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PECULIARITIES OF E-COMMERCE DEVELOPMENT: A CASE OF POLAND

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Abstract. The development of modern technology has changed not only the way of human communication but also the economy. The proliferation of new media and market entry of digital natives as consumers has changed the way of making purchase and sale transactions, collecting information about products, using internet services. There are new forms of human activity, corresponding to the needs of the new digital society. The article contains an analysis of the available statistical material regarding the e-commerce market in Poland together with the theoretical foundation. In the article, the author presents insights into consistent patterns of the development of the e-commerce market in Poland, distinguishes factors affecting this market, and analyses historical data on this market. The author provides a broader context of the processes by comparing the sizes of CEE-6 markets. The analysis of existing data used in the article, as the chosen research method enables presenting to the reader from outside the regional peculiarities of the e-commerce market development in Poland.

Keywords: digital economy; e-commerce; Central and Eastern Europe; digital marketing; e-shopping

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JEL Classifications: L81

Additional disciplines: history, media research, sociology

1. Introduction

The development of modern technology has changed not only the way of human communication but also the economy. The proliferation of new media and market entry of digital natives as the consumer has changed the way of making purchase and sale transactions, collecting information about products, use of internet services. There are new forms of human activity, corresponding to the needs of the new digital society. The emergence of e-commerce has become an alternative way for society to acquire the desired goods or to replace them, but besides the many advantages and benefits that also bring with it certain risks; its development faces many barriers. In the understanding of the impact of the new sales technology economy, it is important to recognize the significance of the impact of technological changes on social changes. Culture, i.e. human beliefs, values, cultural symbols can be the cause of technological changes. In explaining the phenomenon, the question of how

technology affects ways of solving universal problems of societies, i.e. specialization, stratification, integration, and socialization, has to be answered. Nowadays, it is no longer questioned that new technologies create different business conditions and different competitive models capture this phenomenon well, e.g. Uber, the largest taxi company, doesn't have a single vehicle; Facebook, the most popular media channel, does not create content; Alibaba, the most profitable retail network, has no warehouses; Airbnb, the world's largest accommodation chain, has no building. As the author indicates, these companies are a sign of today's times or the beginning of the fourth industrial revolution announced by K. Schwab, creator of the World Economic Forum (Schwab, 2017). As researchers indicate, the most advanced economies in the world are based on a model in which, on the one hand, we are dealing with an economy focused on the production of information and cultural content, on the other, there is a development of digital environments, more economic, advanced and integrated, connected to the Internet (Rodriguez, 2017). The latter variable, which is constantly growing, determines non-market cultural production decentralized compared to the last century. According to the analysis of economic models, the relationship between the user and the enterprise is based on the peaceful coexistence of gift economics and market economics. It is assumed that new media is an industry and therefore can be studied from the point of view of ownership structures and professional practices. On the other hand, the communication and entertainment industry produces not only goods for consumption, but also intangible, fundamental for exercising power, consensus, or common sense (Medina et al., 2015). If production has moved from the company to the users, then the latter must be considered an important production force in a post-industrial society (Arias, Acebrón, 2001). Different definitions of e-commerce can be found, for example, in the works: Amor (1999), Strauss and Frost (2001), Phan (2003), Mohapatra (2012), Taranenko et al. (2021), etc. This study aimed to demonstrate the phenomenon of e-commerce from the perspective of the social economy. Theses that have been raised are: (1) e-commerce is the fastest-growing segment of the market; (2) e-commerce requires the implementation of other tools than those used in traditional sales; (3) a change in shopping preferences of consumers from shopping offline to shopping online. The present article uses the method of analysis of existing documents/sources such as literature, studies, and industry reports.

2. Review of literature

Before the internet business appeared in companies and international corporations, has developed e-business - EID (electronic data interchange). With the development of the internet began to move Electronic Data Interchange standards for e-business (Nojszewski, 2004; Wiktor et al., 2021).

The broadest concept relating to the economy, business, and commerce in the virtual world is an e-market, also called the new economy or the digital economy. E-market is: virtual space on which the activity is conducted, ongoing transactions, comes to the creation and exchange of values and mature direct contacts between its participants (Szymański, 2013).

A slightly narrower issue is the concept of e-business, which generally includes all forms of business using computer technology. As indicated Szymanski (2013, p.34), the first definition of e-business was founded in 1997 and described it as a secure, flexible approach to doing business consisting of the supply of additional business value by combining traditional methods with the possibilities offered by the Internet. It should also add that contemporary electronic business not only affects electronic transactions but also all the processes leading to making the transaction.

The concept of electronic commerce (e-commerce) is the narrowest and should be understood as handling, using, and creating commercial activities based on Internet technologies (Szymanski, 2013, p.34). It includes four business processes: promotion and marketing, payments, deliveries, and orders. E-commerce can be divided into the following segments (Table 1).

Table 1. Segments of e-commerce and the relationships between them

| Corresponding Initiating | Business | Consumer | Government |
|-----------------------------|--|--|---|
| Business | B2B - are contacts between different types of companies, transactions on electronic exchanges. | B2C - are commercial relations between companies and individual clients concerning retail sales. | B2G - initiatives buisness in relation to public administration |
| Consumer | C2B - the opposite of the traditional auction. The customer provides information about what the product is looking for and what price it can pay for it. | C2C - transactions between private individuals. | |
| Government | G2B - is the exchange of products and information between government agencies and businesses. It includes the following services: consulting, online payment systems, financial support schemes. The most popular service is the presentation of statistical data. | | |

Source: own study based on: Żukowska, Komańda, 2009

An analysis of the available literature source shows that in the aspect of functional since 2008, e-commerce divided into the following segments: (1) e-commerce traditional, (2) an auction site, (3) compare pricing, (4) m-commerce, and (5) f-commerce.

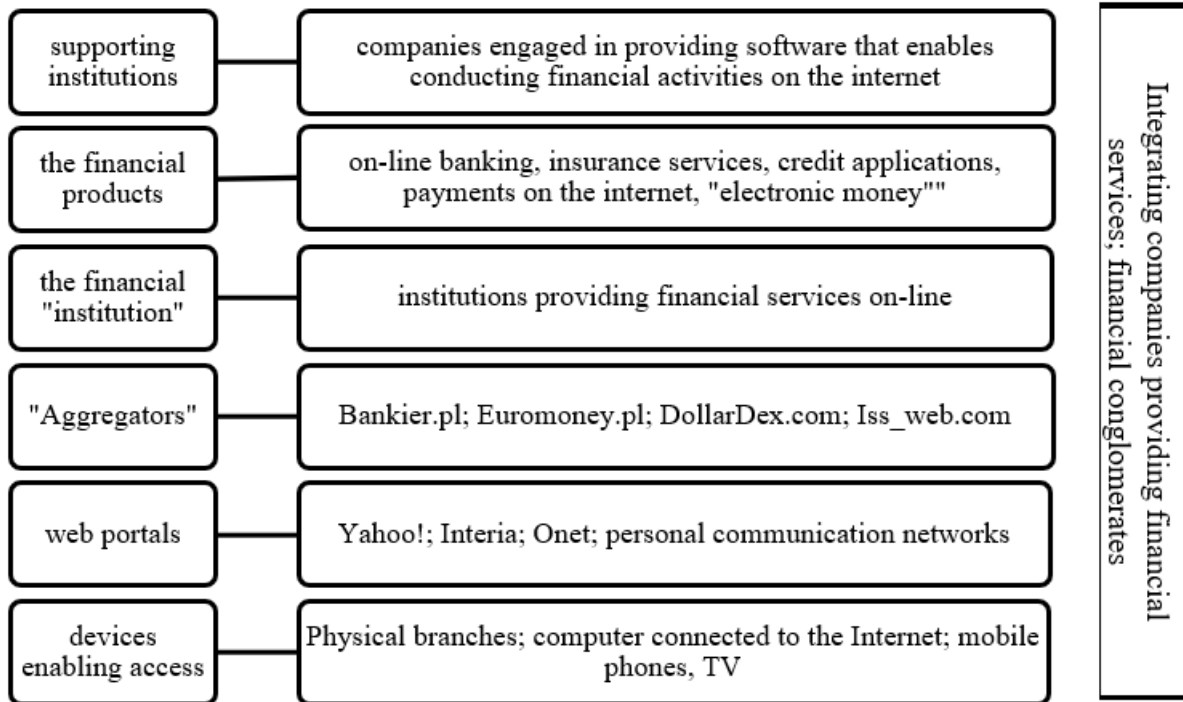
The first category includes traditional stores and online entrepreneurs offering their services through newsletters sent by e-mail.

The second most popular category is the electronic auction websites available on the net. Auction sites are divided into sites providing free access and movement of goods and services between users of institutional and individual (allegro.pl, e-bay), in which options are available to purchase by auction and immediate (instant purchase) and auction services in the strict sense, in which the user is required to buy special envelopes and participation in an auction until the expiry of exposure time object (eg. www.za10groszy.pl).

The third category consists of price comparison websites (ceneo.pl, opineo.pl) to enable a user to find the most favorable offer and correlate it with the opinions of other internet users about the store and product.

Another segment of e-commerce is m-commerce services dedicated to users that purchase through smartphones and tablets. It is the most dynamically developing branch of e-commerce. This is related to the digitization of cultural assets and a change in habits absorption of culture by ordinary users. The most popular goods sold through m-commerce services include e-books, audiobooks, and music (Fura, 2009). The last category consists of financial services sold over the Internet (f-commerce as commerce financial acronym). According to analysts (Nazarko, Dziekonski 2020) is the most promising market covering sales through the internet full package of insurance and financial services. Today noticeable is the trend to create special offers for Internet users. Also, of interest is present contemporary cohabitation offers virtual and real on the f-commerce services and their mutual convergence, which by J. Nazarko and K. Dziekonski (2020) presented in Figure 1.

Figure 1. Distribution segments of e-commerce and their relationship with physical branches of financial institutions



Source: Nazarko, Dziekoński (2020)

2. A gap

In the process of analyzing available scientific studies, the issue of e-commerce is analyzed in a fragmentary way, referring only to the selected issue. A comprehensive analysis of the market from a historical perspective using a research perspective appropriate for the humanities. The subject matter is aimed at structuring and emphasizing the views. It also has a practical dimension; it may provide instructions on the characteristics of the market for external entities wishing to start a business on the Polish e-commerce market. The issues of barriers, as well as the advantages and disadvantages of operating on the market contained in the study, may be included as an element of business plans of platforms and sales stores entering the market.

3. Research aim and research questions

The main purpose of the work is the analysis of changes that have taken place in the e-commerce market in Poland in relation to the twin markets of Romania, Ukraine, and Hungary, which are absent in a combined form. Taking up this research topic is a contribution to further research on the phenomenon of e-commerce and will enable the creation of tools for historical and sociological analyzes of the phenomenon. The following research questions were adopted during the research planning process:

- (1) How has the development and popularization of the Internet in Poland changed the perception of e-commerce?
- (2) Are there differences in purchasing activity between men and women?
- (3) What barriers for the e-commerce industry can be diagnosed in the historical context and whether these barriers in the process of further technologization of the trade market have been lifted?

- (4) Is it possible to define patterns of consumer behavior based on historical and sociological knowledge?
- (5) Which industries recorded the greatest increases in the adopted historical perspective?
- (6) What was the size of the market investigated and the markets used for comparison over the selected historical period?

5. Methodology

The basic research technique adopted in this type of study is the analysis of existing documents understood as - the process of data processing to obtain useful information and conclusions on their basis. Depending on the type of data and the problems posed, this may mean the use of statistical, exploratory, and other methods. Using existing data is an example of non-reactive research - methods of researching social behavior that does not influence these behaviors (Babbe, 2006). For this purpose, a catalog of studies and research reports was created, which were included in the bibliography. In the work on the article, both scientific studies and reports of specialist organizations as well as available press publications in specialist periodicals and internet portals dealing with economics and the influence of new media on economic processes were used. The research was carried out as part of the core business of the unit employing the author of this study.

6. Practical part

The development of the Polish e-commerce market is affected by many factors, among which are the following: economic, political, educational, demographic, and legal. One of the economic factors, the most authoritative in the context of the development of e-commerce is the correlation of this sector of the economy in terms of sector involvement in e-commerce in GDP (Zatonatska, 2018; Beyari, 2021). According to PMR which is the study of the internet, quoted by the website Pb.pl (Portal Pb.pl 2014), the value of the Internet economy in Poland in 2012 amounted to PLN 93 billion, and e-commerce PLN 21.5 billion. The share of sectors in GDP was 6%, compared with countries associated with the G7 and the BRIC (from 0,8-6,3% of GDP) is a good result. According to the company's Polish Internet Research, e-commerce in our country in 2012, generated PLN 21.5 billion, giving him a share of 3.8% for the whole trade. An important indicator is an increase in the correlation from year to year, which in 2016 amounted to 17,3%, and the market reached PLN 37.4 billion PLN.

The above-mentioned growth is presented graphically in Table 2.

Table 2. Value and growth of online retail in Poland in 2010-2016

| Year | Value (bn PLN) | Growth (%) |
|------|----------------|------------|
| 2010 | 15,7 | 16,5 |
| 2011 | 16,2 | 16,2 |
| 2012 | 21 | 15,7 |
| 2013 | 23,8 | 12,9 |
| 2014 | 27,3 | 15 |
| 2015 | 31,8 | 15,4 |
| 2016 | 37,4 | 17,3 |

Source: own, based on: Portal Pb.pl (2014)

Among the other important factors determining the development of the e-commerce sector are socio-demographic factors. According to the report, "Kupuję w internecie", commissioned by the E-Commerce Polska Izba Gospodarki (E-commerce Poland 2014: 2-3), in Poland use the Internet 21.6 million people (64% of the population), of which 17 million users visit e-commerce sites. According to the report, the predominant group of internet users is young people, entering the labor market, while the largest demographic group is people over 55 years old. Analyzing the data presented in Figure 1 and Figure 2. You can conclude that in the future will increase

revenue from e-commerce and the development of these services due to mental and generational change that occurs.

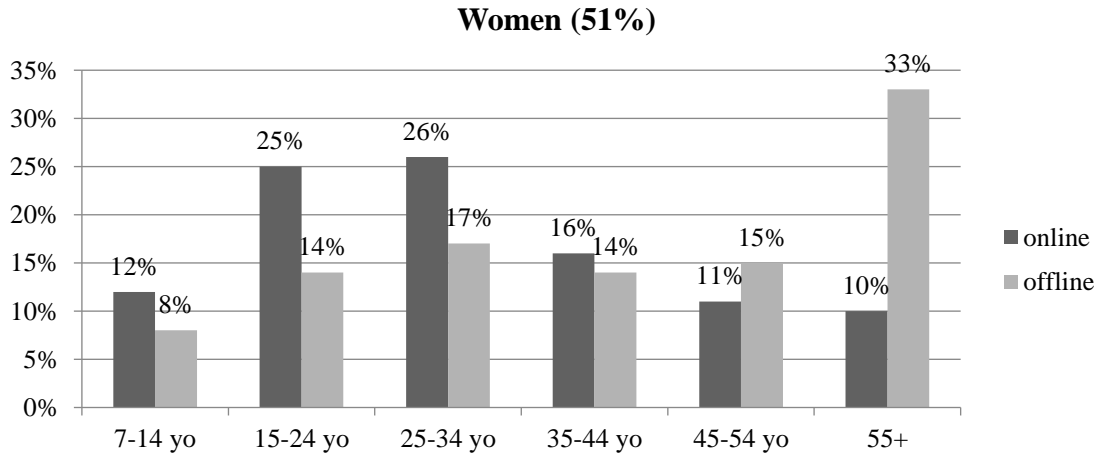


Figure 1. Demographics in e-commerce – women
 Source: Gemius (2014)

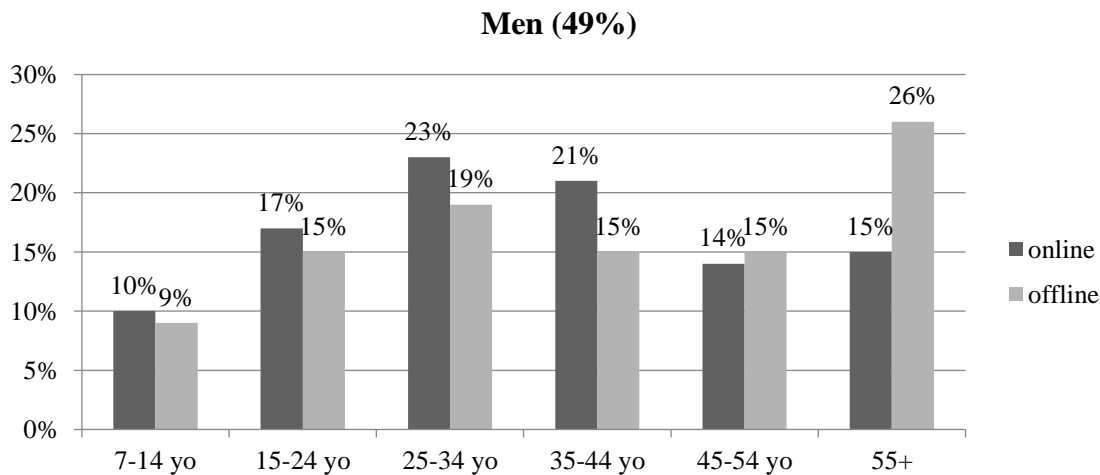


Figure 2. Demographics in e-commerce – men
 Source: Gemius (2014)

According to the data of the report "E-Commerce in Poland 2014" (Gemius, 2014, p.24) indicate that a larger group interested in participating in the process of purchasing on the internet are women (53%). In the correlation of age, observable are (1) an increase in the number of internet users between the ages of 25-34, and (2) a decrease in the number of active users e-commerce in the age group 50+. Shopping online, make most people with a high school education (45% of the sample), a growing number of people with higher education that perform such transactions (35%) can see the downward trend when it comes to people with lower education (19%). With e-commerce sites most often used by people living in cities up to 200 000 people (41%), an increase

in the number of users is observed in large cities (36%). A decrease in the number of active users was observed among residents of villages and small towns (23%). The above-mentioned trends are probably related to the processes of mass education and migration from rural to urban areas. Visible in the research is to reduce involvement in participation purchasing on e-commerce sites with lower-income households (up to 2000 zł). The increase is visible among households with affluent or very affluent portfolios (from PLN 2001-10000). It maintains at a constant level the market share of the holders of more than 10 000 PLN per month. Presented above increases are linked to the market entry of branded outlets and websites offering luxury goods (e.g. 5thavenue.eu, amazon.com, istore.com). A detailed statement is presented in Figure 3.

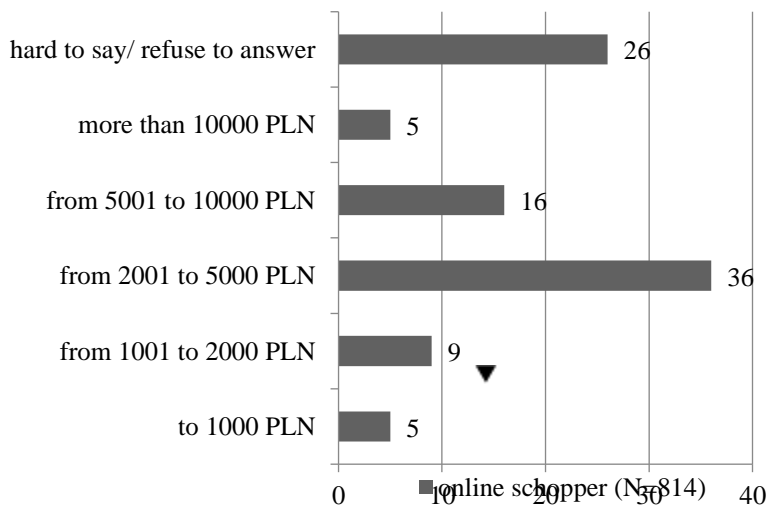


Figure 3. Household income - active users of e-commerce services
 Source: Gemius (2014)

An important legal factor contributing to the increased interest in internet users, the use of e-commerce is the Law on Consumer Rights (OJ 2014 item. 827), which entered into force on 12.25.2014 year. Through this law introduced new rules protecting e-consumer against unfair practices of traders, imposing an obligation to fully provide information on the proposed offer. This Act introduced a catalogue of 21 information obligations - these are the issues about which the tenderer must inform the e-consumer, e.g. The manner of delivery, the period of withdrawal from the concluded contract, guarantee conditions. Also expanded regulations for withdrawal time (14 days) and built a catalogue of cases in which the right of withdrawal is not entitled. The entrepreneur is also obliged to inform the e-consumer in a clear and understandable on the issues of key importance to the concluded agreement (which is problematic for those containing the agreements using the SMS channel, due to a large amount of information to be provided). This obliges the trader to provide information on product description, method of payment, payment terms, the total price of the service, methods of delivery, and costs. This Act has equipped the e-consumer rights and protected them from unfair practices, and thereby encouraged people sceptical about the safety of e-services, to use the services of e-commerce. It will result in the unification of rules and regulations of online stores, but it is difficult to conclude what will be the impact these regulations have on the condition of Polish e-commerce sites. This Act is an implementation of Directive 2011/83 / EU, which has been implemented in all Member States of the European Union, which was supposed to eliminate differences in legislation and remove barriers to cross-border e-commerce. Unify the rules were designed to facilitate e-consumers access to foreign online stores and increase competitiveness (Chomiczewski, Lubacz, 2015, p.77).

To political factors, affecting the dynamic development of the e-commerce sector may include the de-monopolization of telecommunications and postal services. The first of these factors is closely correlated with the affluence and purchasing power of individual households and the political decisions related to the public finance sector. Allowing the deduction of tax on goods and services (VAT) and making it easier for settlements in e-commerce and the ability to deduct from income tax the cost of access to the Internet, enabling the development of the e-commerce sector. The second of these factors made it possible to achieve greater profitability online stores, most of which operate business model oriented smaller profit associated with a higher turnover than the profit per unit. Achievement of a present level of development of the e-commerce sector would not be possible without the grants to set up new businesses from European funds. As indicated by the "Dziennik Internautów" (Lisowska, 2014) direct grant stimulates young entrepreneurs to start a business, and enables business growth through free training and business workshops or constitutes an important element for the development of the company.

The increase in interest in the e-commerce sector is undoubtedly also influenced by educational factors. More and more young people have contact with the media, according to the "Diagnoza Społeczna 2013" (Batorski, 2013: 334) already 3-4-year-olds use mobile devices. This increases confidence in this form of communication and ease of use of modern technologies. Young people are not afraid to enter into transactions over the internet, increasingly it is for them an alternative, less expensive form to get the desired goods - according to the Report "E-commerce w Polsce 2014" (Gemius, 2014, p.43) for 93% of teenagers motivator for online purchases is a lower price.

The most important benefits associated with the establishment and development of e-commerce sector, we can, for the professional literature, (Grudzieński, Hajduk, 2002; Szpringer, 2005; Sroczynska-Baron, 2018; Tikhomirova et al., 2021) indicate: (1) reducing the operating costs of the company, in particular the costs associated with maintaining offices and costs associated with maintaining the network of delegations and human costs, (2) the possibility of interactivity and customization of communication with customers through a variety of additional services (newsletter, contact form), (3) flexibility in logistics chains, (4) saving working time due to the reduction of responsibilities of employees, (5) making available of customer a much larger number of products - due to the much greater availability of goods on e-commerce market, (6) automate the process of product search, understood as a reduction of labour costs, and (7) continuous updating of the commercial offer related to the competitiveness of the market. The disadvantages of commerce that have been described in the literature can include those, seen from the point of the customer and that of defects that relate to the seller. They are presented in table 3.

Table 3. Summary of disadvantages of e-commerce

| The disadvantages for the consumer | The disadvantages in terms of the seller |
|---|---|
| ensuring the security of payments over a network | too high cost of delivery to the customer |
| uncertainty as to the reliability of the seller | lack of an effective and extended system of forwarding and delivery |
| the inability to try or touch the purchased goods | lack of effective handling credit card payments |
| perceived lack of physically existing vendor with whom you can consult some urgent issues | reduction of profit margins, resulting from flattening prices and often with a "price war" between operators, mainly advertise in the price comparison websites |

Source: Own study based on: <http://zakupydodu.blogspot.com/2012/11/zalety-i-wady.html>

In the context of psychological barriers associated with online shopping, an important problem are shopping models appearing in the online store-client relationship. The most popular model defining the relationship is a model ROPO (Research offline purchase online) developed by K. Hudetza, A. Hotz and S. Strothmann (2011). Following laid down in the paradigm of the modern internet user becomes familiar with the commercial offer in

the real world, but the purchasing decision-taking in the virtual world. From an economic perspective, this leads to a reduction in demand in the local market and an increase in demand in the global market. This economic relationship is related to the theory of McLuhan (2004) paradigm of the global village, in which people seek out the most attractive offers without geographical barriers, guided by the only profitable individual understood as a benefit unit. As noted by Joanna Bilińska from the website Ceneo.pl: the internet is currently the main source of information on services and products, which can be seen even enduring popularity of price comparison sites. However, not every shopping that Poles begin in the network ends the online transaction. The research we conducted among our users indicates that half of them make purchases in stationary stores, after earlier research on the internet. ROPO effect, translated as search online, buy offline, is a strong trend in shopping habits of those consumers who prefer to see the merchandise before buying, save the cost of delivery, or to buy merchandise available "on the spot" (Gemius, 2014: 86). This phenomenon is particularly strong in these product categories and industries like automotive, tourism, home electronics/appliances, and mobile communications, or wherever the key is time that the consumer can devote to wait for the goods from the decision of purchasing (Gemius in 2014: 86). Under the effect of ROPO noted convergence on trade channels online and offline. Stationary stores have recognized the need to intensify marketing activities on the internet so that its offer be getting to the client, which is oriented to the purchase traditionally but actively seeking information on the Web. Online shops notice the need for the complexation and flexibility it offers - more and more of them can receive personal goods or all-day contact with the seller via the hotline. In terms of convergence of sales channels is an interesting sales subchannel called e-FMCG, which deals with fast-moving products. Large retail chains have noticed the potential sales of smaller batch via the Internet and allow you to make so-called everyday purchases electronically (Tesco.pl, Alma.pl) with the delivery to the house or in a specially prepared receiving point near the shop.

Polish internet users are positive about buying online stores, with active users of e-commerce services evaluating them better in all dimensions. E-consumers appreciate above all the convenience of the transaction and the costs lower than in the traditional trade. People not using services of the e-commerce sector, the least evaluate the safety of such transactions, considering it as risky (Gemius, 2014, p.28). Specific concerns of internet users are associated with electronic payment methods. Research Gemius, SA (2014, p.25-26) shows that doing online shopping the internet users show the greatest concern in matters related to security and the time of delivery. Not surprisingly high, the third item of cash transferred upon receipt of the goods (21% surveyed), on the list of the most popular forms of payment for online purchases. Wins the force of habit and feel that paying on delivery faster and easier to turn merchandise. The respondents as the most convenient payment method in the shop online, most often mention fast internet payments (36%). Second place, with the same result (24%), take cash and payment by online bank transfer. With high-speed internet payments using mostly young, well-educated and living in big cities. It is also a form of payment preferred by men.

It is interesting also to present in the report "Kupuję w internecie" prepared for the Association of IAB Poland list of the most popular online trades in Poland. The above research shows that the greatest popularity among Internet users it has the following categories of stores: clothing stores (28%), department stores (25%), and electronics (24%). In the following part of the statement were shops offering books, music, and virtual pharmacy. At this point, it should be noted that part of the market is devalued by shops located in countries neighboring the Polish employing a more favorable tax system. Among the factors, motivating people to make purchases online should be replaced (1) clock availability, (2) favorable pricing, (3), direct distribution defined as the delivery of the product directly to the customer's home. Expenditure related to commercial activity in the virtual world is dependent on the industry. For shopping network statistics Pole spends a month on average, including 89 PLN for jewelry, 90 PLN for clothes, and 49 PLN for perfume (E-commerce in Poland in 2014, p.15). In terms of growth in the number of online stores in the next 5 years (2008-2013), the largest increase recorded online stores that sell perfume products for children and department stores, reflecting the low saturation of this market in the aforementioned period. A full list is presented below in Figure 4.

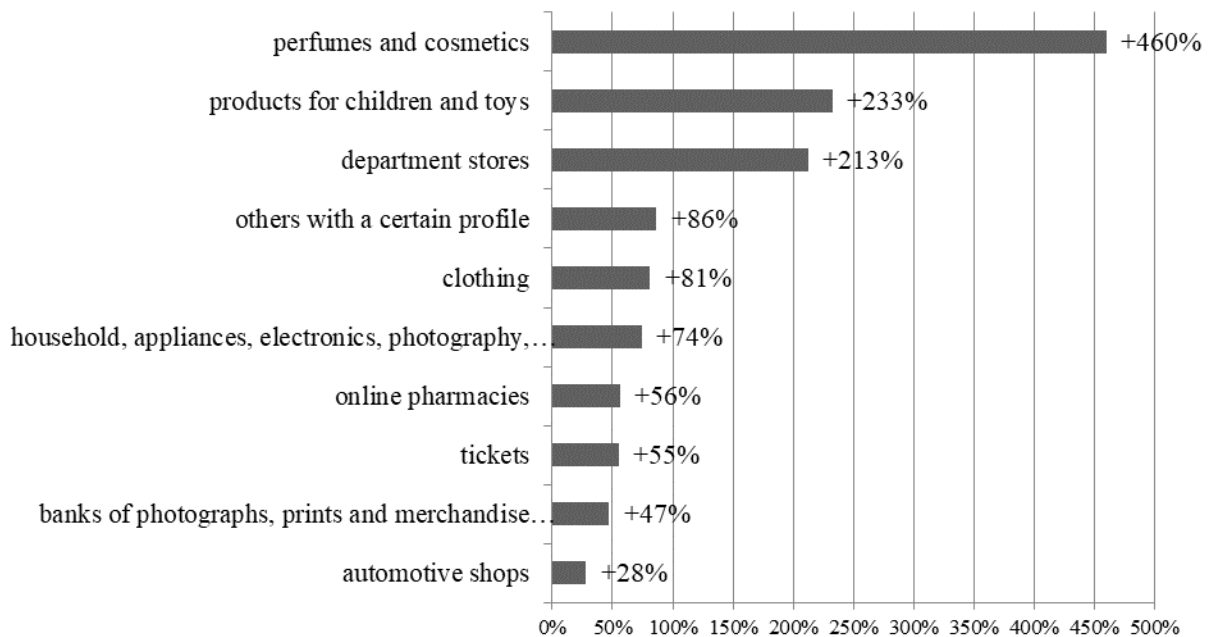


Figure 4. Increase in the number of online stores by category

Source: Ryciak (2014)

As pointed out by Andrew Garapich (2011) determinant of shopping online is the possibility of a comprehensive familiarize with the product and its specifications. According to the aforementioned Andrew Garapich, internet users are becoming users of e-commerce services due to the ability to compare products and find a more satisfactory price offer. Searching for suitable products, people buying online support mainly information found in the results of search engines on merchant websites and online auctions. The research (Gemius, 2014, p.66) shows that the determinant of purchase decisions in the virtual space remains the price of the product. More and more often indicated in the offer is the availability of virtual products non-phase on the traditional market, friend recommendations, and opinions obtained from external sources (specialist press). If the decision of purchasing, users are increasingly turning attention to the credibility of the shop (opinions about the store, the physical location), and on the options available in after-sales warranty. Interestingly, factors that fit the credibility of online shops, in the opinion of internet users (Gemius, 2014, p.70) are a visually appealing look of the page, the photo headquarters store in the contact tab, the ability to purchase in installments, and logos banks. Such prioritization is a potential threat associated with the possibilities of falsification of the elements mentioned above by people with more advanced computing competencies, for example by creating a non-existent store based on photos of the buildings available in the public domain. The biggest problem in the development of e-commerce in Poland is the low public trust associated with purchases made at a distance (Bylok, 2021). It is connected with the experience of the transition period experienced by the older generation and digital exclusion associated with smaller digital competence elderly (Van Dijk, 2010, p.248-264). An equally pressing problem enterprise operating in the sector of electronic services is to create in a customer so-called consumer loyalty (Olejniczak-Merta, 2010, p.135). As mentioned above, the majority of consumer decisions taken in the webspace is determined by the lowest price. The challenge for entrepreneurs is to prepare the additional offer for regular customers, which would encourage repeat purchases in a given shop. The largest e-entrepreneur (oleole.pl, electro.pl) prepare for its customers' special packages loyalty. These are the offer of discounts, rebates, and additional products at preferential prices or free delivery options. These are marketing techniques also present in the standard business.

As indicated by several economic reports, e-commerce plays a very important role in the rapid development of the service sector in the CEE-6 region, however, the irregular nature of the rapid increase in internet sales makes estimating precise values extremely difficult. The authors of the “Statistica” report forecast an increase in online sales to EUR 6.9 billion, which is 10 percent of the total projected increase in retail sales at EUR 71.5 billion in 2018-2022. The extreme scenario presented in the report, assuming that all retail sales from today until the end of 2022 will be responsible for e-commerce, seems unreal. This would mean that online sales would increase to 19-29 percent retail sales in all CEE-6 countries. The above data indicate that the e-commerce market is becoming an important element of the economies of Central and Eastern Europe. Based on the data collected by the United Nations Statistics Division in Table 4. Data on the value of the E-commerce market in Central and Eastern Europe are presented below (Table 4).

Table 4. The estimated value of the e-commerce market in 2018 in Euro

| Country | The estimated value of the e-commerce market in 2018 in Euro |
|----------|--|
| Bulgaria | 690.000.000 |
| Hungary | 1.690.000.000 |
| Poland | 9.300.000.000 |
| Romania | 3.800.000.000 |
| Ukraine | 1.830.000.000 |
| Russia | 16.3000.000.000 |

Source: E-commerce in CEE, <https://www.gemius.pl/e-commerce-100/category/europa-poludniowo-wschodnia.html>

As indicated above, e-commerce markets are an important element in assessing markets and affect the development of the sector of innovative solutions for individual national economies. However, the author of this article did not find data specifying the percentage of GDP generated by the e-commerce sector as a whole for the economy of the countries described above. These data could be extremely valuable for understanding the economic impact of this sub-market.

7. Novel insights

The estimated value of the Polish e-commerce market in 2017 was about 40 billion PLN. As in previous years, the industry still recorded a double-digit percentage increase in sales. It is worth noting that in countries with a stabilized market of the e-commerce percent increase in turnover is about half less than in Poland, while the value of the e-commerce market is much higher than in Poland. In addition, consumers are increasingly aware of their rights and responsibilities. Entry into force of the new law, which took place on December 25, year 2020 was widely reported in the media and commented. The subject pointed out both entrepreneurs and consumers. This year's e-commerce challenges include more accurate analysis of customer needs, customized content to target groups, and real-time content management, which means the collection and management of data in real-time (Kozłowski 2015). Present an analysis of the phenomenon of e-commerce is due to the reduced volume of text, only fragmentary. However, the text should be a contribution to further interdisciplinary scientific discussion because of poor scientific literature. Presented in the text of the individual elements require more than a multi-page analysis from a scientific point of view, which not only systematizes the issues but also cleaned up the data present in the literature of industry.

8. Research limitations

The conducted study was contributory. Due to the research methods used, it can only be a reference point for future planned research related to e-commerce. In principle, the article is the beginning of in-depth research aimed at the categorization of entities e-commerce and the description of phenomena occurring in small and medium-volume e-commerce markets in Central and Central Europe. These markets have enormous potential that should be explored in the future, using sociological methods both at the level of site-centric and user-centric research, which was noticed by the author of the article and placed in the individual research development program. In subsequent studies, the author will take up the subject of the development period (2017-2020) and the impact of the COVID-19 pandemic on consumer decisions and behaviour in the e-commerce industry on the example of selected market sub-segments using quantitative (questionnaire) and qualitative (IDI) methods in the research process.

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