

FACTORS INFLUENCING E-COMMERCE DEVELOPMENT IN BALTIC RURAL AREAS

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Abstract: *In this article author observing key factors influencing development of Internet and electronic commerce in Baltic countries. Author analysing statistic data for Latvia, Estonia and Lithuania and comparing different processes in politic, economic and social life of those countries during the last 24 years. Development of telecommunication infrastructure, information technologies and electro technic created absolutely new business environment where business development has a different rules and possibilities. New possibilities and challenges have a different usage in different counties. Even small time periods in development of telecommunication infrastructure can influence number of users of Internet and later on e-commerce as well. Lever of welfare in any country influencing usage of technologies and habits of population and adaptation to new business environment. Than better is economical situation in country than more active population and business environment are in new virtual environment. One of conclusions after analyse of statistic and author researches done in last 5 years in Baltic business area is that general level of education and specially level of digital literacy between different groups of population have a significant influence to usage of e-commerce. Than more countries involving in digital literacy of population and stimulating enterprises to adopt new knowledge and technologies that faster development of e-commerce in public and commercial areas. Governmental activities in development of electronic environment are very important not just to develop legislation, but create electronic services for citizens and business needs to intensify all processes and minimise administrative obstacles. Unfortunately as showing research in small and medium regional enterprises sector, SME are not ready to start business in virtual environment and to use all benefits of new environment. Main reasons are lack of special knowledge about possibilities in new environment, lack of free finances to start e-commerce activities and lack of specialists. From author point of view solution for this problem could be to intensify activities of NGO and local authorities to organize education on possibilities of business development in virtual environment to continue develop e-services for citizens and business.*

Key words: *e-commerce, technologic infrastructure, level of welfare, digital literacy.*

INTRODUCTION

Since the beginning of Internet era, starting in 1969 with ARPANet project (Advanced Research Projects Agency, USA) Internet and all virtual world benefits are becoming more important in our personal and business life. Activities in a virtual world became day-by-day activities and we do not imagine our life without communication using different Internet tools and electronic devices. Starting from the beginning of 90's the world got to know a new term- electronic commerce.

In 1995 deals in electronic environments reached 159 million USD dollars but in 1998 amount of e-commerce exceeded \$ 43 billion. [1] Rapid growth of business activities in the virtual environment exceeded all forecasts and are still developing and growing. The digital revolution crossed borders of countries and became Global, giving to entrepreneurs and customers a totally new environment, roles and tools for communication and exchange of goods and services.

New business environment – New Ecosystem

E-commerce transferring global access to Internet to the level based on main business processes of exchange goods and services, improving those processes to more efficient and more profitable. It is giving enterprises new possibilities, challenges and way for further development on wider market. E-commerce benefits like continuous operation created new terms in our business language – work 24/7/365. Immediate reaction form market and bilateral communication increasing more and more temps of business development. Global auditory and selected target customers groups giving enterprises much more competitiveness then

traditional ways of doing business. Personalisation and customisation permits achieving potential customer needs and preferences. All of these and other benefits of the new business ecosystem generating the main one- profitability, target of any business activity. In last 10 years more new services were launched than in all previous century. This new ecosystem developing every second and it is complicated to make prognosis even for next five years development. Human race and business are turning to the virtual ecosystem and there is no way to stop it unless we stop progress itself.

E-commerce, but wide term- e-business totally changed traditional way of doing business but actually everything is quite simple. D. Shaffey describe e-commerce a simple way – “as all electronically mediated transactions between an organization and any third party it deals with.” [2]

Basic factors influencing development of e-commerce

Internet and e-commerce in Baltic States developed relatively late, just in the middle of 90’s. It was related with development of telecommunication infrastructure. Estonia, Latvia and Lithuania started to develop their own International telecommunication connections to the Global Internet and digitalization of local telecommunication infrastructure. Internet in Latvia and other Baltic Countries has developed in several phases and progress was driven by various technical, economic, political and public factors. In the middle of 90’s, immediately after privatisation process of telecommunication companies started a rapid development and modernisation of there telecommunication networks- the base for development of Internet and e-commerce. Direct connections to Global Internet and good level of technical specialists gave many possibilities to use benefits of Internet and e-commerce to enterprises and private persons.

Analysing development of Internet in Baltic countries author concludes that there exists some basic factors for e-commerce development.

In all three Baltic countries modernization of telecommunication network started with 2 years difference- in Estonia in 1992, In Latvia in 1994 but in Lithuania in 1996. It influenced number of Internet users and penetration in every country. [3]

Table 1

E-commerce development factors

Factor/Country	Latvia(LV)	Estonia (EE)	Lithuania (LT)	Data source
Fixed broadband penetration (subscriptions as % of population) 2013	25	28	27	[4]
Fixed broadband coverage %, 2013 (total/rural)	93/43	87/87	96/92	[4]
Mobile broadband penetration – all active users %, 2014	62	90	48	[4]
Internet users% of population, 2014	75,2	83,3	72	[7]
Individuals ordering goods or services online % of all individuals aged 16-74 , 2014	34	49	26	[4]
Individuals interacting online with public authorities, 2014, % of all individuals aged 16-74, 2014	53,5	50,7	41,5	[4]
GDP per capita by years, USD \$ (1995/2000/2013)	2107/3308/15375	3036/4070/18783	2178/3267/15538	[4]
Number of Internet users between seniors, % of seniors, 2014	42	55	35	[7]

Development of telecommunication infrastructure even with 2 years difference influenced Internet usage but not significantly. Two other important factors the level of welfare and level of digital literacy of population are important giving the possibility to use benefits of the new virtual business environment. To increase level of digital literacy of the population, especially for the generation above 50 and seniors all three countries organised several government, NGO and commercial organisations non-profit projects to give the possibility

for individuals without computer skills to learn basic needs to use the Internet and e-commerce benefits. Public Internet access points especially in rural areas positively influenced Internet and e-commerce usage. Access to the Internet and increasing welfare of population gave the possibility to develop different type of electronic services and the first big section of e-services started within develop banks and financial organisations giving them possibility to save a large ammount of expences making the business more profitable.

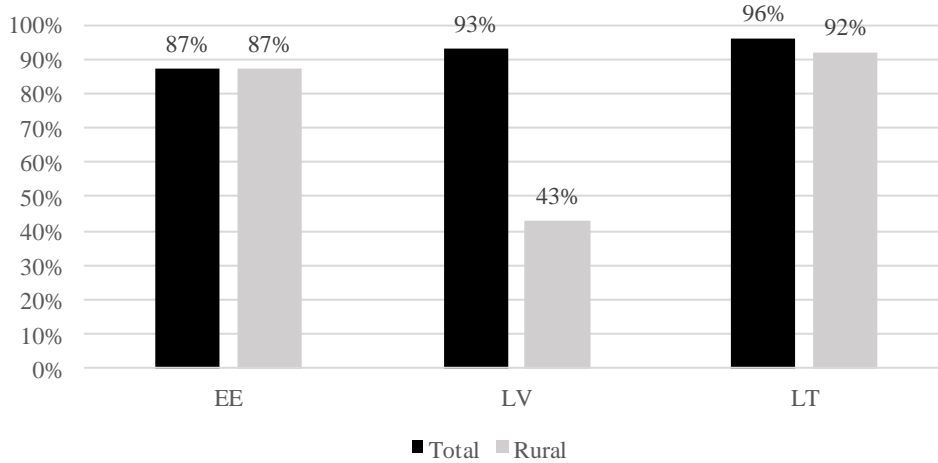


Figure 1. Fixed broadband coverage in Baltic, 2013 [3]

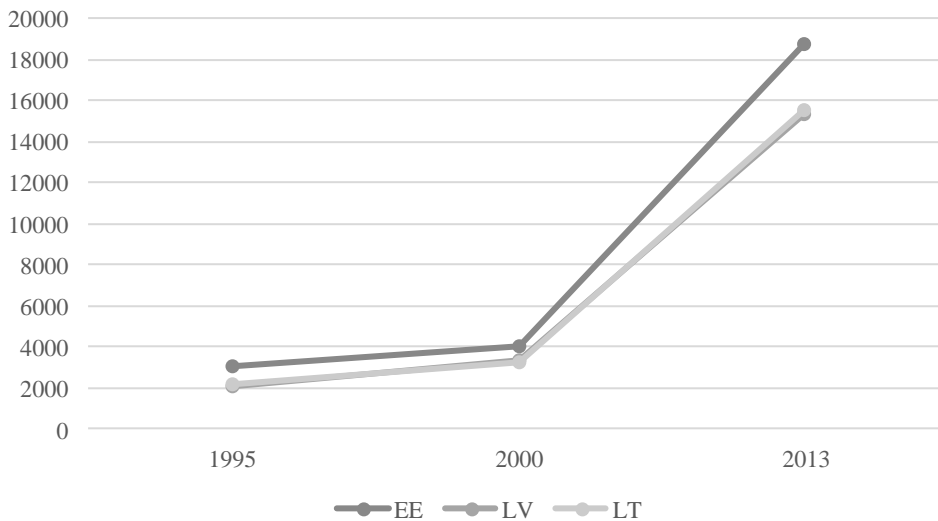


Figure 2. GDP per capita in Baltic, USD, 2014 [4]

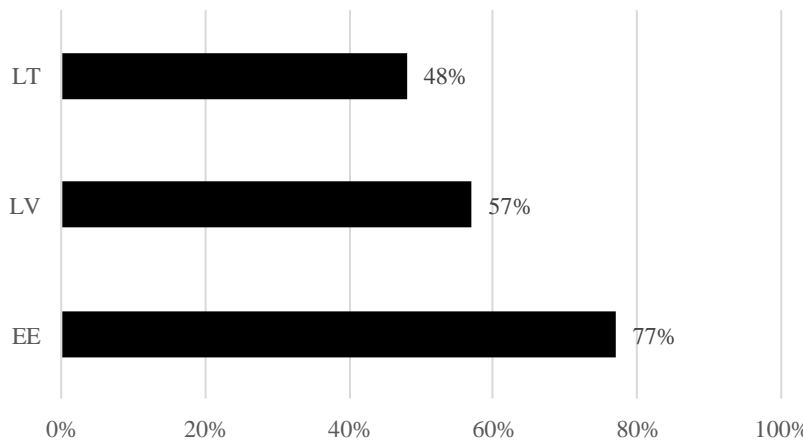


Figure 3. Online banking penetration in Baltic, 2014, % of all individuals aged 16-74 [5]

Development of public and commercial electronic services gave the possibility for further e-commerce content development and then more services were provided to the market that encouraged e-commerce growth and usage.

Accessibility to Internet is a main factor for companies to start any activities with in e-commerce even development of company web page. Starting from the 1994, first independent access to Global network Latvia achieve 75, 2% of Internet users, in Estonia it is higher 83% but in Lithuania – 72%. Wealth is growing and electronic devices and Internet access becoming more and more accessible for any inhabitant wherever he/she lives and rural areas are no longer reasons not to have and Internet connection.

Legislation in all Baltic countries is oriented on new technologies and e-services development and governments and local municipalities are investing in financial and human resources for development of infrastructure and e-services for enterprises and all population.

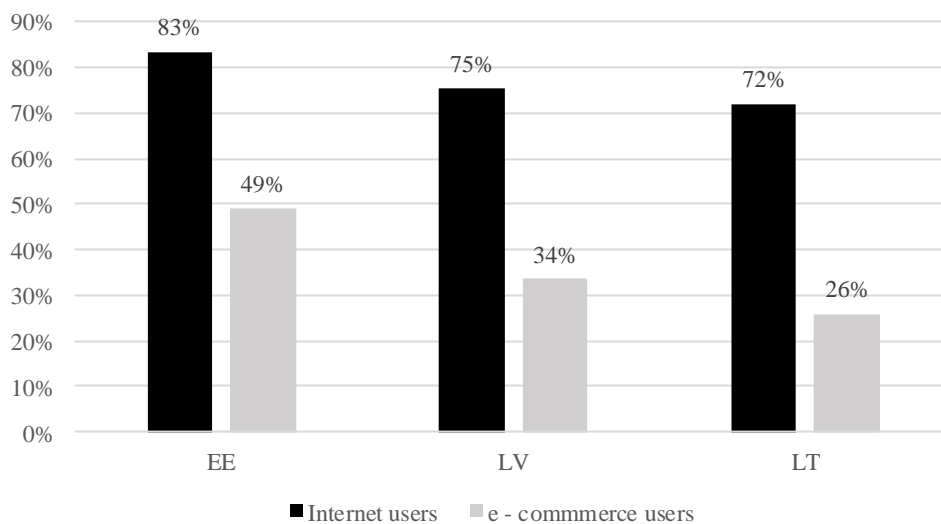


Figure 4. Internet and e-commerce users in Baltic, 2014, % of all individuals aged 16-74 [6][8]

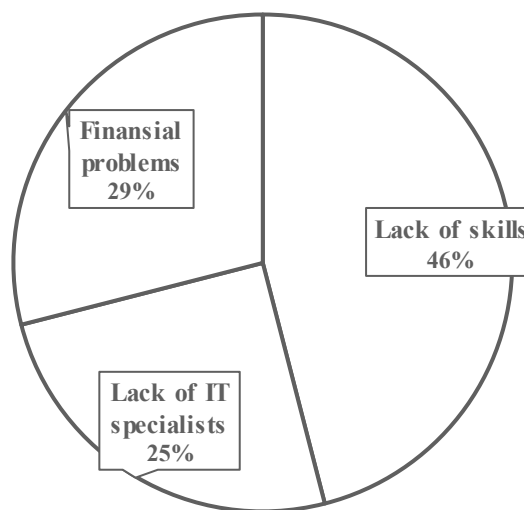


Figure 5. Reasons for disuse of e-commerce in rural enterprises in Latvia, 2014 [10]

RESULTS AND DISCUSSION

Cities and large enterprises have solved all problems regarding successful usage of e-commerce tools. Potential customers are ready to use offered services and serious e-commerce era already started for enterprises specialised to e-services. A different situation is in rural are and especially in small and medium enterprises located in rural areas. From results of research done in end of 2014, 420 respondents were electronically interviewed in Latvian rural areas where the situation was different.

68% of respondents consider that local companies are not active in e-commerce and not using new electronic environment possibilities for business development. SME are not visible in Internet and are not using Internet marketing and e-commerce. 54% of respondents are sure that local companies can find a way for development using e-commerce tools and just 12 % of all respondents have opinion that local rural companies have not any possibility and it is not necessary to develop any business activities in Internet environment. The goal of telephone interviews with management of 20 enterprises done in end of 2014 the goal was to find the reasons for such low usage of e-commerce for business development.

The main reason low usage of e-commerce in business development is lack of knowledge for management (46% of respondents) and second one was – lack of specialists who can give vision how to use e-commerce tools for business development, not just to sell products and services. [9]

CONCLUSIONS

Internet and e-commerce development in any country are influenced by 4 main factors:

- Development of infrastructure, access to network, technologies, local access, public Internet points,
- Level of general education and digital literacy between all groups of population,
- Level of economic development, welfare and prices for access and electronic devices,
- Governance and legislation, public services development [11]

If the main factors effecting positive development and influencing e-commerce development and usage, other existing additional factors, mainly based on education factor influencing trend of development in negative way. It is a lack of e-commerce and e-marketing skills for management of small and medium enterprises and a lack of IT specialists in rural areas.

The main solution to improve this situation is to continue all government and NGO activities especially in rural areas for education of population about e-commerce benefits, organization of special courses for management of small and medium enterprises about possibilities to use e-commerce tools for business development and communication with existing and potential customers.

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