TRADE IN THE CONDITIONS OF DIGITAL TRANSFORMATION

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Abstract: In modern conditions, when the Internet has reached the peak of its development and application., and enabled efficient and fast communication, the world is facing a series of changes that require adaptation to new circumstances. The road to a new digital-Internet economy is opening up. There is a digital transformation of the economy (trade) and society as a whole. Industry 4.0, artificial intelligence, "fight" robots-cashiers, buy-sell on "Click", virtual trade, mobile platforms, e-money, lead to a turnaround in creating a new model of competitive advantage of trade in the conditions of "new-Web-Internet- digital "economy. It all takes place on a digital platform. It is negotiated, sold-bought, on a virtual platform, without the participants being seen. The World Bank predicts that 1/3 of traditional occupations will disappear by 2030, while the "Silicon Valley" oligarchy predicts that in 2050 the human brain ("identity-thinking entity") will be stored in a “klaud” environment. Physical-psychosociological- "material" and other recognizability of today's man, economy and society as a whole will be formatted in the form of a "digital" record. Therefore, futurists predict a new initiation of society as a whole on a new path of humanity: HUMANITY 2.0. The aim of this paper is to show the way trade works in the age of everyday changes on a global level. The expected results of this paper are to provide adequate information on the functioning of trade in the conditions of digital transformation, to present new models of society, humanity, economy-trade, better known in the futurist vision as "Digital format of new society, humanity and man-as a mosaic of harmonized details".

Key words: Trade, digital economy, e-commerce, globalization, digitization, internet

JEL classification: O039

1. INTRODUCTION

Trade is one of the oldest economic activities, therefore it is the most susceptible to change and the introduction of innovations. With the development of information technology, there is a convergence of traditional forms of business, the carrier of trade activities and information technology and electronics. It turned out that the application of informatics and technology provides a number of opportunities for the development of trade. Electronic commerce has evolved in its development, with the development of satellite and cable television, micro-economics and the application of information and communication...
systems, until the development of the Internet, which leads to the creation of new trade institutions. The digitalization process has encouraged the development of virtual communities that develop their virtual currencies, the development of a virtual form of trade, "click" shopping, all of which contribute to the embodiment of the problems of modern society, the struggle for the survival of traditional occupations as well as man as a conscious being, not man in "cloud" environment. It is precisely the goal of this work to show the way trade functions in the age of daily changes on a global scale. The goal of the research is to get acquainted with the concept of electronic commerce, innovations in electronic commerce, to show the challenges of commerce in modern conditions, as well as the impact of the Covid-19 pandemic on the development of electronic commerce. The starting premise is that electronic commerce is turning the world into a global market and as such is subject to changes and challenges. The expected results of this work are to provide adequate information on the functioning of trade in the conditions of digital transformation, to show new models of society and trade in the conditions of the "new-Web-Internet-digital" economy.

2. DIGITAL TRANSFORMATION OF TRADE

Digital transformation is the process of introducing digital technologies into all segments of life and business. With the development and application of the Internet, the way to a digital economy is opening, which permeates all aspects of the global economy and refers to an economy based on digital technologies and communication networks. The use of the Internet leads to the reengineering of the entire supply chain, the development of new business formats for trade in goods, services and capital. It is produced and traded without the business partners even seeing each other. The way to a new concept is opening, the concept of virtual (electronic) business, electronic commerce, virtual supply chain.

The digital economy refers to the economy based on digital technologies, including digital communication networks (Internet, intranets and private value-added networks), computers, software and other related information technologies (Turban, McLean and Wetherbe, 2004). Post-industrial society is denoted by the terms "network economy", "digital economy" and as such they separate the economy driven by resources and the economy driven by knowledge and information. The term "new economy" is often synonymous with the digital economy. Its infrastructure provides a global platform where people and organizations communicate and collaborate, and under its influence worldwide there have been major changes in labor and product markets. According to the OECD, the term "new economy" describes aspects or sectors of the economy that produce or intensively use innovative or new technologies. This relatively new concept particularly applies to industries where the production, sale and distribution of goods and services are increasingly dependent on computers, telecommunications and the Internet. (OECD, 2014)

Ćuzović and Sokolov-Mladenović, (2014) conclude that "ICT challenges are accepted by multinational companies, leaders in the global market. Due to the different pace of ICT implementation in the business strategy, there is a technological and economic gap between companies. The differences are even more noticeable if the development and application of technological innovations is viewed at the global level. The digital divide that already exists between the developed North and the underdeveloped South will lead to a further technological and economic divide between these countries. The generators of the "new economy" also lead to the division of companies into globally recognizable and parochial type companies. Through that prism, and in the conditions of further penetration of ICT, future trends of globalization should be viewed". (p. 145.)

One of the most represented forms of trade in the digital transformation is electronic trade, which was created precisely on the basis of the development of information and communication technologies and electronics, when a path was created for the development of the digital economy, which provides the basis for the creation of electronic trade. Electronic commerce has evolved in its development, with the development of satellite and cable television, micro-electronics and the application of information and communication systems, until the development of the Internet, which leads to the creation of new trade institutions. Electronic trade as a synonym for Internet trade is closely related to other scientific disciplines such as: business informatics, distributed marketing, electronic business, electronic marketing.

Electronic commerce (e-commerce) is defined as conducting business transactions via telecommunication networks, primarily the Internet. Also, it is pointed out that the term e-commerce tries to denote a diverse, multidisciplinary business that includes a set of activities starting from technology intended for computer experts to customer behavior (Turban,
McLean and Wetherbe, 2003, p.168). Aware of the fact that there is no single definition of the concept of electronic commerce, and that the definition cannot be standardized, electronic commerce actually represents a term with multiple meanings, and according to these authors, many theoreticians and practitioners use the term electronic business (eng. e-business) as a synonym for e-commerce, which includes not only sales and purchases, but also customer service, collaboration with business partners, and conducting electronic transactions within the organization (Turban et al., 2003, p. 168). Electronic commerce includes business activities that take place outside the company, and electronic business includes the application of information technology for processing business transactions within companies and institutions (Laudon and Traver, 2002, p.10). Two characteristic phases can be observed in the development of electronic commerce, namely (Ćuzović, Sokolov-Mladenović and Ćuzović, 2018, p.125):

1. application of information and communication technologies in traditional trade institutions, i

2. development of new electronic trade institutions.

The first phase is characterized by the application of computers, the development of EAN/GS1, EPOS, EFTPOS systems in traditional trade. With the emergence of EDI, the EDIFACT standard and the Internet, a new phase of institutional innovations in trade, better known as electronic-Internet trade, is emerging. In addition to virtual stores, online (eng.on-line) sellers and buyers, electronic auctions, electronic stock exchanges are also developing, paper documents are being replaced by electronic business documents, new models of electronic trade are being developed. It is recognized that it is necessary to standardize the entire telecommunications infrastructure, which will provide a unique language of communication in the marketing channel, starting from the search and presentation of business information, payment systems, delivery, and complaints to customers.

3. NEW TRADE MODELS

After the appearance of POS equipment, computer cash register scanners, the Internet and the like, there is a transition from traditional payment systems (cheque, bill, paper money) to an electronic payment system. Market developed countries have developed electronic money, electronic credit cards, electronic check, electronic payments via mobile phones and many other electronic payment systems. Consequently, electronic payment has taken root in the e-commerce system. However, for the economic objectification of further development, it is necessary to look at: the purchasing power of future e-customers, socio-cultural peculiarities, the level of security, the level of development of the telecommunications infrastructure, etc. Electronic commerce is turning the world into a global market. The internationalization of electronic commerce implies the standardization of telecommunications infrastructure, the standardization of electronic business documents, information and communication systems, security protocols in the e-commerce system and the like. It is necessary to develop the concept of information cooperation and this can be achieved by interconnecting the infrastructure of banks and trading companies into national and global infrastructure.

EDI was born in the process of development of scientific and technological progress and company operations in an increasingly turbulent environment. With the development of information technologies, the application of e-mail, the transmission of visual information, in the mid-90s in market-developed countries, the concept of electronic trade based on EDI technology was affirmed. EDI is structured commercial data interchange, which means that messages must be in a format that allows for electronic processing. EDI represents the exchange of data between computers of separate companies, it represents the shoulder of data between computers of manual intervention, so the exchange of data between applications, not people. EDI enables the electronic exchange of data not only in trade, but also in other activities: transport, customs, payment transactions, healthcare, state administration, etc., thereby affirming the concept of electronic trade and electronic business. (Ćuzović and Ivanović, 2017, p.124.). Globalization of the market, which is supported by EDI technology, provides an opportunity for business entities to increase their participation both on the domestic and international markets. The possibilities of practical application of EDI in trade are unlimited. According to one research, 80% of disruptions in the functioning of trading companies were caused by problems in communication. These disturbances are the result of an inadequate number or a large amount of information. Hence the need to introduce an information system in trade.

The rapid development of the Internet has encouraged the development of virtual communities that develop their own virtual currencies to enable the exchange of goods and services between their members. Virtual currencies
are a relatively new form of electronic money used to pay for goods and services, as well as other transactions. There are many definitions of virtual currency in the literature. According to the definition of the European Central Bank, virtual currency is a type of unregulated, digital money, which is issued and usually controls its development, and is used and accepted among the members of a certain virtual community (Stankić 2009, p.95)

Conducting e-commerce using mobile devices and wireless networks represents mobile commerce (m-commerce), which is also called m-business. These activities include B2B, B2C, m-administration and m-learning transactions as well as the transfer of information and money. As with e-commerce, m-commerce is an electronic transaction that takes place using mobile devices, over the Internet, business intranets, private communication lines or other wireless networks. M-commerce differs from traditional e-commerce and often uses special business models, which leads to the development of a large number of new applications by changing the relationship between buyers and sellers. Smartphones today play a more important role in the personal life of consumers, compared to desktop or laptop computers. Primarily because they are physically constantly present to consumers or in their vicinity. One of the important features of smartphones is that they identify the user's exact address, which allows marketing messages to be targeted to consumers based on their location.

The development of social networks and social marketing contributed to the emergence of social commerce, that is, commerce through social networks. The concept of social commerce first appeared in 2005, due to the increased use of social media. Social commerce itself, which is also called social business, refers to e-commerce transactions that take place through social media on the Internet, created by integrating e-commerce and e-marketing using the Web 2.0 social media application. Social commerce is commerce that involves the use of social media that promote social interactions and help in activities, buying as well as selling, products and services online and offline. It was the main driver of social trade, in addition to the globalization of business. The process of globalization has led to the cooperation of employees, partners and consumers around the world. The development and rapid growth of smartphones has enabled the development of social commerce. Mobile commerce itself represented the basis of the development of social commerce.

Based on the sources that have appeared since 2005 and then in the following years, it can be concluded that globalization, along with the development of information technologies, changes the awareness of consumers as well as their perception of the products themselves. The result is the analog development of social commerce, as a new form of electronic commerce. The speed of progress is not the same in consumer consciousness as in technology, but it tends to synchronize in some future period. (Ivanović, Simović, 2019, p. 81).

4. TRADE IN A NEW ENVIRONMENT - CHALLENGES OF ELECTRONIC TRADE

After the conditions were created for the transition from the mechanical to the electronic phase of development, the development of the "new-digital-web-economy", the emergence of electronic commerce and electronic marketing, market-developed countries stepped into a new technological cycle, better known as Industry 4.0. In this cycle, the Internet represents a phase of development and enables new opportunities for the development of electronic commerce. Industry 4.0 as a new industrial revolution enabled the automation and development of trade in technological and organizational terms. There is a turning point in the factors of competitiveness. A resource-driven economy is giving way to an economy driven by knowledge, innovation and information. Knowledge and new ideas that lead to technological changes, on the one hand, and sustainable growth, on the other, are coming to the fore.

Technical and technological progress in the field of digital industry and computing has given rise to artificial intelligence, robots and automation, which are becoming the leading designer of the digital economy and society. On the line of digital transformation of society, the World Bank also spoke with the message: "Some occupations will disappear due to automation, and other jobs will not even be created." Foxconn Technology Group, the Asian manufacturer of Apple products, has cut the number of employees by a third since robots entered their production facility. This means that in the period from 2012 to 2016, in this Taiwanese group, more than 400,000 workers were fired due to automation (robots extinguished 100,000 jobs per year). There are currently 120,000 robots on the list of Amazon employees. Digitized stores where there are no cash registers or shopping carts, but purchases are made via a mobile Android application, have become a reality for the company "Amazon Go".
Futurists predict a new initiation of society as a whole on the new path of humanity: HUMANITY 2.0. (more on this see: Keze, 2016)

Artificial intelligence and robots are changing the traditional concept of business, on the one hand, and affirming the new concept of digitalized enterprise and "marketing-management robots", on the other. Many companies are using artificial intelligence in their promotional and communication mix to retain and attract customers. Many companies are planning to improve their vehicle fleet with artificial intelligence and enable robots to drive trucks. In the literature, the process of transition from a resource economy to an economy driven by knowledge and innovation is recognized as a partnership of the market economy and knowledge - the interaction of the market economy with natural knowledge. Paul M. Romer (Paul M. Romer), winner of the Nobel Prize for Economics (2018), researching this topic, says that national economies and society as a whole will have competitive recognition and sustainable economic development if their vision, mission and strategy are based on the integration of technological innovations in long-term macroeconomic analyses.

Paul M. Romer proved how the accumulation of ideas-technological innovations contributes to long-term economic growth in the global economy and the well-being of the population. On the other hand, Yuval Noah Harari, one of the most quoted historians today, warns "that we can use artificial intelligence to create heaven or hell." According to him, "we forget that our world was created by a chain of random events and that history shaped not only our technology, politics and society, but also our thoughts, fears and dreams". Sociologist E. Giddens (Ethan Giddens) both encourages and frightens us, claiming (in words): "this is a fascinating and terrifying time." It seems that the digital revolution has left us in a state of stupor and confusion, and that we will, for a long time, be "hearing stories-learning lessons" from the visionaries of the global village.

Čuzović and Labović (2019) point out that the race between humans and smart machines continues. At the same time, there is no end in sight for the research into the digital economy-trade. Robot or cashier? The final decision will be made by man. It is also logical if we keep in mind that electronic commerce is created by people, for people. Despite a series of unknowns, what technological changes and industry 4.0 bring us, one thing is already certain, robots and humans are, to a large extent, collaborators. Last but not least, it should be emphasized that e-commerce should not be made into a "mythomania". It is a new way of doing business, based on the application of modern information and communication technologies to meet the new - digital - web - internet economy. E-commerce, which was once mentioned as a vision, has now become a reality in market-developed countries. (p. 28.)

In addition, if the predictions of the technology research company "Gartner" from the USA are approximately correct, that by 2025 one third of today's jobs will be replaced by artificially intelligent machines, the academic research elite must not be discouraged, regardless of the fact that robots are artificial intelligentsia, in a big way, launched an offensive on the labor market, pushing the workforce out of factory halls and supermarkets.

One of the leading challenges and problems since 2020 is the pandemic of the Covid-19 virus. As such, it has affected all aspects of life, the economy and even trade itself. Due to its specificity that requires physical distance, avoiding contact, it influenced consumer behavior, but also highlighted the importance of e-commerce. The pandemic further accelerated the development of electronic commerce, as the need to purchase goods via the Internet arose. Many companies have realized the importance of electronic commerce and directed their attention towards its promotion. Online sales are gaining more and more importance, but traditional forms of sales are not neglected either. The outbreak of the pandemic further accelerated the development of contactless shopping, while certain traditional retailers found themselves in trouble. Approaches that explain consumer behavior are divided into three groups: (Mehta, Saxena, Purohit, 2020, pp. 291-301)

- psychological - based on the relationship between the consumer's psyche and behavior;
- sociological approach - which is devoted to consumer reactions in different situations or behavior under the influence of various social situations, social leaders; and
- economic approach - based on basic knowledge of microeconomics in which consumers define their requirements.

Research that was done after the beginning of the pandemic, and which is still being done, and is aimed at looking at the consequences of the pandemic on business operations, shows that countries that have registered cases of infection, show from 46 to 77% growth in requests for services provided through digital and information technologies. Also, the declaration of a state of emergency and the prohibition of movement in the states, as measures aimed at preventing the spread of the virus, resulted in an increase in online sales between 8 and 10%. It seems that a kind of
revolution in the development of trade is really coming, which was certainly coming, but the conditions of the pandemic have significantly accelerated it. It is important to apostrophize the importance of the existence of an adequate normative framework, which is the function of the smooth application of various forms of electronic commerce in practice. Whether it is developed or developing countries, their functioning in pandemic conditions has changed in the direction of growing reliance on the potential and power of digital technologies.

People/society/economy/companies adapt their functioning to a digital and contactless mechanism for the realization of business transactions on all relationships (between individuals, or companies, or governments - B2B, B2C, B2G, G2G, etc.). According to the projections, in the new paradigm of post-covid development, those countries/companies that implemented the digitization process faster and more efficiently will be more successful. Some authors also indicate that earlier comparisons between developed/developing countries, East/West, those who have/and those who have not, in the new world order will be reduced only to the need for comparison between those who are digital (contactless)/and all others. In this sense, it is evident that the digital divide between countries is constantly widening, resulting in new and greater inequalities. (Pillai, R.S. (2020), April.)

The fear of the infection of Kovid-19 manifested itself differently in different countries, therefore there are different preferences towards buying certain foods online:

- In Serbia, the online purchase of organic food has increased to 66.67%, compared to the period before the Covid-19 pandemic. Changes in percentage terms from the aspect of online shopping can be explained by the increased fear of infection with Kovid-19, as well as fears for one's own health. Organic food was mostly consumed by women, generation X (aged 25-40), consumers who completed higher education and those with an above-average monthly income (Čirić, Ignjatijević, Brkanlić (2020), pp.151)
- In China during the Covid-19 pandemic, food was mostly bought online by young people living in big cities. (Gao, Shi, (2020), pp.1)
- In India, consumers have a specific attitude when making purchasing decisions. They need to see and touch the product before they decide to buy, especially if the value of the goods is higher. Many customers are conservative and tend to make decisions based on promotions, e.g. when discounts are offered if you buy online, free shipping and the like. (Srivastava & Bagale (2019), pp.309) The Covid-19 pandemic affected the growth of the number of users of online shopping, for whom such a way of shopping was unimaginable. (Susmitha (2021), pp.1162)

Traditional trade is the dominant form of trade in the Republic of Serbia, but electronic trade records continuous growth. Electronic commerce in Serbia, according to the research of the Republic Institute of Statistics, 36.1% of respondents bought something online in 2020, 11.8% bought something in the last year, 9.1% more than a year ago, while 41% of respondents did not never shopped online. The reasons for the relatively large number of those who do not use or are slow to accept. Electronic commerce in Serbia, according to research by the Serbian Chamber of Commerce, doubled during the state of emergency, compared to the time before the Covid-19 pandemic, and the growth of online shopping and sales is expected in next period. The analysis of PKS indicates that the sale of groceries in that period increased ten times compared to the average monthly turnover before the pandemic. In addition to the growth of online sales, the pandemic brought to Serbia a change in the structure of users, because online shopping has spread to all age groups of consumers and across the entire country, with an increase in the transition to the use of online payments. Large retail chains have activated and strengthened their online stores and their own delivery services. due to the high standards required for the transport of food products. Negative experiences of e-commerce users related to the downfall of certain sites and problems with the automation of ordering and receiving orders were also recorded. The reason is most often that domestic merchants do not yet have fully customized solutions for e-commerce.

CONCLUSION

With the development and application of the Internet, the way to a digital economy is opening, which permeates all aspects of the global economy. Trade, as the oldest economic activity, is the most subject to change and faces the challenges of the modern world, and it is necessary to create a new model of competitive advantage that will include the application of artificial intelligence, the process of digitalization, the development of a mobile platform, social commerce, all with the aim of surviving on the market in modern conditions, conditions of globalization. The rapid development of the Internet has encouraged the development of virtual communities that develop their own virtual currencies to enable the exchange of goods and
services between their members. Artificial intelligence and robots are changing the traditional concept of business, on the one hand, and affirming the new concept of digitalized enterprise and “marketing-management robots”, on the other. Many companies are using artificial intelligence in their promotional and communication mix to retain and attract customers. Based on the initial assumptions, we come to the conclusion that despite a number of limitations such as the socio-economic environment, culture and habits, business environment and technical conditions, electronic commerce turns the world into a global market. The outbreak of the pandemic further accelerated the development of contactless shopping, while certain traditional retailers found themselves in trouble. The pandemic has proven the importance of electronic commerce and its advantages as well as its inevitability in conditions such as those during the pandemic.

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SUMMARY

Digital transformation is a process of introducing digital technologies in all segments of life and business. With the development and application of the Internet, the way is opened to a digital economy that permeates all aspects of the global economy and refers to the economy based on digital technologies and communication networks. The application of the Internet leads to the reengineering of the entire supply chain, the development of new business formats for trade in goods, services and capital. Products are traded without business partners being seen at all. After
the advent of POS equipment, computer scanners, the Internet and the like, there is a transition from traditional payment systems (check, bill of exchange, paper money) to electronic payment system. Market developed countries have developed electronic money, electronic credit cards, electronic checks, electronic payments via mobile phones and many other electronic payment systems. Consequently, electronic payment has come to life in the e-commerce system. However, for the economic objectification of further development, it is necessary to consider: the purchasing power of future e-customers, socio-cultural features, the degree of security, the level of development of telecommunications infrastructure, etc. The development of e-commerce has contributed to the development of mobile commerce, which is an electronic transaction that is performed using mobile devices, over the Internet, business intranets, private communication lines or other wireless networks. M-commerce differs from traditional e-commerce and often uses special business models, which leads to the development of a large number of new applications by changing the relationship between buyers and sellers. Social commerce is commerce that involves the use of social media that supports social interactions and assistance in activities, shopping as well as sales, products and services online and offline. She was the main driver of social trade, in addition to the globalization of business. The process of globalization has led to the cooperation of employees, partners and consumers around the world. The development and rapid growth of smartphones have enabled the development of social commerce. Mobile commerce itself was the basis for the development of social commerce.

After creating the conditions for the transition from Menanka to the electronic phase of development, development of the "new-digital-web-economy", the emergence of e-commerce and e-marketing, market developed countries have entered a new technological cycle, better known as Industry 4.0. In this cycle, the Internet is a guide to development and provides new opportunities for the development of e-commerce. Industry 4.0. as a new industrial revolution, it enabled the automation and development of trade in terms of technology and organization. There is a shift in competitiveness factors.

The pandemic has further accelerated the development of e-commerce as the need has arisen to purchase goods online. Many companies have realized the importance of e-commerce and turned their attention to promoting it. Online sales are gaining in importance, but traditional forms of sales are not neglected either.