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## Article

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Academic journal of economic studies

## Provided in Cooperation with:

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*Reference:* Vargas, Mădălina-Vanesa (2018). Analysis of the e-commerce development in the Balkans.  
In: Academic journal of economic studies 4 (3), S. 63 - 96.

This Version is available at:

<http://hdl.handle.net/11159/2496>

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## Analysis of the e-Commerce Development in the Balkans

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**Abstract** *This study analyses e-commerce data reports of the countries from the Balkan Region. Data published by Eurostat, Statista, World Trade Organisation and Internet World Stats are compared and processed. The results are evaluated in order to have an overview and a comparative analysis of the region. Eight countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania, Serbia and Slovenia) will be analysed from two different points of view: the internet penetration rate and smartphone users' proportion. It is expected an increasing number of users in each country, but the results show us that the population value and the GDP of the country are important factors in the e-commerce level of each one. All of the above-mentioned countries have a communist history, but the evolution of each of them is very different. Croatia, Slovenia and Romania are some of the most developed countries from the Balkan Region regarding e-commerce concept, while Albania and Bosnia and Herzegovina represent the less developed countries in the specified region.*

**Key words** e-Commerce, e-business, Balkans, internet penetration, Southeastern Europe

**JEL Codes:** M16, O11, O57, O52

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### 1. Introduction

Market forecasts confirm that electronic commerce has a great future. Business transactions are changing rapidly under the influence of electronic communication technologies. Although it is also expected to be business-to-consumer e-commerce worldwide a successful sales and communication channel, E-Commerce is currently not meeting the hoped expectations in broad consumer strata (Lallana, 2002). This depends not least on the dissemination of the Internet together, which does not progress equally in all population groups. Based on relevant studies, this article will discuss the use and acceptance of Internet and business-to-consumer e-commerce in the Balkans based on the Internet penetration rate, but also the smartphone penetration rate, because the device most used for online purchases tends to be the smartphone.

### 2. Literature review

A comparative analyse between the Balkan countries was not made by now, due to the fact that e-commerce statistics for this countries are not very popular and you cannot find exact numbers for every state. In some countries like Kosovo, Macedonia or Bosnia and Herzegovina, the e-commerce sector is placed at its beginnings and an evolution of the online purchases in the last 10 years, for example, is almost impossible. There are some journals and specific books for each of these countries, but not really an analysis between them.

The first research upon the long-term use of the business model concept was performed by Ghaziani and Ventresca (2005) who examined its frequency in academic journals from 1975-2000. There were 1,729 publications containing the expression "business model". Only 166 were published between 1975 and 1994. The remaining 1,563 appearances were part of the 1994-2000 period. After an extended analysis up to 2009, Zott *et al.* (2011) reveal a dramatic increase in the appearance of the term in academic journals (1,202 new appearances), but even more spectacular in non-academic ones (8,062 appearances). However, the explosive interest and extensive use promoted the dispersion rather than the convergence of perspectives. Numerous definitions have been proposed, the business model being described either as an architecture (Timmers, 1998) or as a conceptual tool (George and Bock, 2009; Osterwalder, 2004; Osterwalder *et al.*, 2010), a mix of elements (Johnson *et al.*, 2008) or even a company description (Magretta, 2002). The early e-commerce literature attempted to provide a conceptual framework for classifying business models developed in the online environment according to the operations performed. Timmers (1998) uses two dimensions (functional integration and innovation) to individualize multiple model classes and identify 11 business models deployed in the electronic environment, mostly developed through the evolution of the Internet and basic technology.

### 3. Methodology of research

This article is the result of a deduction and induction, investigation, critical and comparative interpretation of numerous national and international studies on the research theme. It is a presentation of the current situation of the electronic commerce and its implications.

The paper starts with the hypothesis of e-commerce growth. Empirical analysis was conducted in few steps. First, the online purchase for the last period was analysed for the researched countries. The analysis was run for Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania, Serbia, and Slovenia. Two chosen variables for e-commerce analysis are as follows: Internet use expressed as a percentage of individuals with last Internet use in the last 12 months and Internet purchases expressed as a percentage of individuals with last online purchase in the last 12 months. The last available data for those selected variables were for 2016.

#### 4. Results and discussions

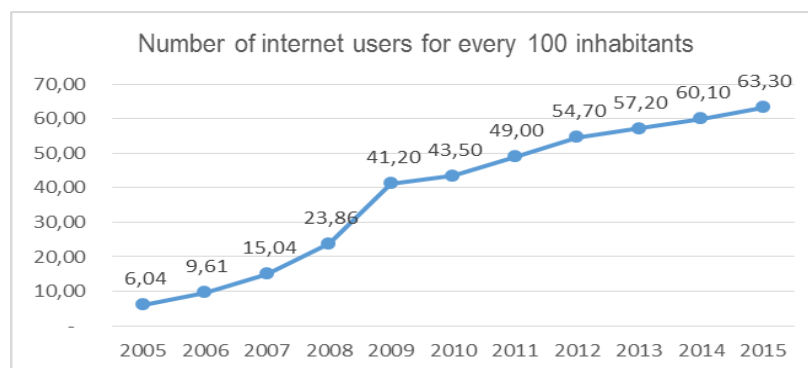
E-commerce is an application field through which customers order products or services through the Internet. (Keith, 1999) That is, to operate an e-commerce application, if one party makes a request of the service/product and sending money, the other will provide products or services required (Snider and Ziporyn, 1992). Nowadays, technology has made it possible for almost everything that we see in different stores or shops; you can buy them all through the internet. To function properly, website transactions must first have a mechanism to get order, or orders and also a mechanism for payment. One of the ways to execute these payments is through credit cards or debit customers. Also, company or firm must ensure and enable the product be distributed to customers on time, or different services be carried out in time (Lallana, 2002). But to make all this happen, consumers must first be registered in the relevant website, giving all relevant data to be required to achieve the required services. This data is stored and kept in secret (at least it should) and will be available to firms in which the order or request. To identify the consumer, the pair username and password is used. In short, to operate e-commerce customer must find the right online company or shop, to optimize product or service, and to confirm the order made. Payment mechanism makes the transfer of money from the account of consumer in a bank account server and then the seller delivers goods or performs various services are commissioned. The most important types or models of e-commerce applications are the following: Business-to-Consumer (B2C) - Interactions business-to-consumer, Business-to-Business (B2B) - Interactions business-to-business, Consumer-to-Consumer (C2C) - interaction Customers -Peer-to-Peer (P2P) - interaction colleague colleague Mobile Commerce (Mcommerce) - mobile trade. Regarding this research, we focus more on B2C model, which means cooperation between different businesses or firms with customers, or in other words the interaction seller-buyer. Model B2C e-commerce application, facilitates the sales and purchase enterprise customers, enabling those services via the Internet.

##### 4.1. Balkan Region

The Balkans, or the Balkan Peninsula, is a geographic zone in the southeast part of Europe with various and controversial definitions. This region is named after the Balkan Mountains, ranging from the Serbian-Bulgarian border to the Black Sea (World Atlas). There is no general agreement about the components of the region. The Balkans are usually characterized as comprising Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo, Macedonia, Montenegro, Romania, Serbia and Slovenia - with all or part of each of these countries within the peninsula. Parts of Greece and Turkey are also located in the geographic region generally defined as the Balkan Peninsula, and many descriptions of the Balkans cover these countries (Crampton, et al., 2015). Some define the region culturally and historically and others geographically, though there are even different interpretations among historians and geographers.

##### 4.2. Albania

The Albanian population measures 2.91 Million people with an urbanization grade of 59%. The nominal GDP increased from 3.4% in 2016 to 3.8% in 2017.



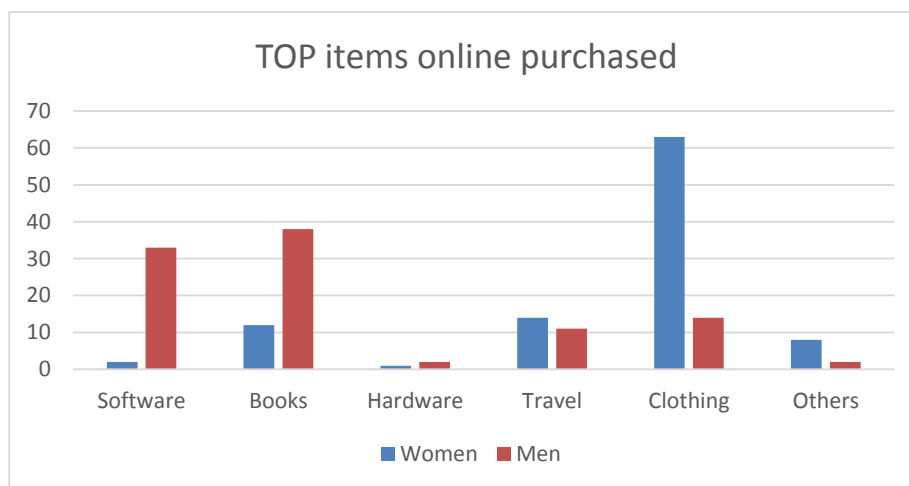
Source: Own representation based on data from <http://www.internetlivestats.com/internet-users/albania/>

Figure 1. Number of internet users for every 100 inhabitants

The main reasons for this increase were the private investments and personal consumption expenditures. This growth stimulated the increasing number of available jobs (Heritage, Albania). E-Commerce data is hard to find, because this type of commerce is at the beginning. The number of household that have internet access is about 1.93 Millions or just 63.3% of the total. In addition, online purchases and online payment methods are at the beginning of the road. Very few merchants provide online payments and the population is not used to pay online. The most used online payments are in the banking sector because banks provide e-banking systems. The Internet penetration rate stands at 63%, with 1.93 million Internet users and 4.75 million mobile subscriptions. Among those are 1.5 million, which are active social media users, while 45% of the population goes mobile for the social media.

#### 4.3. Bosnia and Herzegovina

Bosnia and Herzegovina holds a transition economy, having a population of about 3.8 million. The GDP-per-capita value in 2015 was \$ 4,670, with a total nominal GDP of about \$ 18.5 billion. Bosnia and Herzegovina's Central Bank reports GDP growth of 2.8% for the year 2016 (CIA Gov). E-commerce is not so well developed. Bosnia and Herzegovina citizens and businesspersons mostly do not shop or do business online. Despite many companies having websites, online credit card orders are very rare. The Internet penetration rate is estimated at 68 percent (2016 Internet World Stats). The financial sector is the foremost of many commercial banks, which are offering e-banking to their clients.



**Source:** Own representation based on survey "E-commerce in Bosnia & Herzegovina" by Şerife Özlen, Merdzana Obralic and Emir Čičkušić (International BURCH University)

Figure 2. TOP items online purchased

The items that are most often online bought differ between women and men. As it can be seen above, the items that males usually tend to buy, in order of the biggest to the smallest quantity are books, software, clothing, travel (airline tickets, hotel reservations), computer hardware and then others were approximately evenly distributed. Whereas females tend to buy mainly clothing items online, with some responses of books and magazines, as well as travel (airline tickets and hotel reservations). The most popular online stores are OLX, eBay and Amazon. Popular local websites are also eKupi.ba, citydeal.ba, Fedi Arts and kupujmo.ba. The most Facebook page is MBuy - Monika Posredovanje.

#### 4.4. Bulgaria

Bulgaria's population is estimated at about 7.13 million, having a total GDP of \$ 52.4 billion and a GDP-per-capita of \$ 7,392, which is estimated at \$ 8,988 by 2021. Bulgaria, a former communist country that joined the EU in 2007, has an open economy that has shown strong growth all along its history. There are currently 2.58 million e-commerce users in Bulgaria, while another 860,000 are expected to shop online by 2021. Four years from now these 3.44 million e-commerce users will be spending an average of \$ 225.56 online (Statista, 2017).

The Internet penetration in Bulgaria stands currently at 64% and is expected to reach 70% by 2021. Smartphone penetration is slightly lower (47.6%), but there is an expectance to rise up to 60.2% over the next four years (export.gov, 2017). The breakdown of Internet usage across age groups gives a better picture of the Bulgarian eCommerce market: 97% of 16-24 year olds, 92% of 25-34 year-olds and 88% of 35-44 year olds register daily. The older generations also regularly register with 45-54 year olds and over 55 year olds with a daily penetration rate of 79% and 74%, respectively.

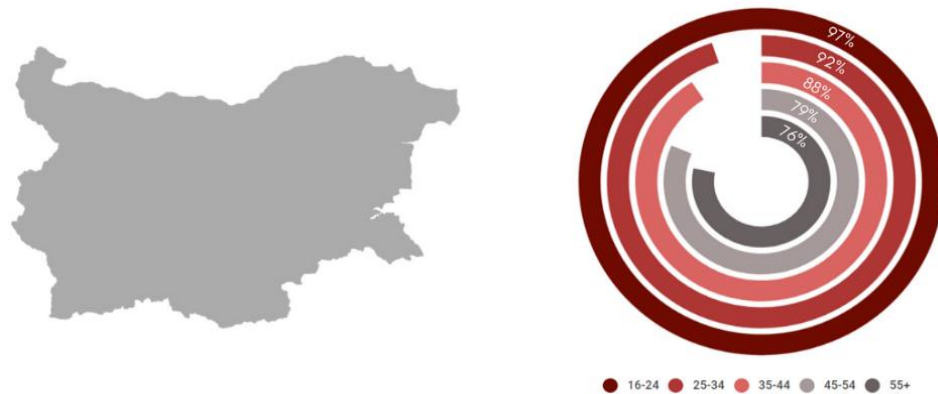


Figure 3. Daily online shopper internet usage in Bulgaria

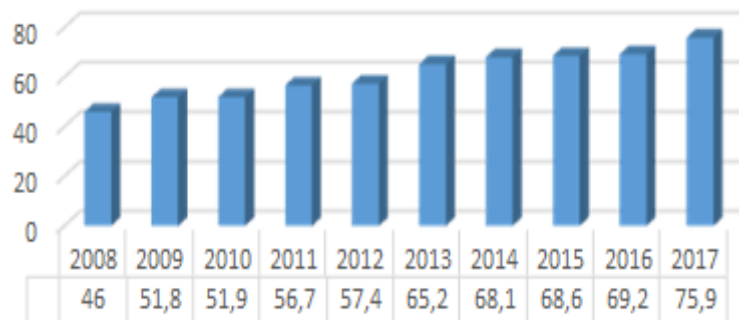
Each month, over 32% of Bulgarians become active visitors of virtual places such as Facebook, YouTube, Google+ and Twitter, the leading social networks.

#### 4.5. Croatia

Although Croatia still holds the place as one of the richest republics of the former Yugoslavia, the Croatian economy suffered greatly during the 1991-1995 war. There are currently 1.77 million e-commerce users in Croatia and by 2021, another 150,000 users are expected to begin shopping online. Over the next four years, these 1.92 million e-commerce users will be spending an average of \$ 299.15 online. According to Mastercard's 2017 Master Index Report on Europe-wide e-Commerce, 87% of Croatian cardholders and 39.5% of Internet users are online at least occasionally.

#### 4.6. Republic of Macedonia

E-commerce is increasing in Macedonia, but the practice is still relatively poor in terms of local retailers and online shoppers. The Internet penetration value for 2017 was at 75.9 percent; 56 percent of Internet users could access the Internet via smartphone. Among those with an Internet connection, about 19,3 percent ordered online in 2016, with 40.8 percent from local companies, 20.7 percent from EU and 58.6 percent from other parts of the world (Worldbank, 2018).



**Source:** Own representation based on data from <http://www.internetlivestats.com/internet-users/macedonia/>

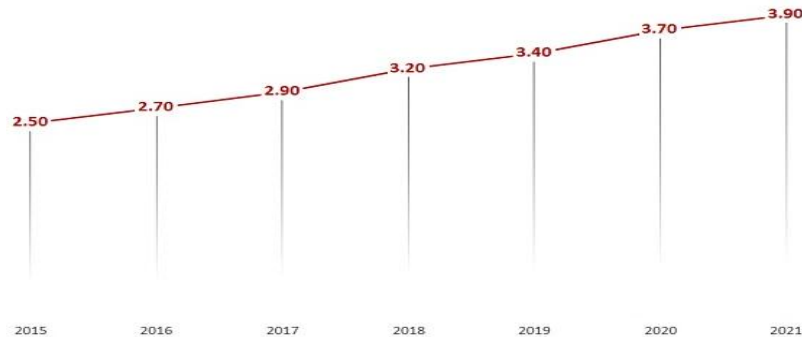
Figure 4. Internet penetration (% population)

#### 4.7. Romania

There are 19.71 million people currently living in Romania and GDP value of \$ 187.59 billion. The value for the GDP-per-capita stands at \$ 10,406, expected to reach \$ 13,757 by 2022. Romania represents one of the largest e-commerce users in southeast Europe. The e-commerce market was estimated at about € 1.4 billion in 2015, compared to € 1.1 billion in 2014 and € 600 million in 2013. Nowadays, total Romanian e-Commerce revenue in all product categories is \$ 2.8 billion (World Economic Outlook Database, 2016). Electronics & Media is currently the leading product category in Romania with a market share of \$ 788.1 million, followed by Fashion \$ 538.3 million. The count of Internet users reached 14.3 million in 2017 with a national internet penetration rate of 73,5%. (ANCOM, 2017) While the smartphone penetration rate in Romania was estimated at 56 percent in 2016, its value rose up to 70 percent in 2017 and to 83 percent in 2018 (The World Factbook, 2018).

#### 4.8. Serbia

There are currently 2.9 million e-commerce users in Serbia, and another 2 million users will be shopping online by 2021. These 3.9 million e-commerce users will account for 69% of the total population. The average user spends \$ 93 online, which will reach to \$ 112 by 2021.

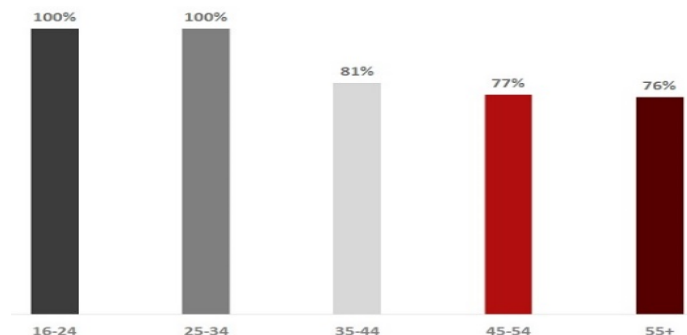


**Source:** <https://www.eshopworld.com/blog-articles/serbia-ecommerce-insights/>

Figure 5. Number of users (In millions)

#### 4.9. Slovenia

The online deals with consumer goods have strongly increased in Slovenia during recent years, which also happened for the use of credit cards for personal and online transactions. About 90% of Slovenes aged 10 to 74 and almost all companies with more than 10 employees have broadband Internet access (Heritage, 2016). Currently 1.2 million e-commerce users are shopping in Slovenia, and another 20,000 will be shopping online by 2021. These 1.4 million e-commerce users will hold up to 80% of the country's population. The average user spends about \$ 249 online, reaching \$ 295 by 2021 (Focus Economics, 2018).



**Source:** <https://www.eshopworld.com/blog-articles/slovenia-ecommerce-insights/>

Figure 6. Daily internet usage rate by age group in Slovenia

### 5. Conclusions

The internet era has changed everything, even our way of doing shopping. With very few simple actions, we can buy what we have seen or desired. It is an industry that in the world, only last year, recognized record sales figures in a trillion. In the Balkan region, electronic commerce is booming. The official figures are still lacking, but the market operators say that sales have increased significantly compared with two years ago. The main reason for this growth is clearly a higher GDP rate mostly because of the increased consumption expenditures. This means the income of the population is higher. A higher income represents longer working hours and results in less time. This drop in leisure time is visible in the growth of online shopping and the search for more efficient and quick solutions to meet our needs and desires.

The GDP rate is not the only factor of the increasing number of the online purchases. The broadband access market is deregulated and free, the networks are nowadays of high quality especially in countries like Romania or Croatia with a high internet penetration rate. The top of this ranking is clearly Croatia and Slovenia. E-commerce in Croatia is increasingly evolving due to the increasing use of Internet for business (figure 8).



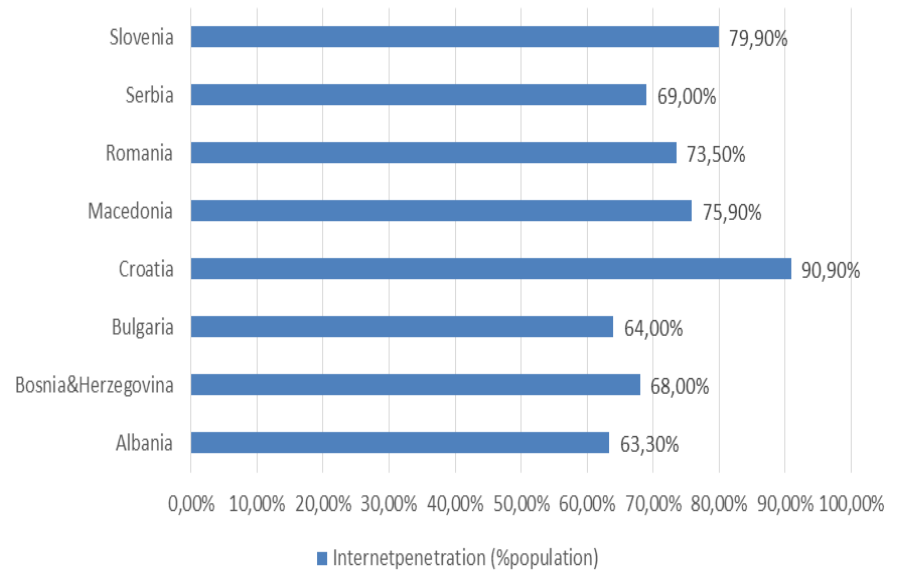
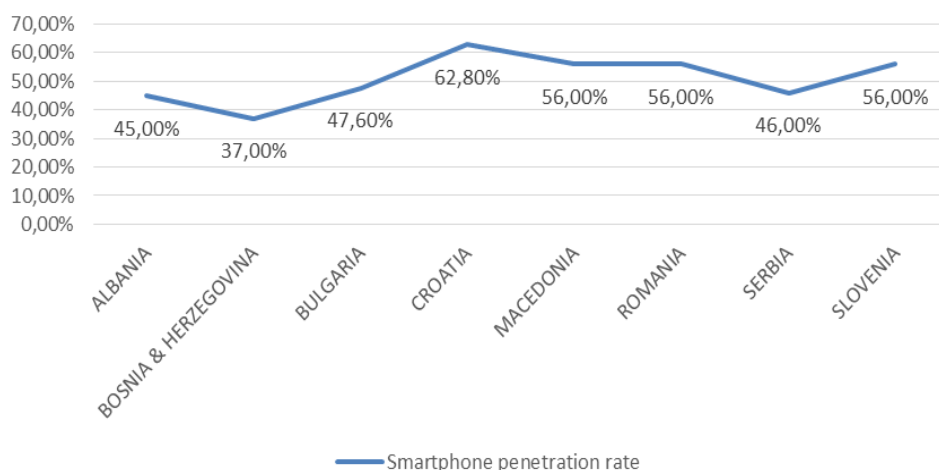


Figure 7. Higher income – less free time – more online shopping

Source: Own representation

Figure 8. Internet penetration in Southeastern Europe



Source: Own representation

Figure 9. Smartphone penetration rate in Southeastern Europe

10 years since the first iPhone appeared and the smartphone seems to be the most preferred device to get online, surpassing even the desktop. Almost a third of the global population use a smartphone nowadays and this number will increase constantly. Consumers show an addiction of this device and is one of the most popular disruptive technologies ever seen. Like the internet penetration rate, there is a strong connection between the national wealth and the smartphone ownership (figure 9). The presence of the social media and the addiction this cause influence the growing trend of the smartphone penetration, especially among adolescents and young adults. Croatia is the country with the highest smartphone penetration rate with a direct connection with the internet rate. Bulgaria has the lowest smartphone penetration rate among European Union countries, but in the Balkan Region, countries like Bosnia and Herzegovina are holding much lower rankings. Technology, Internet, and e-commerce have developed considerably in recent years. E-commerce offers to buyers more choices like time and money saving, and easy buying, so it is no wonder that it is constantly increasing. There are also some disadvantages of e-commerce, such as waiting for delivery, wrong delivery, non-delivery, or distrust and uncertainty of buyers. Despite these shortcomings, e-commerce finds its way to buyers.

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