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Review paper

FACTORS INFLUENCING E-COMMERCE DEVELOPMENT IN SERBIA

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Abstract. *In this paper, an overview of current state of e-commerce development in Serbia is presented. Also, some important factors influencing e-commerce diffusion are discussed. The factors are divided into four groups: technical factors, which cover e-commerce telecommunication and logistics infrastructure; legal factors, i.e. necessary laws and regulations on e-commerce; economic factors, and psychological factors and local culture. The study showed very strong correlation between broadband internet penetration and internet usage on the one hand and online shopping penetration on the other hand. Also, strong correlation was found between national economic wealth and online shopping penetration. The development of logistics systems in Serbia, national laws and regulations related to e-commerce, e-payment systems and cultural characteristics and habits of Serbian customers are discussed. The results show that despite the notable improvement in the last few years, the level of e-commerce development in Serbia is still far away from EU28 average. Finally, some recommendations for faster e-commerce diffusion are presented.*

Key words: *electronic commerce, e-commerce development, B2C, influencing factors, e-payment*

INTRODUCTION

Rapid growth of information-communication technologies (ICT) in the last few decades and broad penetration of the Internet opened possibilities for new forms of business. One of the most popular and widespread is electronic or e-commerce, usually defined as "the sale or purchase of goods or services conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders"

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(World Trade Organization, 2013), while the payment and the ultimate delivery of the goods or services do not have to be conducted online. Laudon and Traver (2015) define it as the use of the Internet, the Web and mobile applications to transact business.

E-commerce has had very high growth rates for more than a decade (Kalinic, 2014b). It is assumed that today our planet has approximately 7.4 billion inhabitants, out of which 1.2 billion are already shopping online (Ecommerce Europe, 2015a). As one of the fastest growing parts of commerce today, e-commerce provides significant potential for economic growth in every country, offering numerous benefits to both shoppers and sellers: no time and space constrains i.e. 24/7 availability; access to the global market; wider product offer, lower operating costs, etc. (Kalinić and Sternad Zabukovšek, 2015). E-commerce enables providers to manage customer demands quickly and efficiently. Moreover, in e-commerce it is much easier to monitor shopping activities of customers and to use collected data for demand prediction or marketing campaigns (Demirdogmez, 2015). E-commerce also brings a lot of benefits to the government, including new jobs and taxes, so some countries made significant efforts for the development of e-commerce in their rural areas, in order to reduce the gap between urban and rural parts of the country (European Commission, 2015). It is important to stress that e-commerce development also influences the development of all supportive services, like postal and courier services. Although developing countries have a strong potential for e-commerce development, they are still lagging behind developed countries to a significant extent (Alyoubi, 2015).

The development of e-commerce is also one of the priorities of the EU, and the development of Digital Single Market is one of the seven pillars of the Digital Agenda for Europe, by which two important targets were set: 50% of EU consumers buying online by 2015 and 20% buying online cross-border within the EU (European Commission, 2012).

Serbia signed the Stabilization and Association Agreement with the European Union, which entered into force on September 1st 2013. By this Agreement, Serbia committed itself to perform structural reforms and fulfill a number of objectives, including the development of the information society (Kalinić and Sternad Zabukovšek, 2015). In order to harmonize its path with EU guidelines given in the Digital Agenda and related documents, Serbian government has adopted Strategy for Information Society development in the Republic of Serbia by 2020 (GRS, 2010). This Strategy sets out actions needed to converge to the EU average level of development by 2020 and defines the key objectives, principles and priorities of the development of information society, including telecommunication infrastructure, e-commerce and governmental e-services, like e-health and e-justice. MASMI (2015) research shows that already almost half of Serbian consumers use Internet to inform themselves before shopping.

This paper presents the current state of development of B2C e-commerce in Serbia, and compares it with the EU countries. Also, it brings the analysis of the key factors influencing e-commerce deployment in a developing country like Serbia. Finally, the study gives some suggestions which could improve and accelerate the implementation of e-commerce in Serbia.

1. E-COMMERCE IN SERBIA – STATE OF DIFFUSION

Internet access, as a basis for e-commerce activities, is widely available in many countries and today people use the Internet for a wide range of activities, including buying goods and services online. In the EU28 in 2015, 76% of individuals aged 16 to 74 used the Internet almost every day, and nearly 53% of them shopped online (Eurostat, 2015).

Total turnover of B2C e-commerce worldwide in 2015 was estimated at 1,943 billion Euros, which is an increase of 24% compared to previous year, mainly due to the significant increase in Asia-Pacific region. Three main e-commerce markets are China, United States and United Kingdom, which together account for 61% of all B2C e-commerce sales in the world (Ecommerce Europe, 2015b). Concerning Europe, out of 818 million of its inhabitants, 564 million are using Internet, and 331 million are shopping online (Ecommerce Europe, 2015a). Total turnover of B2C e-commerce in Europe in 2015 was around 424 billion Euros, which is an increase of 14% to the previous year, and the main markets remain United Kingdom, Germany and France.

Although the share of online retail in Europe is still low (6%), it should be stressed that it has high growth rate, and that internet economy contributed to European GDP by 2.5% (Ecommerce Europe, 2015a).

As it can be seen from the Figure 1, e-commerce development in Serbia, represented by the percentage of individuals shopping online, with 33% still significantly lags behind EU average (53%) and Digital Agenda milestone (50%), but encouraging fact is that it is better than several EU members, like Greece, Lithuania, Croatia, Italy, etc., as it will be presented in Figure 2 (Eurostat, 2015; SORS, 2015a).

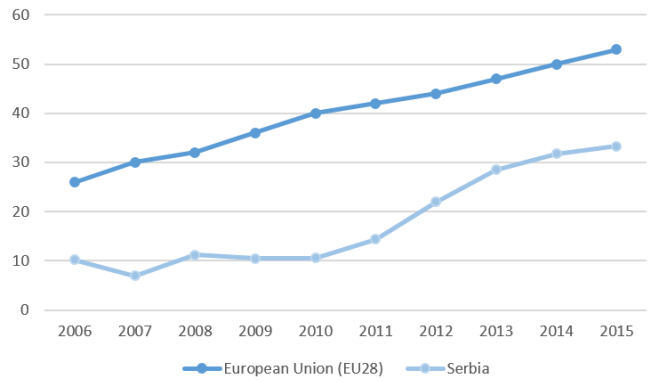

Fig. 1 Individuals who purchased something over the Internet in the last year (in %)

It is very interesting to demonstrate that global financial crisis, started 2008, did not have any negative influence on e-commerce diffusion (Kalinić and Sternad Zabukovšek, 2015). As it can been seen in Fig. 1, e-commerce in the EU was developing at high rates even during crisis years, while in Serbia it was stagnating. Younger Serbian consumers, more educated and with higher income, are buying online more frequently (MASMI, 2015). Almost half of Serbian online shoppers are buying clothes, footwear and jewelry, while about one third of them buy electronic equipment (MASMI, 2015; SORS, 2015b).

Also, as another measure of e-commerce development, we can analyze the percentage of total turnover coming from e-commerce. The data shows that in 2014, the EU28 average was 17%, but there were big differences between countries, from leading Ireland with 37% to the last one, Greece, with only 1% (Eurostat, 2015). Concerning this measure, Serbia is, with only 6%, again among the last ones.

To assess the readiness of countries for e-commerce, the UNCTAD developed composite B2C E-commerce Index, based on four indicators: Internet use, number of secure servers, credit card penetration and postal delivery services (UNCTAD, 2015), and the value of the index is positively correlated to the percentage of the online shoppers. By this research, Serbia is in the 44th place, out of 130 countries, but in front of some EU member states, like Romania and Bulgaria, and some other important markets like Russia and China. The lowest assessments for our country were for the percentage of Internet users and the relative number of secure servers, as the basis for e-commerce, and in the future period special emphasis should be put on these issues.

2. FACTORS INFLUENCING E-COMMERCE DEVELOPMENT

Factors affecting e-commerce diffusion may be classified as various aspects of economic structure, infrastructure, government policy, culture, etc. (Wang and Liu, 2015). The challenges for e-commerce diffusion in developing countries can be quite different from those experienced by developed countries (Alyoubi, 2015; Kapurubandara and Lawson, 2006), and they may include the lack of telecommunications infrastructure (including poor Internet connectivity) and qualified staff for e-commerce deployment, underdeveloped payment systems (e.g. low credit card penetration), lack of reliable transportation and delivery systems, but also the issues more related to the consumer side, like the lack of computer skills among consumers, low income, low computer and Internet penetration rates and high internet access costs (Alyoubi, 2015; Almousa, 2013; Kapurubandara and Lawson, 2006). Alyoubi (2015) also stresses the lack of effective branding and trust issues, the lack of robust logistic networks, including both delivery services and traffic infrastructure, which is very common in developing countries, and the absence of sound legal and regulatory environment for e-commerce. Also, e-commerce raises many issues such as trust, privacy, security, accessibility, awareness, familiarity, etc. (Kabango i Asa, 2015).

Wang and Liu (2015) discuss the influence factors of e-commerce development in China from various perspectives, such as information infrastructure, economic level, educational level, urbanization, technology deployment, living standards, human capital and price index. As the measures of these perspectives, they propose 12 indexes, as independent variables, such as Internet penetration; number of computers per hundred households; number of websites per ten thousand people; mobile phone penetration; real GDP per capita; knowledge index (calculated using the adult literacy rate and the average years of education); urbanization rate, research and development spending as a share of GDP; number of patented applications per ten thousand people; per capita disposable income; proportion-based employment in information industry; and communication price index, while as an output i.e. a measure of e-commerce development, they adopted the proportion of e-commerce turnover accounted for GDP. The results show that the most important factors affecting e-commerce development in China are mobile phone penetration, per capita disposable income, number of computers per hundred households, and urbanization rate, followed by real GDP per capita, knowledge index and Internet penetration.

Sridhar and Sridhar (2006) also proposed a model of e-commerce adoption in developing countries which included telecommunication infrastructure factors like Internet penetration and quality of Internet services, but also other important aspects like security infrastructure and legal framework, payment methods, cultural issues, etc. As key factors affecting e-

commerce volume in Turkey, Demirdogmez (2015) identifies gross domestic product per capita, number of Internet users and legal regulations.

In his study of the barriers to e-commerce adoption in Egypt, Zaied (2012) divided influencing factors into six categories: economical; legal and regulatory; organizational; political; social and cultural; and technical barriers. As the most important he reported technical issues (especially lack of internet security), followed by legal and regulatory and political barriers, while the least important were social and cultural factors.

Travica et al. (2007) analyzed complex model of e-commerce adoption in Serbia which included factors like traffic infrastructure, delivery services, telecommunications, software industry, e-payment/e-banking, legislation, education and customer e-commerce propensity, and concluded that, at the time of research, the influences are controversial i.e. some of the aspects, like software industry, e-payment/e-banking and legislation are in favor of e-commerce deployment, while some others are underdeveloped. As main barriers of faster e-commerce diffusion in Serbia they reported telecommunications infrastructure and ownership and customer beliefs and behavior.

In this paper, factors affecting e-commerce development in Serbia are divided into four main groups: technical factors, which cover e-commerce telecommunication and logistics infrastructure; legal factors, i.e. necessary laws and regulations on e-commerce; economic and financial factors and finally, psychological and cultural factors, all of which will be discussed in more detail in the following chapters.

2.1. Telecommunications infrastructure and logistics

The accessibility of technical and telecommunications infrastructure is of vital importance for e-commerce diffusion. Although some studies adopt computer penetration in households as an influencing factor, in our study the stress is on internet access, as the main prerequisite for e-commerce. One of the reasons is the rapid growth of mobile technologies, which enables consumers without PC computers to access the Internet and to shop using their mobile devices (mobile or m-commerce). Internet penetration and speed are very important factors in higher e-commerce diffusion. It is noticeable that the countries with high penetration of fast and affordable internet connection also have high percentages of e-shoppers. The percentage of households with internet access, percentage of individuals using Internet almost every day and the percentage of individuals who bought something online during last year in EU28 countries and Serbia in 2015 are presented in Figure 2 (Eurostat, 2015; SORS, 2015a).

It can be seen that our country lags behind almost all European countries, and that more effort should be put on the telecommunications infrastructure development. Also, there are high differences between urban and rural areas i.e. 70% of urban households in Serbia have internet access, while only 53% of rural households have the same (SORS, 2015b).

Today, it is especially important not to just have an internet connection, but to have a fast one, because of increasing demands for complex services and transfer of high amounts of data, like for video streaming (Kalinic, 2014b). Therefore, more relevant factor for e-commerce diffusion is high-speed broadband internet penetration rate, as many e-commerce services strongly depend on it. As it can be seen in Figure 3, there is a strong linear correlation between the broadband internet penetration rate and the percentage of online shoppers in the EU28 countries and Serbia (Pearson's r=0,856) (Eurostat, 2015; SORS, 2015a).

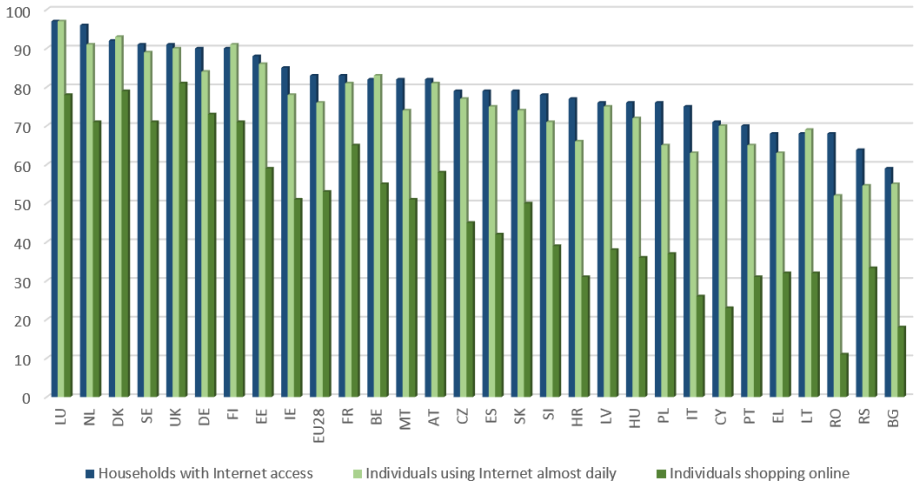

Fig. 2 Households with internet access, individuals using Internet almost every day and individuals shopping online

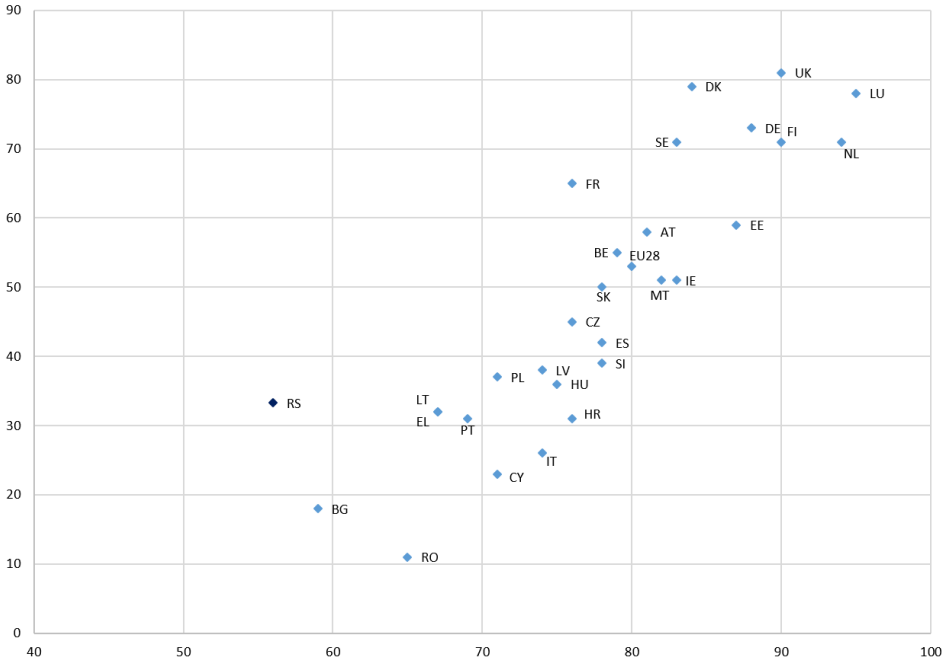

Fig. 3 Correlation between broadband internet penetration in households (in %) and individuals who bought something online in last 12 months (in %)

Another important factor is the actual usage of the Internet by the individuals. This factor is analyzed in many studies and it is also included in UNCTAD's B2C E-commerce Index (UNCTAD, 2015). Figure 4 presents strong linear correlation between the percentage of the individuals using the Internet almost every day and the percentage of online shoppers in the EU28 countries and Serbia (Pearson's r=0,937) (Eurostat, 2015; SORS, 2015a).

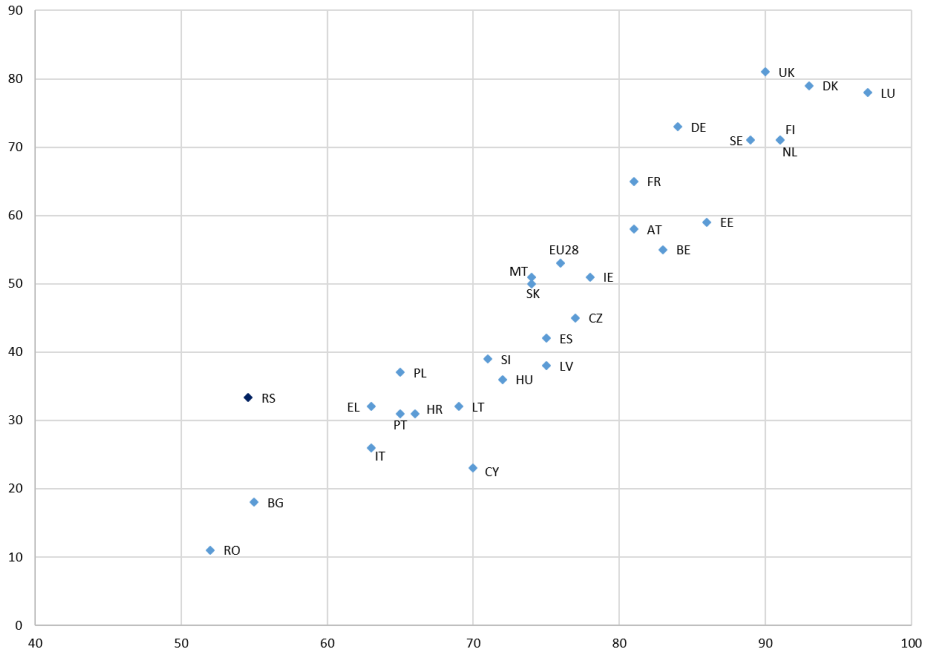

Fig. 4 Correlation between individuals who use the Internet on daily basis (in %) and individuals who bought something online in last 12 months (in %)

Although the actual usage of e-commerce in our country is still very low, from previous two Figures it can be concluded that Serbia is "above the line" i.e. it has more online shoppers than could be expected, based on broadband penetration and internet usage.

Mobile devices are becoming crucial for many commercial activities, and for several years m-commerce even had three-digit growth rates. The most important devices for commerce are mobile phones (especially smartphones) and tablets. In developed countries the number of mobile subscriptions is even higher that the number of inhabitants. For example, mobile penetration (the number of mobile subscriptions per a hundred inhabitants) in European Union is 132%, while in the leading Latvia it is 231% (Eurostat, 2015). The situation in Serbia is quite good on this issue, as mobile penetration is 131%, or around EU28 average (RATEL, 2015).

Taking in mind that e-commerce websites require security software, one of possible assessments of the quality of e-commerce infrastructure is the number of secure servers, which use encryption technology for Internet transactions (UNCTAD, 2015). The results show that, by this parameter, Serbia is well behind all EU28 member states, and even behind some other European countries like Macedonia.

Logistical problems represent one of the main barriers to the e-commerce development. Underdeveloped delivery systems may collapse during high demand peaks, like national holydays, when they have to process and deliver a huge number of items in a short time (Alyoubi, 2015). It is no wonder that UNCTAD (2015) included the share of population having mail delivered at home as one of the factors constituting B2C E-commerce Index, as the lack of reliable address and postal systems, like in same underdeveloped countries in Africa and Asia, may hinder e-commerce development. Delivery problems are particularly hard in cross-border e-commerce, where they may include custom delays, changes in shipping costs, lost goods, lengthy delays in shipping to customers, etc.

For many years e-commerce has been seen as a main growth driver of postal services (IPC, 2015). International postal deliveries of small parcels have experienced a very rapid growth in the past decade, mainly as a result of cross-border e-commerce (UNCTAD, 2015). The survey of Oxford Economics (2015) showed that 30% of e-commerce sales in Europe are dependent on express delivery services (In Netherlands and Italy it is more than 45%). Another study of Copenhagen Economics (2013) confirmed that the improvement of delivery services is an important driver to enhance e-commerce. This study included 3,000 e-shoppers in six EU countries and revealed that problems related to delivery services are a key reason for customers for not buying online. Study shows that delivery-related problems are responsible for 68% of the situations where e-shoppers abandoned the shopping cart before finalizing the order, although they have already started shopping i.e. they have added items to their shopping cart. The primary reasons are high delivery costs and long delivery times.

The main players in this area are national postal operators, international courier services like DHL, UPS and FedEx and a number of regional and national courier service providers. It is found that e-commerce related shipment volumes are fairly evenly distributed between national postal operators (approx. 40%), multinational integrators (40%) and local or regional carriers (20%) (Copenhagen Economics, 2013). Here it should be stressed, due to the barriers to the cross-border e-commerce sales (Kalinic, 2014b), on average, 85 per cent of all e-commerce shipments are domestic (Copenhagen Economics, 2013).

The situation in Serbia is not so bad on this issue, as address and postal systems are well developed and 99% of the population have their mail of packages delivered at home (UNCTAD, 2015), using services of national postal operator Post of Serbia, all important international courier service providers as well as several regional and national ones.

2.2. Legal framework

The role of the government is extremely important in the area of legislation and the creation of positive ambient for e-commerce development i.e. supportive legal and regulatory environment (Alyoubi, 2015). Generally speaking, developing countries are lagging behind developed counties in this area, and very often development is delayed because of slow law adoption process, despite the fact that technology and the market are already there. In most countries, e-commerce is usually covered by complex legal frameworks including general consumer protection and contracts laws, specific e-commerce and e-business laws, legislation related to privacy, copyright and data protection and telecommunications laws and regulations, etc. (Kalinic, 2014b).

In the case of Serbia, e-commerce is regulated primarily by the Law on E-Commerce, the Law on Electronic Document and the Law on Electronic Signature. The Law on E-

Commerce, adopted in 2009 and revised in 2013, is the main national legal document in e-commerce implementation. The Law on Digital Signature is also one of the basic legal requirements of e-business and e-commerce. In our country it was adopted in 2004, and it is in line with common practices and regulations of the EU and United States (Travica et al., 2007). Newly adopted, the Law on Consumer Protection and the Law on Payment Services (both adopted in 2014, in power since October 1st, 2015), brought some important novelties for the e-commerce, which should increase the consumer trust and enable new payment methods. For example, the Law on Payment Services enables the easier operation of new e-payment providers and e-money institutions.

Generally speaking, a lot has been done in Serbia in the last several years and the legal framework in the area of ecommerce development may be assessed as well developed, with all important laws in the areas of e-transactions, consumer protection, privacy and data protection and cybercrime already in power (UNCTAD, 2015). What may still be an issue is legal framework's efficiency and the implementation of adopted regulations. Also, there is often the lack of compliance among some of the regulations. For example, the parents in Serbia have the right on tax refund for baby equipment, accomplished by presenting fiscal receipt from the shop. As, by the law, online shops of baby equipment do not have an obligation to give fiscal receipt, online buyers are in unfair position compared to offline buyers, because they cannot get tax refund (Kalinic, 2014b).

2.3. Economic and financial factors

Some of the factors which are not easy to improve are the national economy and people's living standards. In countries with higher living standards, consumer's demands for high quality and differentiated goods are higher, which represents a very good environment for e-commerce development. The positive effects go in both ways, i.e. positive moves in national economy promote growth of e-commerce, and in turn the e-commerce development promotes further development of national economy (Wang and Lin, 2015). Travica et al. (2007) also identified low living standards and high interest rates for credit cards as limiting factors in the use of e-commerce. There could be found a strong correlation (Pearson's r=0,782) between economic wealth of the nation, represented by the GDP per capita and the percentage of online shoppers, as presented in Figure 5 (Eurostat, 2015; SORS, 2015a).

Another economic factor that may influence e-commerce development is the offer on the national e-market, since it was already presented that more that 80% of e-sales are performed on the national markets. The percentage of companies selling their products and services via the Internet for EU28 countries and Serbia in 2015 in presented in Figure 6 (Eurostat, 2015; SORS, 2015a).

Surprisingly, Serbia has a very good results on this measure, as, according to national statistics data, 23% of enterprises in Serbia were selling via the Internet, which is better than EU28 average (18%) and better than most of EU countries.

In order to successfully implement e-commerce strategy, the state and its financial system should provide various e-payment systems and mechanisms (Alyoubi, 2015). Well-developed and reliable payment systems and mechanisms are essential for the successful development of e-commerce. The existing solutions include a wide selection of online payment mechanisms such as payment cards, mobile payments, e-cash, but in many countries, especially developing ones, conventional offline systems such as cash-on-delivery (CoD) are still the most popular.

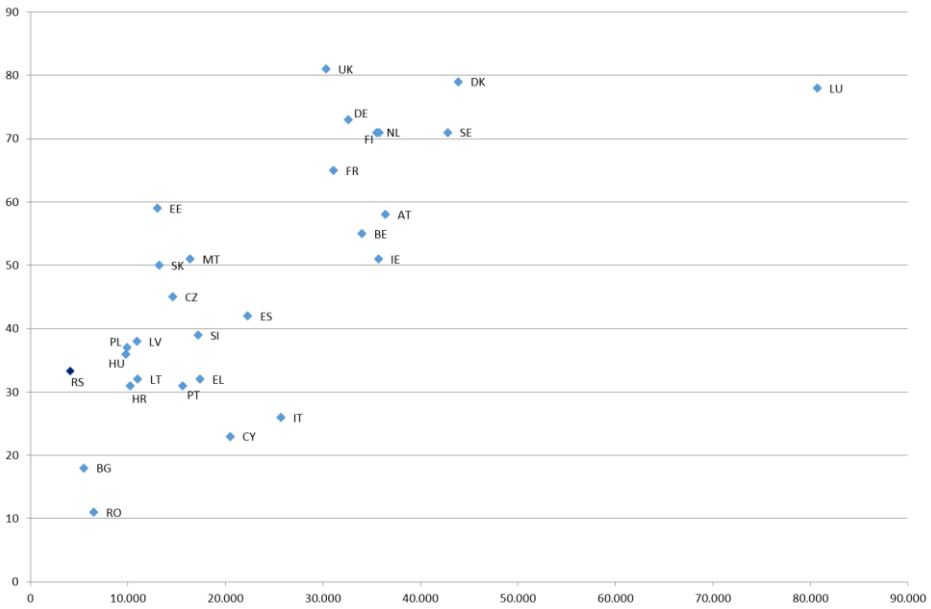

Fig. 5 Correlation between GDP per capita (in Euros) and individuals who bought something online in the last 12 months (in %)

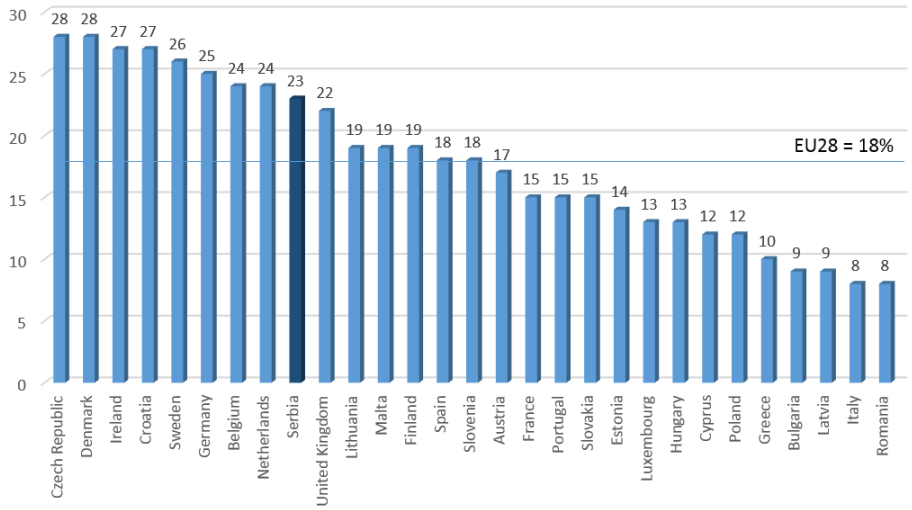

Fig. 6 The percentage of enterprises selling via the Internet

The most popular payment method in Serbia is still cash-on-delivery, which is used by 80% of customers (MASMI, 2015), while other options like payment cards (19%) and off-line pre-payment (10%), are much less popular. Only 5% of Serbian consumers use

PayPal, and the same percentage uses e-banking. This is completely different from the situation in e.g. United States, where payment cards (both credit and debit) account for 78% of all online payments, while the most popular alternative is PayPal (Laudon and Traver, 2015). The same stands for the general world statistics (Birovljev, 2015). It is expected that in the near future this trend in Serbia will be changed, also taking in mind new Law on Payment Services and its possibilities. As already stated, the credit card penetration is one of key factors included in UNCTAD's E-commerce Index. In 2015, there was about 6.4 million payment cards issued in Serbia, out of which approximately one half is active i.e. with at least one transaction quarterly (NBS, 2016). Based on the statistical data of National Bank of Serbia (NBS, 2016), in 2015 Serbian customers spent more than 110 million Euros using payment cards in internet shopping, out of which they spent approximately three quarters on foreign websites, and the remaining quarter at domestic online shops.

2.4. Consumer psychology and habit

National culture and habits may have significant influence on e-commerce acceptance. In some cultures, like in Latin America and southern Europe, shopping is a social event, and people prefer face-to-face contact in the markets or shops than shopping via Internet, and this also stands for Serbia. Kapurubandara and Lawson (2006) also reported that in countries like Sri Lanka and India, face-to-face contact with seller is very important for overall shopping experience.

Customer readiness for e-commerce is one of the key conditions for successful e-commerce development (Alyoubi, 2015). One of the key psychological factors influencing intention to adopt e-commerce is perceived usefulness, because, like any other new technology, consumers would start using e-commerce only if they find it useful and more convenient that its alternatives like shopping in regular shops or using tele-shops. Many research models of technology adoption like TAM (Technology Adoption Model) or UTAUT (Unified Theory of Acceptance and Use of Technology) are based on the concept of technology usefulness. Closely related to usefulness is awareness i.e. the consumer perception and knowledge on e-commerce, which is usually raised by social influence or education (Kabango i Asa, 2015).

Awareness is also closely related to trust; i.e. usually the more consumers are aware of all the benefits but also the threats, the more they are trustful to it (Kabango i Asa, 2015). Some of the main consumer concerns are security and confidentiality issues (Demirdogmez, 2015). Many consumers are still unsure about the security and privacy of their personal and financial information during online shopping (Kabango i Asa, 2015; Kalinic, 2014b). Therefore, trust is a very important factor in e-commerce adoption. It gives the consumers faith to purchase services or products even if the e-seller is unknown (Kabango i Asa, 2015). Also, trust should be analyzed as a two-way street i.e. the trust of sellers in customers is equally important to the opposite one (Travica et al., 2007). Kool et al. (2011) found that trust plays more important role in e-commerce acceptance than in traditional commerce because, compared to buying in traditional shops, consumers perceive more uncertainty or risk when buying online. Other important predictors of intention to adopt e-commerce are social influence, perceived ease of use, cost, perceived enjoyment, etc.

Travica et al. (2007) report that typical Serbian consumer is mistrustful, more oriented to traditional ways of commerce. Concerning national culture and group psychology, it appears that trust is a major driver of e-commerce in Serbia (Travica et al., 2007). When buying

online, about 74% of Serbian consumers prefer domestic online shops, 11% of them usually buy on foreign ones, while the remaining 15% is buying on both of them (MASMI, 2015). The customers prefer domestic online shops because they believe that they are safer, and because they understand the language and prices are reasonable, while the advantage of foreign websites is that they offer products and services that cannot be purchased in Serbia. Serbian consumers also, because of perceived security and trust, prefer cash-on-delivery or some other classical method of pre-payment.

Training and education are some of the most critical factors for successful e-commerce development (Alyoubi, 2015). Developing countries face digital divide i.e. a significant part of inhabitants has a low level literacy in computer usage and English language, which are fundamental for e-commerce. So, more efforts are needed in the area of education, including areas specific to e-commerce, which in turn will increase perceived trust and customer readiness to adopt e-commerce. The government should provide more educational programs in order to build up the awareness of consumers and companies using different means like mass media and educational institutions (Kabango i Asa, 2015). Today in Serbia, a lot of consumers are still not aware of all the benefits of e-commerce, and therefore additional efforts in marketing and education are needed. One of the main objectives of on-going EU-funded IPA project E-business development, with the budget of 2.5 mil. Euros, is to raise the awareness of the Serbian citizens and companies on the benefits of e-commerce and to educate them in safe e-commerce use.

CONCLUSION

E-commerce has been one of the main engines of the retail sector growth for the last several years. Despite the fact that it accounts for only 6% of the total retail sector globally, e-commerce has a double-digit growth, and this trend will continue. It should not be forgotten that also a lot of purchases in traditional shops are influenced by e-commerce and the Internet, as many consumers research on the Internet before they make offline purchases. The results presented in this paper show that e-commerce in Serbia is on a good track and has a good perspective, but a lot of still remain to be done in order to reach its full potential.

Good e-commerce infrastructure is the foundation of successful e-commerce development, capable to support increasingly complex transaction process (Wang and Lin, 2015), so in order to accelerate future development of e-commerce in Serbia, further investments in telecommunications network are needed. Some improvements in logistics and delivery systems would be welcome. Also, special attention should be given to mobile commerce, as an e-commerce segment with the highest growth rate.

In the legal area, further harmonization of e-commerce regulations with the relevant EU directives and rules, synchronization among national regulations and more efficient implementation of legal framework is needed. The support of the government in creation of positive environment is also a must.

Serbian e-market does not have well developed e-payment systems, and this should be improved in the future period. Full access to all PayPal services is just one of possible steps. Also, in many countries with underdeveloped payment system (e.g. some African countries) the focus is on the development and implementation of alternative payment methods, like mobile payment systems, and these projects give very good results.

Finally, further raise of awareness and education of the customers and companies through campaigns, educational programs and public workshops is necessary. This will spread the importance and benefits of e-commerce, and raise the trust, as one of the main barriers to e-commerce diffusion.

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FAKTORI KOJI UTIČU NA RAZVOJ ELEKTRONSKE TRGOVINE U SRBIJI

U ovom radu je prikazan pregled trenutnog stanja razvoja elektronske trgovine u Srbiji. Takođe, analizirani su neki značajniji faktori koji utiču na rasprostranjenost e-trgovine. Faktori su podeljeni u četiri grupe: tehničke faktore, koji pokrivaju telekomunikacionu i logističku infrastrukturu e-trgovine; pravne faktore odnosno neophodne zakone i propise koji se odnose na e-trgovinu; ekonomske faktore i psihološke faktore i nacionalnu kulturu. Studija pokazuje veoma jaku korelaciju između penetracije širokopojasnog Interneta i upotrebe Interneta sa jedne strane i penetracije kupovine na Internetu sa druge strane. Takođe, jaka korelacija je utvrđena između nacionalnog ekonomskog bogatstva i penetracije kupovine na Internetu. U radu su razmatrani i razvijenost logističkog sistema u Srbiji, nacionalni zakoni i propisi u oblasti e-trgovine, elektronski sistemi plaćanja kao i kulturne karakteristike i navike potrošača u Srbiji. Rezultati pokazuju da uprkos značajnom napretku poslednjih godina, nivo razvijenosti e-trgovine u Srbiji je još uvek značajno ispod proseka Evropske Unije. Konačno, date su neke preporuke za brže proširenje e-trgovine u Srbiji.

Ključne reči: elektronska trgovina, razvoj e-trgovine, B2C, uticajni faktori, e-sistemi plaćanja