

## **CURRENT STATE AND PROSPECTIVE DEVELOPMENT OF ELECTRONIC COMMERCE IN SERBIA**

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### **ABSTRACT**

The fast advancing global information infrastructure enable the development of electronic commerce at a global level. The nearly universal connectivity which the Internet offers has made it an invaluable business tool. This fast emerging economy is bringing with it rapidly changing technologies and increasing knowledge intensity in all areas of business. The paper analyzes the concept of e-commerce with a special emphasis on the status and prospects of its development in Serbia. In this work, the quality and quantitative method have been applied, based on the usage of descriptive and statistical analysis.

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### **INTRODUCTION**

E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals. E-commerce is emerging as a new way of helping business enterprises to compete in the market and thus contributing to economic success. E-commerce can help deliver economic growth, increased business opportunities, enhanced competitiveness and better access to markets. E-commerce can apply to purchases made through the Web or to business-to-business activities such as inventory transfers. A customer can order items from a vendor's Web site, paying with a credit card or with a previously established account. Personal and account information is kept confidential through the use of secured transactions that use encryption technology. With the development of network economy, e-commerce plays a major role on new economy stage.

#### **The Concept of E-Commerce**

E-commerce consists of buying and selling of products and services over electronic systems such as the internet and other computer networks. E-commerce is a commercial activity dealing directly with the trading of goods and services and with other related business activities, in which the electronic communication medium plays a central role. These activities include the communication of information, the management of payment, the negotiating and trading of financial instruments and the management of transport. (Heng, 2003)

E-Commerce is a part of e-business and its goal is to generate profit through the various set of activities based on buying and selling principles. E-commerce is strongly related to the information technologies and telecommunication technologies. Some of the benefits that accrue

to an organization from implementation of ecommerce are increased revenue since you will be able to reach more customers, improved customer satisfaction since services will be readily available and fast in their provision, cost reduction because it will not have to incur heavy wage bill, reduced space requirements and hence reduced rent or lease payments. Other benefits include increased efficiency since automation enables you to do more with less input, increased level of output and employee satisfaction.

The uptake of e-commerce is influenced by its potential to create business value and by awareness of its participants of the potential benefits. A major reason for most companies, irrespective of size, to participate in business is to extract some benefit from it. E-commerce is no different. The benefits of e-commerce are classified in two main categories: tangible and intangible.

The tangible benefits are benefits that directly accrue to the organization and contribute directly to increase in revenue and profit. These include: Efficiency which is the ability of the business process to produce the same level of output using reduce resource output or to produce more output using the same level of input. Increased automation of processes where most of the operational activities which were done by people are carried out by machines without physical presence of people. E-commerce enables accessibility of markets that would have been otherwise inaccessible without automation.

Intangible benefits are benefits that do not directly contribute to increase in revenue but may give goodwill and customer loyalty to the organization. They include, enhancing well-being and education of customers. By providing information to customers online, they are enabled to learn more about the organization and also how to carry out their transaction effectively and efficiently at reduced time and cost. Give organizations competitive advantage in that the organization that use automated business processes are able to provide products and services at reduced prices than their competitors. Customers are enabled by e-commerce to carry out their transaction at any place in the world and at any time of the day that is convenient to their lifestyle. To extract benefits from ecommerce, it is important for businesses to overcome the e-commerce inhibitors and challenges.(Chaffey, 2004)

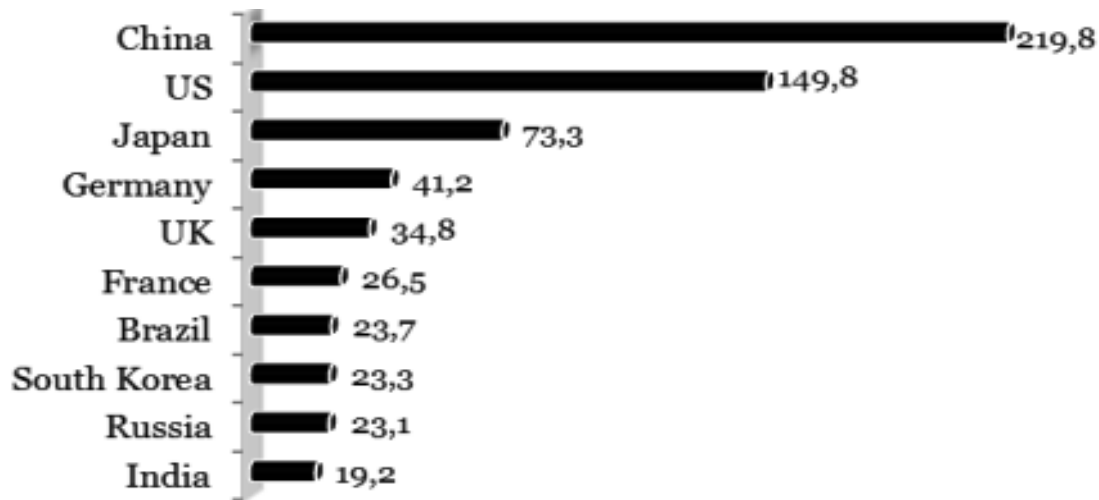
E-commerce challenges are classified as technological and managerial related.

Technological challenges are related to the acquisition, installation and maintenance of the necessary hardware and software. These challenges are Security and Web site issues. The organizations data may face threats from hackers and data loss occasioned by things like viruses. Technology issues including costs, software and infrastructure.

Others are managerial challenges and include people and organizational issues. The people in the organization may resist adoption of the new technology as they may fear that it would lead to loss of jobs. They may also be reluctant to adopt new methods as they may fear change. If the management does not support the e-commerce project, it means that the project will lack the necessary resources and is thus bound to fail.

According to a new report by the Interactive Media in Retail Group (IMRG) e-commerce sales will pass the 1 trillion euro (\$1.25 trillion) by 2013, and the total number of Internet users will increase to approximately 3.5 billion from around 2.2 billion at the end of 2011. The study estimates that e-commerce sales in 2011 increased to 690 billion euros (\$961 billion), an increase of close to 20% from a year earlier.

### Top 10 Countries ranked by Online bayers in 2012 (milions)



Source: [www.internetretailer.com](http://www.internetretailer.com)

Experts predict a promising and glorious future of ecommerce in the 21st century. In the foreseeable future ecommerce will further confirm itself a major tool of sale. Successful ecommerce will become a notion absolutely inseparable from the web, because e-shopping is becoming very popular and natural. At the same time severe rivalry in the sphere of ecommerce services will intensify their development. Thus prevailing future trends of ecommerce will be the growth of Internet sales and evolution.

#### **E-Commerce implementation in Serbia**

The Republic of Serbia is lagging enough in the application of e-commerce compared to developed European countries. The basic reasons are associated to the economic situation in the country, standard of living and computer illiteracy of the population. Every year the Statistical Office of the Republic of Serbia publishes statistics on the usage of information and communication technology in households and businesses. The report for 2012 showed that 98,2% of households have TV sets, 83,9% have mobile phones, 50,4% have personal computers and 21,4% have laptop computers. The overall usage of computers in Serbia is still unsatisfactory, with 44,8% of the population having no access to computers. The survey also showed rather weak results in e-Commerce. The fact that 75% online shopping in Serbia is done by individuals shows that that firms still abstain from online shopping. Unfortunately, the volume of turnover in e-shops in Serbia is so low that it is mostly an alternative form of shopping and business. This state is confirmed by the data of the Republic Institution for Statistics, according to which 40,1% of enterprises having the Internet ordered products and services by electronic way and 20,7% of firms received orders in this way. About 600,000 people in 2012 ordered goods and services on the Internet. In 2011 in Serbia, 73,8% of enterprises with the Internet had Web presentations of their assortments. According to the last researches, great majority of citizens in Serbia want to buy online or they already bought on the Internet, but this experience they had mostly in foreign Web shops. (Statistical office of the Republic of Serbia, 2012) Basic requirement for the development of e-business in Serbia is the institutional and legal regulation. The institutional push for advancing e-payment and e-banking in Serbia was

marked by the Law on Payment Operations introduced on January 1, 2003. All payment operations were transferred from the Accounting and Payments Operations Office to commercial banks, and all payment transactions were completely overtaken by the banks. The reform of the payment system opened a new segment of commerce and urged the banks to compete for clients. The most widely recognized payment card brand on Serbian market is DinaCard, national payment card, while the most successful international brands are Visa, MasterCard, Diners and American Express. DinaCard system has been founded on 2003 with the aim of stepping up development of non-cash payments, decreasing the amount of cash in the money supply and fighting gray economy. DinaCard system has enabled a number of domestic banks, who were not members of international payment systems, to offer to their clients a payment card which can be used in the largest acquiring network in Serbia. The National Bank of Serbia performs transmission, the clearing and settlement of DinaCard transactions, as well as settlement of domestic transactions with Visa and MasterCard payment cards. The National Bank of Serbia regulates DinaCard business, according to the Operative rules for DinaCard System, while business with international payment cards is regulated in accordance with operative rules of respective systems. Requirements and conditions for issue and use of payment cards may differ significantly among different banks, even for the same brand of payment cards, while the differences among different payment card brands are even more significant. (The National Bank of Serbia, 2010)

### Payment Cards and Accessing Devices in Serbia

	2005	2006	2007	2008	2009
<b>Number of Payment Cards Issued</b>					
Debit Cards	3.443.015	4.327.537	4.613.448	4.548.241	4.884.814
Credit Cards	382.158	857.608	1.039.042	1.082.771	1.022.544
Business Cards	33.129	55.237	72.975	97.777	107.032
TOTAL	3.858.302	5.240.382	5.725.465	5.728.789	6.014.390
<b>Value of Transactions with Payment Cards issued in Serbia (RSD millions)</b>					
Debit Cards	58.746	118.070	186.220	255.497	300.854
Credit Cards	10.479	32.868	39.618	43.711	38.545
Business Cards	2.824	6.288	9.629	14.070	15.739
TOTAL	72.049	157.226	235.467	313.278	355.138

The legislative layer of e-Commerce is just developing in Serbia, influenced by the corresponding EU legislature, international standards, certain regional initiatives Serbia has endorsed, and Serbia's legal tradition. Challenges refer to the validity of documents produced and exchanged electronically, security of transactions, and trust, copyright and ownership issues in trade using a website. The most important regulations in the legal framework for electronic business are laws on electronic signatures and electronic commerce. The Law on Electronic Signature has been enacted by Serbian Parliament on December 21st, 2004. The law regulates

areas such as: electronic signatures and qualified electronic signatures, electronic certificates and Certificate Authorities, as well as the rights, duties and responsibilities of electronic signature users and Certificate Authorities. Essentially, the law defines a framework in which electronic signature is considered as a legal equivalent of personal signature, thus enabling legitimacy of electronic documents. The Law on Electronic Commerce is enacted on May 29th, 2009. The law enables citizens of Republic of Serbia to enjoy the benefits of shopping over the Internet. Passage of the Law on Electronic Commerce represents another big step towards development of information society in Serbia.(Law on electronic commerce, 2009)

Adoption of legislation created the conditions for the intense development of electronic business in the future. Electronic banking services were offered in Serbia with certain time lag compared to developed countries. But the delay was not turned out to be so bad: in early stage of electronic banking development, numerous banks in developed countries experienced certain problems concerning security and abuse of transactions. Foreign banks that had entered Serbian market set reliable and secure electronic banking systems, with domestic banks following. Banks in Serbia usually offer to their clients an integrated set of electronic banking services. The most of the banks have a package of services, such as: account information inquiry, detailed report on current account transactions for chosen period of time and detailed payment-card reports. Majority of banks also offer a number of useful applications on their e-banking websites: modules displaying list of exchange rates, loan calculators or currency conversion calculators. Certain banks also offer business intelligence systems to their business clients.

## **Conclusion**

Electronic commerce is revolutionary and modern way of conducting commercial activities and is based on the use of information and communication technologies. In modern business, trade is facing a number of changes that result from the globalization of markets and the development of information technology. For a quick and adequate development of electronic commerce in the Republic of Serbia should identify the opportunities and risks of the business environment in trade organizations. In this sense, the main task of the organization is to monitor changes in the turbulent business environment with special emphasis on the globalization of markets, understanding the needs and requirements of our customers and the experience of developed countries. The development of electronic commerce in Serbia institutional framework is an important pre-condition that reduces the risk of doing business in this area.

## **References**

- Chaffey, D. (2004), "E-business and E-Commerce Management: Strategy, Implementation and Practice", Financial Times/ Prentice Hall.
- Heng, M.S.H. (2003), "Understanding Electronic Commerce from a Historical Perspective, Communications of the Association for Information Systems", (Volume 12), 104-118.
- Law on electronic commerce, Official Gazette RS, No.41/2009.
- Payment Card Operations of Banks in the Republic of Serbia (2010), The National Bank of Serbia, Belgrade
- Usage of information and communication technologies in the Republic of Serbia (2012), Statistical office of the Republic of Serbia
- [www.internetretailer.com](http://www.internetretailer.com)