Analysis of the Development of Electronic Commerce in International Markets

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Abstract — In the paper the analysis of the electronic commerce and developmet of virtual economy, global trends in e-commerce, market size of e-commerce in international market and the predictions of future internet-business are presented. There are submitted innovations in e-commerce industry 4.0, which is a profitable platform for investment from around the world.

Key words – e-commerce, virtual economy, real economy, Internet, Internet-trade, online stores, virtualization industry, industry 4.0, internet-business.

I. Introduction

Nowadays the market of electronic commerce is the market, which growing up the fastest in the world, its total volume is 1.915 trillion dollars. The main factors that form the demand for this type of business are fast calculations, quick customer service, minimize the cost of renting office and office equipment, lack of regulatory non-financial organizations (fire inspection, Sanitation center, etc.), but there are several issues of e-business. First big competition doomed to failure many start ups in the field of e-business. Second, some sellers online cheating customers, which reduces the demand for virtual goods. Today the still topical issue is protection the rights of buyers on the Internet and the constant improvement of regulation of Internet relationships. In Ukraine, the most urgent issue is the introduction and popularization of Internet wallets, not all sites have the option to pay with electronic purse, most goods are sending by post with overhead payment, which increases the cost of online product and therefore reduces demand for purchase online.

II. Main part of research

The real economy is an integral part of modern economies, which plays a major role in ensuring sustainable economic development and social welfare state. At present it holds the key to the economies of many industrialized countries. Thus, for example, it accounts for 54.5% of GDP in the UK, 57.1% - in Japan, 40% - in the USA and 68% - in China. The essence of the virtual model is that instead of administrative methods by which the value transferred from the first to the second sector, in modern pseudo-market systems of successfully operating a variety of non-market forms of payment, bills of exchange, barter, trade debts. Subject's economy is interactive businesses, consumers and the state. Virtual economy as a market, are characterized by intense

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competition. First of all - image and competitiveness of the economy is provided by the reputation and rankings of the economy. Mechanisms such an economy is market signals, the image of the subject of the economy, and various sureties and guarantees. Comparing the virtual and the real economy presented in Table 1.

TABLE 1
COMPARISON THE VIRTUAL AND THE REAL ECONOMIES

The virtual economy,	Real economy,	
economy online	economy offline	
	Fields of activity:	
Fields of activity: trade,	agriculture, industry,	
services;	construction, transport, trade,	
	services;	
	continuous problems with	
mainly unavailable	licensing and controlling	
control and licensing	systems; Tax and other state	
system, not to pay bribes	control bodies require regular	
to corrupt;	bribes, or close the real	
	business;	
	need to spend money on	
do not need to rent or	offices and have additional	
buy office space, work is	problems with bribes	
in online mode (modern	firefighters, sanitary station;	
office - is the lack of	hire and provide health; faced	
office);	to the risks of raiding and	
	racket;	
faster calculations;	slower calculations;	
faster customer service;	economy slowly Customer	
,	Service;	
workers are who where		
in handy in a comfortable	workers working in the office;	
environment, at home or at		
the resort to have access to	,	
the Internet;		
at the head of the virtual		
economy is not tied to the	must be at the office;	
workplace, provides		
online management		
company leader;		
level of the company is	the level of the company is	
the global economy, all	the local economy, town.	
the planets.		

The Internet is undoubtedly the most massive technology and hence the most promising in terms of investment and business. Now is the fourth industrial revolution, which is the computerization of production. It involves the introduction cyber physical systems (CPS) in production and logistics named Industry 4.0, as well as Internet use in industrial processes. By combining a network of machines, storage systems and equipment, we get the "intellectual production", in which the machines independently exchange information and constantly adapt to the urgent needs. As a result, experts expect to receive rapid productivity growth as well as significant savings in materials and electricity.

German Management Academy of Lower Saxony supports through its training program and managers Related Industry 4.0. It abroad can observe great interest in this strategy has not only German industry outstanding opportunities for optimal placement in world production.

In practice-oriented DMAN seminars, which include informational visits to German companies, managers from Central and Eastern Europe, Asia and the Middle East are more familiar with the strategy of industrial 4.0 and learn best practices in place.

The highest e-commerce growth show Asia and the USA, but the annual growth of these indicators on the eastern market is much higher than the USA growth, such as India annual growth is 30%, while in the USA -12.9%.

The leaders in e-commerce at the beginning of 2016 are USA - 313,980.5 billions dollars, China - 300,468.3 billions dollars, Japan - 85,341.3 billions dollars, United Kingdom - 74,844.4 billions dollars, Germany - 61,983.8 billions dollars. The dynamics of leaders indicators of e-commerce is presented in Table 2.

 $TABLE\ 2$ The dynamics of leaders indicators of e-commerce (in billions dollars)

Country	2013	2014	2015	2016
USA	260,67	298,26	342,96	313,980.5
China	390,02	472,91	672,01	300,468.3
Japan	75,78	78,55	89,55	85,341.3
UK	62,49	70,12	77,29	74,844.4
Germany	55,68	58,05	62,73	61,983.8

Analyzing the dynamics of the leading e-commerce can be identified trend to decline of the e-market in 2016 compared to 2015. The most significant decline in this indicator took place in China, the reason for this could be a problem of quality goods and a lot of competition from the side of developing countries. The most profitable type of electronic business in China is B2B (business - business), unlike European countries and the USA. Number of customers in the Chinese market is the largest in the world - 520 million people (in the US - 350).

The most dynamically developing e-commerce market is in India. In 2012 the market volume estimated at 9.5 billions dollars, but today the figure is 20 billions dollars. The annual growth is 40-50%, this phenomenon is due to the fact that India's e-commerce is a young business, people involved internet recently, so the market is at the first stage of its development. The forecast for India e-commerce is using smartphones for internet shopping, because Internet users are young people aged 18-35 years, who prefer mobile access than the more expensive laptop or tablet. By 2020, India is projected position in the top five countries with the largest volume of electronic market.

North American market is actively developing the last ten years. The turnover in the segment of B2C in 2015 amounted to 34.9% (305 billions dollars), taking second place after China's index, which amounted to 38%. However, according to forecasts by the 2019 North American region will lead to the amount of 548 billions dollars, because of reorientation the Chinese market in the B2B segment.

The European e-commerce market in general is estimated at 580 billions euros, the largest share of this

market form the United Kingdom (74.8 billions dollars), Germany (61.9 billions dollars) and France (54, 9 billions dollars), together these countries account for 60% of European e-commerce market. The most promising trend in Europe is the type of market B2C (business to consumer). In this segment, Germany is leading with the index of 61.6 million euro, UK ranks second place - 43.4 million euros.

The online turnover in Eastern Europe is about 7% of the European market. Russia, Ukraine and Romania are the three largest e-commerce markets in the region. Russia reached 10.6 billions euros of e-commerce turnover, while Ukraine and Romania respectively reached turnover of 1.4 and 0.8 billions euro.

Brazil is the leader of the South American region, the volume of electronic market is 11 billions dollars, 5 billions dollars - in the B2C segment, is projected to increase this figure by the end of next year. It is expected that the total turnover of Argentina, Brazil and Mexico, already in 2018 will grow by 135% and will amount to 41 billions dollars.

Conclusion

An analysis reveal the following major trends: e-commerce market penetration by developing countries, India's position in the top five leaders of e-commerce by 2020, the intensification of retailers in Western Europe, the grows of the electronic turnover by 135% untill 2018, the reorientation Chinese market to segment B2B and becoming the USA a new leader in retail e-commerce. Now there is a revolution - Industry 4.0, which will enable to develop information technology to the level of intellectual production. The virtual economy will eventually replace the real economy.

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