## CURRENT TRENDS OF ELECTRONIC COMMERCIAL DEVELOPMENT IN THE WORLD MARKETS

#### Tatiana Victorivna Orekhova<sup>1</sup>, Yaroslav Sergiyovich Tertychnyi<sup>2</sup>

**Abstract**. The article deals with the features of the e-commerce development in the modern world economy. The article analyzes the interpretation of the term "e-commerce" by various domestic and foreign scientists. The study specified three levels of e-commerce. The article also identifies five major e-commerce features - advertising, product demonstration, transactions, after-sales service, long-term customer relationships. The article demonstrates the main effects of e-commerce on the economy, such as: growing competition, globalization of business spheres, personalization of interaction, reduction of distribution channels, cost savings. The analysis of B2C e-commerce sales volume in the regions of the world during 2012–2017 identified a significant level of the direction development in the Asia-Pacific region.

**Keywords**. E-commerce, e-business, information and communication technologies, Internet trading, cryptocurrency.

**JEL**: F19, L81.

#### Introduction

For every type of business, the most important tasks today are to inform the target audience in a timely manner and be able to sell the product

<sup>1</sup> Doctor of Economics, Professor in the Department of International Economic Relations, Vasyl' Stus Donetsk National University, Ukraine

<sup>&</sup>lt;sup>2</sup> PhD student in the Department of International Economic Relations, Vasyl' Stus Donetsk National University, Ukraine

(or service) as quickly as possible, which is why the e-commerce system has become so widespread. This approach allows both the above mentioned and other tasks to be accomplished at the same time (e.g. to control the completion of marketing tasks and make the sale and purchase as efficient as possible).

The end of the last century was marked by significant shifts in the world economy caused by the use of new information technologies. The intensification of competition encouraged enterprises to use and improve existing information systems and to create new ones. Nowadays, if a company does not show any business activity on the Internet – it is regarded as a drawback.

#### 1. Analysis of recent research and publications

Such foreign researchers as R. Inclar, M. Timmer, B. Van Ark, S. Haller, D. Sifchlag, A. Krimes, R. Cleo, F. Stevens, T. Nibel and others have researched problems of digital economy main drivers. At the same time, many aspects of the global e-commerce trends development remain unexplored in the context of information globalization. This happens due to the high rate of transformation processes inherent in today's world.

Foreign authors, when explaining the concept of e-commerce, generalize this notion, for the most part, as an activity that covers all types of electronic transactions between organizations and stakeholders (Chaffey, 2009).

American researcher W. Zwass gives the following characteristics of e-commerce: exchange of business information, establishment of business relations, realization of business transactions through telecommunication networks, as well as trade relations. That is, he focuses his attention precisely on the business aspect of the concept (Directive 2000/31/EC, 2000). The same opinion is shared by A. Sammer and G. Duncan, who define e-commerce as any form of business process in which the interaction between entities occurs by means of electronic communication (European B2C E-commerce Report, 2014).

The business and trading aspects of e-commerce are described by scientists W. Tries and L. Stewart. From their point of view, it involves the use of technology in the financial business, electronic ticket booking, delivery, ordering, and Internet use to buy and sell goods and services, including after-sales services and support (KPMG-ASSOCHAM India Luxury summit, 2014). Similar definitions are presented in the works of such national scholars as V. L. Pleskach and T. G. Zatonatska (Lindner, 2015).

**The purpose of the article** is to identify the nature, functions and major trends of e-commerce development in global markets.

#### 2. Theoretical principles of the notion "e-commerce"

E-commerce (E-commerce, Internet trading, e-commerce) is a wide range of interactive methods of conducting activities to provide consumers with goods and services. E-commerce also means any form of business transaction where the parties interact through electronic technology rather than through physical exchange or contact (Morgan Stanley Blue Papers). E-commerce business is based on the use of electronic communications and digital information processing technologies to establish and change value creation relationships between organizations, and organizations and individuals.

The concept of e-commerce emerges as a fundamentally new model of integrated economic activity. It is based on the use of information and communication technologies along with networks as a unique macroeconomic environment and the main means of production for operational commercial activities in order to increase the efficiency of the existing ones or to dynamically develop new business segments as well as obtain stable socio-economic effect. E-business is a complex interacting and interdependent set of components, which include: means of information exchange; electronic document management systems; corporate representations in cyberspace integrated with other subsystems of the company; means of global information retrieval, knowledge gathering and sharing; an increase of Internet users will be the driving force of the Internet sector in Ukraine.

Today, it is customary to distinguish three levels of e-business, which is why management processes have their own peculiarities.

The levels of e-business are the following:

- Internet commerce (Level 1),
- E-commerce (Level 2),
- E-business (Level 3).

E-commerce mechanism works best in the following five functions:

- 1) advertising traditionally designed to attract as many potential customers as possible, to convey marketing information to the target segment;
- 2) demonstration of goods a display of products through the Internet (photos, videos, 3D-graphics);
  - 3) transactions quick and secure payments, delivery options;
- 4) after sales service assistance provided to the client both in the case of making a purchase and after its implementation;
- 5) establishment of a long-term relationship with the client (studying benefits and tastes, constant communication with the target audience and demand analysis).

Electronic systems differ from traditional markets by a number of parameters. First, the use of computers automates the trading process and the actual trading relationship between both sellers and between sellers and customers. Secondly, the benefits of using e-commerce in financial markets are that they reduce cost, boost efficiency and improve risk management. E-commerce systems provide direct data processing that enables integration of virtually all links in the trading process, from providing information about a product or service to risk management.

Regarding the issue of e-commerce organization, it contains five relatively independent processes, which in their essence may coincide with the functions of e-commerce, but still have some differences:

- access to information consumers have free access to information about the company and its products and services, transparency of access to information is the basis for conducting market research;
- ordering the process is similar to paper registration, can be an absolute analogue of a paper document;

- payment all forms and payment methods available for both regular and e-commerce;
- order fulfillment executed in a single information space, the product can be provided both electronically and in kind;
- maintenance and support providing the consumer with access to all the necessary information and consultations, providing technical documentation, instructions.

All of the above-mentioned elements of the e-commerce system should be evaluated in terms of feasibility and effectiveness, because the conditions of doing this or that type of business are unique and individual in a specific situation. It is important to evaluate the following conditions for the development and functioning of the e-commerce system:

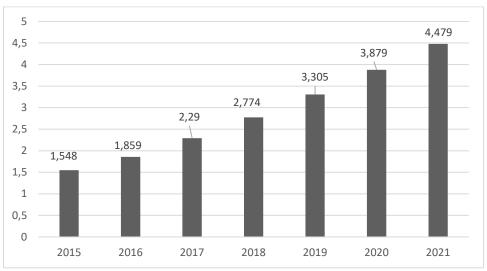
- growing competition access to competitors' information increases the level of product requirements from potential customers, which makes enterprises forced to change the ways of organizing and managing their business, eliminating barriers between company departments, facilitating their interaction:
- globalization of business areas the exchange of information significantly changes the spatial and temporal scope of commerce;
- personalization of interaction the receipt of detailed information about the requests of each individual customer and the automatic provision of products and services in accordance with individual requirements;
- reduction of distribution channels goods are successfully delivered directly from manufacturer to consumer, bypassing traditional channels in the form of wholesale and retail warehouses, which leads to a decrease in the cost of the product;
- cost savings every process, where electronic interaction can be used, may potentially reduce costs.

#### 3. Analysis of the e-commerce market

The global e-commerce market is one of the most dynamic and steadily growing markets. According to the eMarketer report, the volume of world retail e-commerce reached 10.1% of retail in general in 2017, this rate

will increase to 16.1% in 2021; e-commerce growth rates will outstrip retail growth rates overall (Figure 1).

The first section identifies the following major e-commerce sectors as: B2B - business to business interaction between legal entities and organizations; B2C - (business to consumer) sector of interaction between legal entities and individuals; B2G - (business to government) a sector of interaction between legal entities and state organizations; C2C - (consumer to consumer) – a sector of interaction between individuals; G2C (Government to the Consumer) - a sector of interaction between government organizations and individuals. The entity identified by the first letter of the abbreviation acts as the seller or service provider. C2B, G2G, C2G, G2B - include the same participants, differing only in the nature of their interaction (The World in 2013).



Source: Worldwide Retail and Ecommerce Sales: eMarketer's Estimates for 2016-2021

Figure 1. Dynamics of the volume of world e-commerce, in trillions of the US dollars

In the B2C e-commerce segment, the most popular and well-known are Flipkart, Book my show, PayTM, in the B2B segment - Imagesbazaar,

Basecamp, SalesForse, while in the C2C - Olx, Western Union, Paypal, and finally in the C2B - oDesk, Elance, Freelancer .

A. T. Kearney firm published an e-commerce market ranking based on the A.T. Kearney Global Retail E-Commerce Index (Worldwide Retail and Ecommerce Sales: eMarketer's Estimates for 2016–2021). This index considers current market growth indicators, namely: market type (young market, developed and growing or mature), its volumes, technology development and consumer behaviour (Internet penetration, shopping habits and development of e-commerce technologies), availability of e-commerce.

China, Japan and the United States ranked first in the top three markets, with a market value of 100 points, although China is a young market, Japan is a mature one, and the US is a mature and growing market. The UK e-market has also gained 100 points in terms of volume, but due to a lower potential and infrastructure score, the country is only ranked 4. Developing countries have taken 10 places out of 30, including China, which took the first place.

Table 1 provides data on e-commerce volumes in the period 2012–2017 by regions. In 2014, the Asia-Pacific region became the largest regional e-commerce market in the world, as the population of the region spent more on purchases online than the North American population. In particular, B2C e-commerce sales are expected to reach 525.2 billion \$ in the Asia-Pacific region by the end of this year and only 482.6 billion \$ in North America.

Table 1
B2C e-commerce sales volume by region in 2012–2017, billion \$

Region	2012	2013	2014	2015	2016	2017
Asia-Pacific	301.2	383.9	525.2	681.2	855.7	1052.9
North America	379.8	431	482.6	538.3	597.9	660.4
Western Europe	277.5	312	347.4	382.7	414.2	445
Central and Eastern Europe	41.5	49.5	58	64.4	68.9	73.1
Latin America	37.6	48.1	57.7	64.9	70.6	74.6
Near East and Africa	20.6	27	33.8	39.6	45.5	51.4
Worldwide sales	1058.2	1251.4	1504.6	1771	2052.7	2357.4

Source: Worldwide Retail and Ecommerce Sales: eMarketer's Estimates for 2016–2021

China brings in more than 6 dollars out of 10 dollars spent in the e-commerce sphere in the Asia-Pacific region, and in 2017, more than three-fourths of the total e-commerce volume in the region was provided by the country. Today, the Chinese e-commerce market makes up only 5% of total retail, which is half the size of the US and UK. This shows the great prospects for the development of the Chinese market.

In Ukraine, e-commerce volumes in 2017 were estimated at 2 billion dollars, which is 1 billion dollars more than last year, meaning that the Ukrainian market has a rapid pace of development and further prospects. However, due to the general decline of the Ukrainian economy against the backdrop of a difficult socio-political situation, the development of e-business has significantly reduced its pace. Due to the annexation of Crimea and the war in the east, e-commerce volumes have fallen by an estimated 17%, while also reducing the solvency of the population. According to the study (Worldwide Retail and Ecommerce Sales: eMarketer's Estimates for 2016-2021), the average cost of ordering in an online store decreased in proportion to the depreciation of the national currency - by 60%. Consumers of luxury goods began to buy their cheaper counterparts. National exchange market players suffer from declining profits and sometimes suffer losses as a result of exchange rate fluctuations. Therefore, one of the trends in the development of domestic e-commerce is the rapid reorientation to new types of goods and services, flexible pricing depending on the exchange rate.

In the Netherlands, with a total internet audience of 16 million people, which is the lowest rate among the analyzed countries, 9 out of 10 citizens of the country carry out commercial operations on the Internet.

The highest Internet penetration rates of more than 80% are characteristic of the Netherlands, Germany, the United Kingdom and France, which is why these countries have the highest percentage of consumers engaged in transactions with e-commerce enterprises.

According to eMarketer surveys, the first place in the ranking of countries in terms of e-commerce development take the United States, and the second - China. It should be noted that the Chinese e-commerce market has considerable potential and is expected to become a world leader by 2019. Dynamically growing e-commerce markets in China, India and

Indonesia will enable the Asia-Pacific region to outperform the e-commerce markets of other regions by 2019.

In comparison with the US and European e-commerce market, the e-commerce field in India was flourishing in 2017 and amounted to 1.6 billion dollars, however experts forecast that by 2019 its volume may reach 15 billion dollars. According to the ASSOCHAM report & KPMG Report, as of June 2017, the number of online customers in India was over 240 million. The Indian online marketplace is basically a number of separate e-commerce sites and about 80 well-known retailers with annual sales of around 100 million dollars. In this region, the future of e-commerce is predicted by the mobile phones segment, namely smartphones, not the more expensive laptops and tablets. Among the customers of Indian e-commerce companies, 90% are 18-35-year-old ones.

In Asian countries, the rapid pace of online business development happens due to the fact that a large number of consumers have only recently gained access to the network, and started actively conducting their first ecommerce operations accordingly, although Internet penetration is only about 17%. Asian countries, along with Argentina, Mexico, Brazil, Italy and Canada, will galvanize the growth of e-commerce worldwide. According to Forrester Research, the total e-commerce turnover of Argentina, Brazil and Mexico will increase by 135% by 2019 to reach 47 billion dollars. Brazil will remain the leader in the countries of the South American region, its e-commerce (B2C + C2C) market will grow more than twice in 5 years from 15 billion dollars to 35 billion accordingly. The number of online customers will increase by 79.3% over the same period of time, from 30.9 million to 55.4 million people.

According to Center for Retail Research, e-commerce accounts for the largest share of retail in the UK - 13.5%, followed by the USA with 11.6% and Germany taking the third place with 9.7%. The countries with the approximate share of e-commerce in 7% of the total retail turnover - Sweden, France, and the European Union in general. Italy, Ukraine, Poland and Spain showed performance of 2-3%.

The average cost of a single online purchase in 2016-2017 was the highest in the US – 119 dollars, with average purchases per year accounting for 15.6 acquisitions, while in the United Kingdom – 99 dollars and 18

purchases respectively, in Germany - 89 dollars and 18.1 acquisitions, in Italy - 72 dollars and 10.4 purchases. In the US, the most popular product categories are digital content, digital technology, toys, hobby items, books and magazines. The average cost of a purchase depends on the level of prices for goods and services, the level of solvency of the country population, and therefore countries with higher levels of economic development have the highest indicator.

The average cost per citizen to make online purchases per year can be determined by dividing the total e-commerce volume in the country by the number of citizens purchasing online goods and services. The annual cost per consumer in Ukraine is \$ 714, in Russia - \$ 828, in Germany - \$ 677, in the United States - \$ 1104, and in the United Kingdom - \$ 1206. As can be seen from the data obtained, this indicator corresponds to the level of economic development of the country.

The main factors contributing to the rapid growth of e-commerce in the world are the availability of information for smartphone owners and the investment of e-commerce enterprises in the availability of commercial sites and mobile applications.

The Merchant Research Center has released a forecast of e-commerce development prospects in the UK, according to which, due to the rapid growth of e-commerce by 2019, every fifth retail offline store will be closed, the total number will decrease from 282 thousand to 220 thousand. Similar trends are common in other countries as more and more entrepreneurs enter the online markets to reduce costs and increase efficiency.

#### Conclusion

Thus, the main trends in the development of e-commerce in the world are the following: the future of e-commerce is predicted to become mobile and online e-commerce. Transactions will occur via smartphones, tablets and other mobile devices, as the proportion of Internet users using mobile devices is growing. The key factor of success of e-commerce enterprises in modern conditions is personalization and individualization. Recently, e-

commerce customers have been more often interested in unique products designed on the sites personally or by other consumers. However, with the rapid growth of this type of orders, there may be problems with the needs to satisfy all users. An increasing number of retailers are trying to enable their customers to order products via the Internet, and also offer favourable conditions for delivery of products on the day of ordering, free exchange and return of goods, which are undoubtedly their competitive advantages; widespread use of electronic currencies and other new payment methods. as well as the launching of own currencies by e-commerce businesses. One of the prominent representatives of e-commerce companies that have been using their own currency since 2013 is Amazon, and the currency is called Amazon Coins. This type of virtual currency is used to purchase mobile applications and make acquisitions using them. The face value of 1 Amazon Coin is 1 US cent, but Amazon offers a reduced 10% rate for people buying currency for 100 dollars; using the latest technology to promote products online.

Implementation of 3D technologies for in-kind product modelling on the web in order to give them fuller characteristics for attracting new customers, implementation of video viewing technologies with the possibility of one-click transition from watching videos to online stores in order to purchase a specific product; active development of e-commerce through social networks. E-commerce companies use social networks as marketing platforms to advertise their online stores, increase the number of customers, study their preferences, develop personalized offers based on the data obtained, invite consumers to create wish lists or to get acquainted with goods recommended by their friends, services and more. For example, eBay is working on product recommendations based on Facebook data, Walmart has 22 million fans on Facebook and is constantly conducting surveys to determine the range of products offered on the site. A new online lifestyle is spreading among developed countries, that is, ordinary citizens go online not only to obtain information, but also to buy goods, conduct banking operations and other online activities. The form of business-to-business interaction as B2B e-commerce is actively developing, i.e. e-commerce opportunities are

widely realized not only in retail consumer practices. Continuous updating and development of new information technologies and computer equipment that help to facilitate access to the network of users, establish their close interaction.

#### References

- Chaffey, D. (2009). E-business and E-commerce Management. Strategy, Implementation and Practice. Prentice Hall, 800 p.
- Directive 2007/65/EC OF The European Parliament and of The Council. European Parliament. (2007). URL: http://eurlex.europa.eu/legalcontent/EN/TXT/?uri=CELEX%3A32007
- Directive on electronic commerce: Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000. EU Law. (2000). URL: http://eur-lex. europa.eu/legal-content/EN/TXT/?uri=celex:32000L0031
- E-Commerce Europe. European B2C E-commerce Report 2014. URL: http://www.ecommerce-europe.eu/facts-figures.electcom/06-57452\_Ebook. pdf
- KPMG-ASSOCHAM India Luxury summit 2014. URL: http://www.kpmg.com/IN/en/IssuesAndInsights/Articles Publications/ Documents/KPMG-ASSOCHAM-India-Luxury-Summit-2014.pdf.
- Lindner, M. (2015). Global e-commerce sales set to grow 25 % in 2015. Internet RETAILER. 2015. URL: https://www.internetretailer.com/2015/07/29/global-e-commerce-setgrow-25-2015
- Morgan Stanley Blue Papers. URL: http://www.morganstanley.com/views/perspectives.

#### **CURRENT TRENDS OF ELECTRONIC COMMERCIAL ...**

- The World in 2013: ICT facts and figures. URL: www.itu.int/en/ITU-D/ Statistics/Pages/facts/default.aspx
- Worldwide Retail and Ecommerce Sales: eMarketer's Estimates for 2016–2021. URL: //https://www.emarketer.com/Report/Worldwide-Retail-Ecommerce-Sales-eMarketers-Estimates-20162021/20020
- Treese, C. (1998). Winfield, Stewart Lawrence C. Designing Systems for Internet Commerce. AddisonWesley, 375 p.
- UNCITRAL Model Law on Electronic Commerce with Guide to Enactment 1996 with additional article 5 bis as adopted in 1998. United Nations publication.

  URL: https://www.uncitral.org/pdf/english/texts/electcom/05-89450 Ebook.pdf
- Uniform Electronic Transactions Act. Annual conference meeting in its one-hundred-andeighth year in Denver, Colorado July 23–30, 1999. URL: http://www.uniformlaws.org/shared/docs/electronic%20transactions/ueta final 99.pdf

ISSN 0861 - 6604

# BUSILESS Managanant

management



PUBLISHED BY D. A. TSENOV ACADEMY OF ECONOMICS - SVISHTOV 4/2019

#### **Editorial board:**

**Krasimir Shishmanov – editor in chief,** Tsenov Academy of Economics, Svishtov Bulgaria

**Nikola Yankov – Co-editor in chief,** Tsenov Academy of Economics, Svishtov Bulgaria

Ivan Marchevski, Tsenov Academy of Economics, Svishtov Bulgaria Irena Emilova, Tsenov Academy of Economics, Svishtov Bulgaria Lubcho Varamezov, Tsenov Academy of Economics, Svishtov Bulgaria Rumen Erusalimov, Tsenov Academy of Economics, Svishtov Bulgaria Silviya Kostova, Tsenov Academy of Economics, Svishtov Bulgaria

#### International editorial board

**Alexandru Nedelea** – Stefan cel Mare University of Suceava, Romania **Dmitry Vladimirovich Chistov** - Financial University under the Government of the Russian Federation, Moskow, Russia

**loana Panagoret -** Valahia University of Targoviste, Alexandria, Romania **Jan Tadeusz Duda –** AGH, Krakow, Poland

**Mohsen Mahmoud El Batran** – Cairo University, Cairo, Egypt **Nataliya Borisovna Golovanova -** Technological University Moscow , Moscow Russia

Tadija Djukic - University of Nish, Nish, Serbia

Tatiana Viktorovna Orehova – Donetsk National University, Ukraine

Yoto Yotov - Drexel University, Philadelphia, USA

**Viktor Chuzhykov -** Kyiv National Economic University named after Vadym Hetman, Kyiv, Ukraine

Proofreader - Anka Taneva

English translation – senior lecturer Zvetana Shenkova, senior lecturer Daniela Stoilova, senior lecturer Ivanka Borisova Russian translation - senior lecturer Irina Ivanova Technical secretary – Assist. Prof. Zhivka Tananeeva

In 2019, the printing of the journal will be funded with a grand from the Scientific Research Fund, Contract KP-06-NP/36 by the competition Bulgarian Scientific Periodicals - 2018.

Submitted for publishing on 28.11.2019, published on 05.12.2019, format 70x100/16, total print 100

- © D. A. Tsenov Academy of Economics, Svishtov, 2 Emanuil Chakarov Str, telephone number: +359 631 66298
- © Tsenov Academic Publishing House, Svishtov, 24 Gradevo str.



### **CONTENTS**

MANAGEMENT theory	
INDIVIDUAL AND GROUP DECISION MAKING IN MACEDONIAN SMES Accos. Prof. Snezhana Hristova, PhD Assoc. Prof. Dimitar Kovachevski, PhD Ivona Mileva, MSc	5
MARKETING	
CONTEMPORARY DIMENSIONS OF SALES MANAGEMENT Assoc. Prof. Vanya Grigorova, PhD	23
MANAGEMENT practice	
CURRENT TRENDS OF ELECTRONIC COMMERCIAL DEVELOPMENT IN THE WORLD MARKETS Tatiana Victorivna Orekhova Yaroslav Sergiyovich Tertychnyi	39
THE STUDENT INTERNSHIP PROJECT – A FINANCIAL MECHANISM FOR CREATING A SUSTAINABLE RELATIONSHIP BETWEEN HIGHER EDUCATION AND THE LABOUR MARKET  Angel G. Angelov, PhD	52
AGRICULTURAL INNOVATIONS IN EUROPEAN AND CENTRAL ASIAN COUNTRIES Yaroslav Valeriyovich Korovii	69