according to estimates of major players in the market.

#### ***d. Summary weaknesses and strengths on the development of electronic commerce in Romania***

After studying the evidence submitted and several books, magazines, information on the Internet, I defined several strengths and weaknesses in the development of e-commerce in our country, which we presented in the following sequence:

- *Weaknesses :*

- The low degree of integration of ICT in business applications;
- The low level of accessing e-banking services by individuals or firms;
- Attractive design low for some online stores;
- Limiting the sales of goods in Romania, only 5% of transactions are carried out abroad.

- *Strengths:*

- Specialized departments in stores that handle online sales;
- Very high quality communications infrastructure;
- High quality of professional training of staff from IT;
- Increasing the number of specialized online stores.

### **3. Conclusions and Proposals**

It can be seen as economic globalization is deeply marked by electronic commerce. Although the classic trade will not disappear it is difficult to judge which will be the ratio of e-commerce and CCL classic. However conducted online businesses seem to be more convenient and more profitable. Along with electronic commerce through Internet can develop other forms dc intellectual commerce such as trade, the consultancy etc.



An important factor in visiting online stores to customers is that they are familiar with using e-banking, banks here and online shop owners should work more to improve access and customer offers proposed. Evolution of online payment depends primarily on the evolution of Internet access. At the moment, about 40% of the population has Internet access and those who are less and uses it frequently. Basically, Internet access in rural areas is sporadic. To reach the 80% level to make at least one online payment that almost all Romanians should have access to the internet and utilize it frequently.

For the further development of electronic commerce and loyalty is a need to attract as many customers for this trade.

What went almost perfectly was the concept of marketplace, which identified the need for highly novel one-stop-shop PayU considered official. And indeed, 2014 has meant entering more niches activity of brands like eMAG, Elefant.ro or evoMAG.ro.

As differences from Western Europe / USA, I scores that Westerners "have education and tradition as customer in willing to pay by card - be it Visa, Mastercard or American Express, offline or online. The first impulse to order online is to remove the card from your wallet and make payment. "The fundamental difference in terms of approaching their stores as customer orientation.

In terms of market evolution of online commerce in the country, the PayU out that any input of a retailer offline in online building market - IKEA is an example of this, the company announced this year's entry in the online commerce. On the other hand, the output of a player such as Groupon, leading to shrinking market. Overall though, the market growth 20% in fiscal year 2015 market but also allowing greater further increases.

I propose a new idea improvement to increase customer confidence in the products purchased intangible decision before buying, to force sales team responsible for selling online with wireless video micro-cameras who live issue.

If the buyer wants visualization product that one will purchase it with a click of the mouse will connect live with an operator which to present your products, it being able to view before making a purchasing decision, the a great advantage for the buyer in addition to existing photos and technical data specific online sites. The idea is addressed to special stores which trade practice but classic and virtual stores.

A big plus we may see in the diversification and strengthening of belief that anything can be bought online quickly and securely. When referring to trade online with durables - we estimate a market of 1 billion euros.

If we were to compare the US market / Western Europe to that of Romania, we notice yet, unfortunately, fairly large differences. At the market - if the US / Western talk of a mature market and another level to educate consumers, accustomed to all remote trade mechanisms, in Romania, the whole process of education has a recent history. Keeping proportions, talk and share different online trade in total trade in the two markets. In this context, here there is a great opportunity for spectacular growth.

On the other hand, I can say that the Romanian market has the advantage of better services - transport speed, ease of product return and also legislation that protects buyers. A common denominator of the Romanian market and large markets: customers who use the smartphone in online commerce follows the same trend.

Overall, the market grow further and this trend will remain still many years from now, online commerce represents a great opportunity. ***Online is the future, we want it or not.*** As trends in 2016 the market will develop new product categories for players already in the market and also we will see, in 2016 the entry of new offline players in the online area. Also it will develop, accelerated product niches that have not yet strong players in online commerce - sports equipment and automotive, among them.

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