ECONOMICS AND ENVIRONMENT 1(88) • 2024

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OPTIMIZATION OF CONSUMER DECISIONS AND THE IMPACT OF SELECTED FACTORS ON PURCHASING BEHAVIOR IN POLISH E-COMMERCE

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ABSTRACT: The article aims to present consumer behaviour in the process of purchasing goods and services in online stores in the Polish market. The impact of selected factors determining or discouraging online shopping, as well as influencing the choice of an online store by young consumers representing the "Z" generation, was examined. 100 respondents took part in the pilot study, and women constituted nearly 70% of the surveyed population. Depending on the needs of customers, various factors determine whether they will make purchases online or convince them to choose an online store. Additionally, through the prism of various concerns and their own experiences, they assess factors discouraging online shopping. The results of the analysis can be used in practice when planning an advertising campaign by introducing coordinated and organised activities using one or several different related media. The publication also discusses the impact of online advertising on consumer behaviour in e-commerce, combining an interdisciplinary approach in the areas of management and quality sciences with economics and finance. The study was conducted in the fourth quarter of 2022.

KEYWORDS: consumer behaviour, e-commerce, online advertising

Introduction

A new type of society, which in this case is the information society, shapes a new personality, a person with the skills needed to act in conditions of developing technologies. An e-consumer, a member of the information society, uses modern information technologies with which he or she deals practically in all areas of his or her life. He is convinced that new technologies are changing the ways of production and consumption, giving new meaning to these forms of activity (Kędzior & Kieżel, 2002; Tokarski & Wolak, 2023; Wątroba, 2006).

Many factors shaping buyer behaviour on the market can be relatively quickly identified through simple observation. However, most of these elements require deeper analysis. This is because buyer behaviour is a very complex and, at the same time, diverse category. This is primarily due to the large number of factors determining and differentiating consumer decisions, as well as the complexity of decision-making processes. Therefore, it is not easy to see all the elements and aspects of buyer behaviour on the market. Empirical research only allows us to identify consumer behaviour at a specific point in time. Based on these conclusions, it is possible to determine certain types of regularities in their behaviour and then attempt to construct a model or models of these behaviours (Kowalski, 2021; Pleśniak, 2004; Smyczek, 2007).

Depending on the adopted criterion, there are different classifications of consumer behaviour models. The most common division falls into two main categories – sequential and structural models. Sequential models are based on the purchasing decision-making process itself, explaining in a more or less detailed way the determinants of these decisions. In turn, structural models take into account the most important aspects shaping consumer behaviour and the relationships between these factors. Moreover, both these types of models can also be divided into qualitative and quantitative (Burlita, 2014; Maciaszczyk, 2014).

Most models depicting consumer behaviour present a simplified version of its dependence on many different factors. These schemes usually differ in their nature, number of variables, complexity and connections between explanatory processes. Buyer behaviour can be called behaviour composed of many subsequent stages in a specific order (Lambkin et al., 2001; Światowy, 2006; Falkowski & Tyszka, 2009). The main purpose of developing the scheme is to be able to predict buyer behaviour in the future, taking into account the factors determining it, constituting the consumer's environment. A properly developed model of buyer behaviour should take into account (Bartosik-Purgat, 2011):

- stimuli marketing mix,
- goals utility maximisation,
- the ability to predict the behaviour of individuals or groups,
- · constraints consumer's budget,
- organism characteristics and dispositions of the consumer,
- surroundings.

In summary, it should be said that psychological variables play an important role in consumers' economic behaviour because consumption is complex and unpredictable. Buyer behaviour cannot be predicted or explained solely by examining economic laws. Some distortions caused by the psychological processes of decision-making, evaluation and choice must also be taken into account. The buyer is not just an economic entity rationally involved in the process of increasing utility (Wolanin-Jarosz, 2006; Włodarczyk-Śpiewak, 2008; Kicińska, 2009).

Millennials and Generation Z are the generations that are really interested in ecology and social issues. They do not want greenwashing activities (i.e., ostensible activities that conceal the brand's unsustainable activities) and empty slogans, but they want real evidence that the fate of the planet is really important to companies. If they don't understand this, they are likely to place the brand in the wrong world and confront its representatives with the information obtained (CBOS, 2020).

The article consists of an abstract, introduction, motivation and purpose, materials and methods, results, conclusions and references. Each area was described in detail based on the available literature, reflected in the references.

Motivation and purpose

E-commerce in Poland is developing and playing an increasingly important role; both its value and share in GDP are growing, and its share in total retail trade reaches 3.1% (in Western Europe, where mail-order catalogues were more common, the share is Great Britain 12%, in Germany 9%, and in France 7.3%) – as of 2019 (Tur, 2019).

According to CBOS research, a Polish Internet user is a person with a higher than average socio-financial status and is most often well-educated; almost as many Poles as Polish women use the Internet. Most Internet users are in the age groups 18-24 (25%) and 25-34 (23%). The number of Internet users decreases with age. Of people aged 55 to 64, only two-fifths use the Internet regularly. Some types of professional activity involve working on a computer, which usually involves being online. Internet users constitute the largest group among managerial staff and specialists with higher education, as well as among technicians and middle-level staff, office workers and private entrepreneurs. Workers, especially unskilled workers and farmers, declare that they use the Internet relatively less often than others. Internet users spend an average of 11 hours a week on the Internet. Over the last three years, the average declared time spent on the Internet has remained stable. The number of hours spent on the Internet is related to age. Internet users up to 34 years old stay on the Internet longer on average than older users. The oldest are the least active. 3/4 of Internet users (75%) made purchases online, i.e. 45% of all respondents. Thus, younger users (aged 18 to 34 - 84%) and the most educated (87%) were relatively most likely to buy something on the Internet. People who operated a bank account online in the month preceding the survey constitute 3/5 of Internet users (59%), i.e. 36% of all respondents. Better education favours the use of electronic banking, although the youngest respondents use it less often (CBOS, 2023).

The Internet is a medium used mainly by residents of large cities and areas with well-developed telecommunications infrastructure. This is a very interesting group for marketing specialists – a significant part of Internet users are students who currently do not have a stable income (Frąckiewicz, 2006; Dąbrowska et al., 2009; Skawińska, 2009).

The use of various types of e-services is dictated by several universal motives (Mirońska, 2010; Rybowska, 2010):

- comfort,
- time savings,
- · saving money,
- overcoming time and geographical barriers,
- · variety of offers.

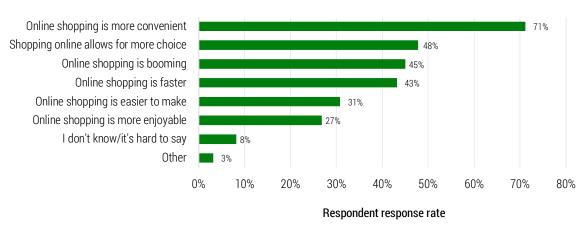


Figure 1. Percentage of indications regarding the motives for making purchases on the Internet Source: authors' work based on Mirońska (2010) and Rybowska (2010).

Most of the information regarding the motives for using e-services is directly related to e-commerce. According to the report "E-customer – Buyer behavior", the main reasons mentioned above why consumers choose to shop online is convenience (e-Gospodarka.pl, 2004). The choice of this

factor as the most important is influenced by: limited time on the part of customers, increased need for relaxation related to a change in lifestyle. Nowadays, more and more people experience a deficit of free time. It is becoming more and more valuable, which is why consumers are looking for goods and services that will allow them to save it (Kotler et al., 2002; Tokarski & Witaszewska, 2022).

The advantages of e-stores include the following benefits for customers (Mirońska, 2010; Rybowska, 2010):

- 24/7 access,
- the customer buys when he wants, how he wants and what he wants, he can interrupt the transaction at any time to return to selected store pages in the future,
- · the comfort of use,
- · possibility of purchasing hard-to-find goods,
- cheaper shopping than in traditional stores,
- greater selection access to current offers from around the world.

In the context of a constant lack of time, consumers do not want to be dependent on store opening hours and their location. They want to buy where they want and when they want. Modern consumers are different from their predecessors, and they are better educated and more demanding. They have higher expectations in terms of service and comfort (Pangsy-Kania, 2012).

A greater selection of products on the Internet encourages potential customers to shop online. Consumers can easily compare product features and prices without leaving home. For many of them, the ability to widely compare prices means they can make the right choice and save money. Hence, lower prices in online stores, or the impression created by the possibility of comparing individual product features, influence the decisions of e-shoppers. Other positively assessed features of the purchase of goods online mean greater speed and ease of shopping. The customer's choice of an online store is most often determined by the price attractiveness of the goods and a wide selection of products. E-shopping excludes most of the features that make traditional shopping a chore (Wolny, 2016; Dybka, 2017).

The factors determining the change in consumer behaviour in the use of e-services are (Dąbrowska & Janoś-Kresło, 2010; Nogieć, 2011):

- access to markets, from local to international, which is important in the era of globalisation of services.
- a consumer looking for a service on the Internet is anonymous, which may make it much easier to make an independent decision to purchase a service,
- short time for concluding purchase and sale transactions, and in the case of some services, also for their consumption, which shortens the time needed to meet needs,
- modification of offers in terms of prices, exchange rates, and changes in trends is very important, especially in periods of turmoil, e.g., during the transition period. financial crisis,
- the ability to reach a larger number of consumers with the offer, access to whom using traditional methods is limited and often expensive,
- the possibility of eliminating intermediaries in the case of some services, which brings the service closer to the recipient and may reduce the costs of its provision and, therefore, the price,
- the possibility of extending the working time of a service company without incurring additional
 costs, which, given the price pressure, is not without significance for companies and for consumers, it makes the company more accessible and open to the needs and expectations of customers,
- variety of payment methods,
- providing consumers with comprehensive information about services.

The Internet, like other media, influences the purchasing decisions of traditional consumers who look for information on the Internet but make purchases in the real world, and e-consumers – in this group, the Internet can be used at all stages of the purchasing decision-making process.

A pro-ecological approach starts with the website itself. It turns out that the implementation of modern technological solutions allows you to reduce the number of returns and, consequently, the carbon footprint (Tokarski & Motowidlak, 2023). Ecology is not a passing fad but a new standard in the e-commerce industry. This is primarily due to the needs of customers themselves and their expectations towards online stores. As market research shows, including Sustainability and the Consumer 2021 (conducted by Drapers in cooperation with Smurfit Kappa), as many as 50% of consumers are willing to pay more for eco-friendly packaging and delivery. Moreover, as many as 1/3 of respondents

(approx. 33%) admitted that they give up shopping if the store does not offer ecological solutions. The study was conducted in relation to trends among e-consumers purchasing clothing and accessories online, but its results provide an overall picture of what consumers want. The consumer wants to be eco-friendly, so he is willing to pay more (Drapers, 2021).

Materials and Methods

The literature review conducted by the authors of the presented article indicates that the publications did not present research similar to the topics discussed in the study. In this way, a research gap was identified, justifying scientific work on the optimisation of consumer decisions and the impact of selected factors on purchasing behaviour in Polish e-commerce.

The problem presented in this way allows us to formulate the following research questions:

- 1. What factors influence the decision to buy online?
- 2. What factors discourage people from shopping online?
- 3. What factors influence the choice of an online store?

The research method is a diagnostic survey, the technique is a survey, and the tool is a questionnaire survey. The diagnostic survey method is a way of collecting knowledge about structural and functional features, as well as about the dynamics of social phenomena, views and opinions of selected populations and directions of development of specific phenomena (Aponowicz, 2015).

Survey research is the most popular method of social research. Therefore, in order to obtain the data necessary to achieve the purpose of the analysis, a research tool was used, which is a survey questionnaire, which, compared to an interview questionnaire, largely contains closed questions in a closed or semi-open format. This form of research does not require the presence of an interviewer. It can be sent by mail, shared on a social networking site, and carried out easily and quickly. It provides information about a broad research phenomenon in large groups (Juszczyk, 2001).

To answer the research questions posed above, it was decided to prepare a survey questionnaire consisting of four basic parts:

- respondents' data (gender, age, marital status, education, place of residence, professional status, financial situation of the household, level of average monthly net income per person in the household),
- ability to use the Internet,
- specificity of online shopping,
- the impact of online advertising on consumer purchasing decisions.

The study was conducted in the fourth quarter of 2022. The pilot study involved 100 respondents (69 women and 31 men), Internet users aged 16 to 26 – born after 1995, representing the "Z" generation. The sample was selected using a non-random method, random selection. The survey was conducted using an interactive form available on the online platform. Participation in the study was voluntary and anonymous.

Before completing the surveys, respondents were initially informed about the purpose of the study and instructed on how to properly complete the survey, which enabled precise preparation of the results, which are presented in a descriptive form later in the article. Statistical measures (percentage, mean, median, dominance) were used to analyse the obtained results. The survey questionnaire consisted of 19 questions; most of them could be answered only once, and all surveys were completed correctly.

Results

Depending on the needs of customers, various factors decide to make purchases online or convince them to choose an online store instead of a stationary store. Additionally, through the prism of various concerns and their own experiences, they assess factors discouraging online shopping. The study focused on the analysis of positive (Figure 2) and negative (Figure 3) factors determining online shopping. Each respondent indicated a maximum of 3 positive and negative factors.

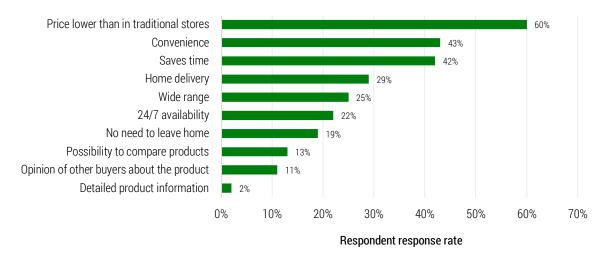


Figure 2. Factors determining respondents' decision to make purchases on the Internet Source: authors' work based on research results.

According to respondents, the factor that had the greatest impact on online shopping was the lower price than in traditional stores (60%). However, 43% of respondents indicated convenience and time-saving as the decisive factor for online shopping. The conclusions of the research conducted coincide with the results of the report by PwC and the Digital Experts Club, which was prepared on the basis of interviews with e-commerce leaders. According to him, the key factor when choosing an online seller is the price (68%), and in the case of young consumers, also the speed of delivery (Forsal, 2021). The least frequently chosen factor influencing online shopping was accurate product information (5%).

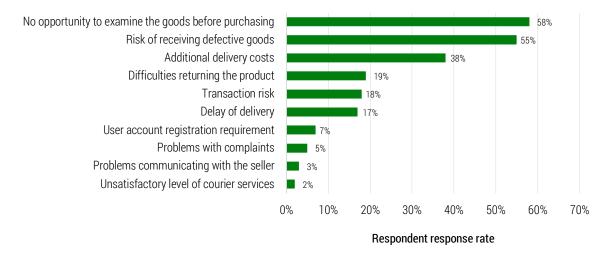


Figure 3. Factors discouraging respondents from shopping online Source: authors' work based on research results.

Research shows that in 58% of cases, the lack of opportunity to familiarise yourself with the product discourages online shopping. An equally high percentage of respondents (55%) indicated the risk of receiving defective goods as a factor discouraging them from shopping online. Almost 38% of respondents cite additional delivery costs as a reason for not shopping online. According to the Expert Sender report based on research conducted in August 2020, the factors most discouraging online shopping are pop-up advertisements and the lack of free delivery or unpredictable delivery dates (Wasilewski, 2020).

The multitude of factors determining the choice of an online store is an element that significantly influences purchasing decisions. Consumers' purchasing choices are often influenced by other people – close friends or strangers from the Internet. People making purchases are not free from celebrity opinions or messages conveyed through advertising. Individual factors influence the final decision and the choice of the right product. The last aspect of the analysis regarding online purchases made by the surveyed people was the factors influencing the choice of an online store.

Table 1. Factors influencing the choice of an online store by respondents by gender and place of residence

Category	Avaerage								
	Woman	Man	Village	City up to 30 thousand inhabitants	City 31-100 thousand inhabitants	City 101-400 thousand inhabitants	City 401k and more inhabitants		
Knowledge of the store	4.42	4.42	4.36	3.90	4.46	4.27	4.36		
Result in an internet search engine	3.20	3.27	3.38	1.38	2.92	3.11	3.26		
Opinion on online forums	3.33	3.59	3.33	3.55	3.52	3.21	3.52		
Ranking of online stores	3.01	3.38	3.16	2.45	3.4	2.95	3.11		
Advertisement	2.82	2.44	3.26	2.55	2.86	2.82	2.63		
Friends' opinion	3.67	3.38	3.59	3.64	3.64	3.74	3.44		

^{*} Assessment based on a scale from 1 to 5, where 1: very rarely, 2: rarely, 3: neither often nor rarely, 4: often, 5: very often. Source: authors' work based on research results.

Analysing the results of the conducted research, it can be concluded that individual factors equally influenced the choice of an online store by the surveyed women and men. Respondents of both genders indicated the same mean (4.42) in terms of the importance of knowing the online store when shopping online. This means that it often or very often determines respondents' choice of where to shop online. In turn, the factor that achieved the lowest average value – 2.44 for men and 2.82 for women – was advertising.

Taking into account the respondents' place of residence, it can be seen that respondents living in cities rarely or not very often chose an online store based on advertising, while people living in rural areas did it more often (average 3.26). In addition, advertising as a determinant of the choice of an online store for online shopping achieved the lowest average in all surveyed places of residence, which means that it had the least influence on this choice. Additionally, it can be stated that a factor that often or very often determines the choice of an online store is the knowledge of the store for each type of place of residence examined. The average values in all analysed variants ranged from 3.9 to 4.5.

When examining the factors influencing respondents' choice of an online store, it is worth focusing on their income level. Factors influencing the choice of an online store depending on the level of respondents' income are presented in Table 8. Analysing the income level of the surveyed people, it can be concluded that for each income bracket, as well as for people who do not have one, the most important factor influencing the choice of an online store is knowledge. The average ranged from 4.00 to 4.60. In the case of people with monthly income of PLN 2,001-2,500, the lowest average (3.01) was achieved by the search engine result as a determinant of the choice of an online store. However, the opinion of friends often determines this choice in the case of people with income below PLN 1,000 (average 4.00). Consumers believe in the recommendations of people they trust and only check recommended online sellers.

According to the IAB Polska / PwC AdEx report, the value of the online advertising market in Poland in the fourth quarter of 2020 was over PLN 5 billion (IAB / PwC AdEx, 2022). The level of these expenses increases from year to year and shows how important an element of advertising is in the consumption process.

Table 2. Factors influencing the choice of online store by respondents according to: income level

Category	Avaerage								
	Woman	Man	Village	City up to 30 thousand inhabitants	City 31-100 thousand inhabitants	City 101-400 thousand inhabitants	City 401k and more inhabitants		
Knowledge of the store	4.38	4.38	6.36	4.00	4.60	4.47	4.30		
Result in an internet search engine	3.20	3.27	3.38	1.38	2.92	3.11	3.26		
Opinion on online forums	3.33	3.59	3.33	3.55	3.52	3.21	3.52		
Ranking of online stores	3.01	3.38	3.16	2.45	3.40	2.95	3.11		
Advertisement	2.99	2.57	3.14	2.45	2.96	2.74	2.52		
Friends' opinion	3.67	3.38	3.59	3.64	3.64	3.74	3.44		

^{*} Rating based on a scale from 1 to 5, where 1: very rarely, 2: rarely, 3: neither often nor rarely, 4: often, 5: very often. Source: authors' work based on research results.

Conclusions

The results of the analysis can be used in practice when planning an advertising campaign by introducing coordinated and organised advertising activities using one or several different, related media that appear in a specific order and at appropriately set dates. These activities can be used to achieve specific goals. The most general goal of an advertising campaign is to influence consumer decisions and behavior (Adamowicz & Krasuska, 2016). Therefore, it is often believed that one of the most important elements of an advertising campaign is to attract attention. When planning an advertising campaign, it is very important to determine the media that will be used in it. Various measures of the attractiveness of individual media are used to analyse the most profitable media for a given advertisement. These may be indicators determining the average minute of watching TV or the number of views of a given profile/page. Advertising campaigns are most often carried out by advertising agencies entrusted with activities related to the planning and implementation of campaigns. The average duration of a regional or national campaign is approximately 1.5 years, although a shorter period is, of course, possible. There are also advertising campaigns that last for several years (Mruk et al., 2007; Tokarski & Wawryniuk, 2023).

A unique feature of the Internet is its complementarity with other techniques for searching, storing, transmitting and processing information and the comprehensiveness of its social effects. This makes the Internet a very effective instrument for the development and functioning of a modern economy. The Internet has introduced a new quality into the lives of many people around the world, giving them previously unknown opportunities. It offers a wide range of possibilities and very different forms of activity, making life much easier but also giving the opportunity to create a different virtual world. For the Internet, there are no distances, no country borders, no social, economic or cultural differences. It allows you to overcome time or space limitations and creates the opportunity to individualise the message addressed to the recipient. It is constantly changing both in terms of functioning and scope of applications (Hanson & Kalyanam, 2020; Katsikeas et al., 2020).

Small and medium-sized e-commerce enterprises operating on sales platforms and online stores, such as Allegro, Amazon, eBay, Empik, Facebook, Instagram, Marketplace, OLX and other advertising portals and price comparison websites, can benefit from the implementation of the analysis's assumptions. The ability to create completely new revenue streams will determine which companies will develop in the Internet era and which will not. The Internet is no longer just a global computer network enabling easy communication. It has also become a channel for transferring values and resources. Thanks to the Internet, information, material goods, services and logistics management systems have become available. To find its place in the inevitable wave of innovation, the company must become more like the Internet itself. It must be open, democratic, experimental, non-hierarchi-

cal and adaptable. Internet advertising is an inspiration for many ideas for running a successful business. It allows you to implement innovative solutions supporting company management (Rajendran et al., 2018; Choi, 2019).

Brands that focus on sustainable development and have a transparent policy enjoy greater consumer trust. This trust translates into increased sales results, shopping experiences and repeat customers. As much as 86 percent customers decide to buy from a company they consider authentic*. However, taking care of the brand's image cannot end with words – consumers need actions. Today's customers do not equate a good reputation only with smooth deliveries, good customer service and high-quality goods. To make a purchase decision, it is not enough to recommend it to a friend or read the opinions of other satisfied customers. They demand total transparency from companies. They want to know what they are paying for and whether what (and where) they are buying fits into their value system (Śleszyńska-Świderska, 2017; Apaczka, 2022).

The contribution of the authors

Establishing the concept, D.T.; establishing research methods, D.T.; text creation, D.T. and A.F.K.; analytical description of the phenomenon, D.T.; implementation of the research idea, D.T.; critical evaluation, D.T.; data collection, D.T.; data analysis and interpretation, D.T. and A.F.K.; development of research results, D.T. and A.F.K.; literature review, D.T. and A.F.K.

References

- Adamowicz, M., & Krasuska, A. (2016). Komunikacja marketingowa a zachowania nabywców na rynku towarów konsumpcyjnych. Nierówności społeczne a wzrost gospodarczy, 45, 173-185. https://doi.org/10.15584/nsawg.2016.1.18 (in Polish).
- Apaczka. (2022, July 27). Ekologia w branży kurierskiej. https://www.apaczka.pl/blog/ekologia-w-branzy-kurierskiej/?gad_source=1&gclid=CjwKCAiAloavBhBOEiwAbtAJO-UvznLcGTl7ErQoDKNXsXJAPeSdskCyI_I4YNcifb6KpViwBZw8UxoCM78QAvD_BwE (in Polish).
- Aponowicz, J. (2015). *Metodologiczne uwarunkowania pracy naukowej. Prace doktorskie, prace habilitacyjne.* Warszawa: Wydawnictwo Difin. (in Polish).
- Bartosik-Purgat, M. (2011). Kulturowe uwarunkowania zachowań konsumentów na przykładzie młodych Europejczyków. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu. (in Polish).
- Burlita, A. (2014). Badanie temporalnych aspektów zachowań konsumentów. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania, 38(1), 113-126. (in Polish).
- CBOS. (2020, December 30). *Komunikat z badań: Świadomość ekologiczna Polaków z 2020 r.* https://www.cbos.pl/SPISKOM.POL/2020/K_163_20.PDF (in Polish).
- CBOS. (2023, June 30). *Komunikat z badań: Korzystanie z internetu w 2023 roku*. https://www.cbos.pl/SPISKOM. POL/2023/K_072_23.PDF (in Polish).
- Choi, S. H. (2019). The Effect of Logistics Services, Corporate Image, Product Reliability & Customer Services on Customer Satisfaction and Repurchase Intention in e-Commerce. Journal of Digital Convergence, 17(6), 159-167. https://doi.org/10.14400/JDC.2019.17.6.159
- Dąbrowska, A., & Janoś-Kresło, M. (2010). *Konsument na rynku e-usług w krajach Europy Środkowo Wschodniej*. Warszawa: Wydawnictwo Difin. (in Polish).
- Dąbrowska, A., Janoś-Kresło, M., & Wódkowski, A. (2009). *E-usługi a społeczeństwo informacyjne*. Warszawa: Wydawnictwo Difin. (in Polish).
- Drapers. (2021, September 15). Sustainability and the Consumer 2021. https://www.workcast.com/register?cpa k=5790508292327311&referrer=D
- Dybka, S. (2017). Trendy w zachowaniach konsumentów jako czynnik determinujący rozwój przedsiębiorstw. Studia Ekonomiczne Uniwersytetu Ekonomicznego w Katowicach, 388, 81-95. (in Polish).
- e-Gospodarka.pl. (2004, August 23). *E-klient zachowania nabywców.* https://www.egospodarka.pl/5707, E-klient-zachowania-nabywcow,1,20,2.html (in Polish).
- Falkowski, A., & Tyszka, T. (2009). *Psychologia zachowań konsumenckich*. Gdańskie Wydawnictwo Psychologiczne. (in Polish).
- Forsal. (2021, May 20). *Polacy nie porzucą zakupów online*. https://www.forsal.pl/biznes/handel/artykuly/8169393,zakupy-online-polacy-nie-porzuca-zakupow-online-w-tym-roku-duza-czesc-z-nas-wyda-wiecej-raport.html (in Polish).
- Frąckiewicz, E. (2006). Marketing internetowy. Warszawa: Polskie Wydawnictwo Ekonomiczne. (in Polish).

- Hanson, W. A., & Kalyanam, K. (2020). Internet Marketing & e-commerce. USA: Thomson South-Western.
- IAB / PwC AdEx. (2022, April 24). IAB Polska/PwC AdEx. https://www.iabadex.pl (in Polish).
- Juszczyk, S. (2001). Metodologia badań empirycznych w naukach społecznych. Katowice: Wydawnictwo AWF Katowice. (in Polish).
- Katsikeas, C., Leonidou, L., & Zeriti, A. (2020). Revisiting international marketing strategy in a digital era: Opportunities, challenges, and research directions. International Marketing Review, 37(3), 405-424. https://doi.org/10.1108/IMR-02-2019-0080
- Kędzior, Z., & Kieżel, E. (2002). Konsumpcja i rynek w warunkach zmian systemowych. Warszawa: Polskie Wydawnictwo Ekonomiczne. (in Polish).
- Kicińska, J. (2009). Psychologiczno-społeczne determinanty zachowań młodych nabywców na rynku dóbr konsumpcyjnych. Journal of Agribusiness and Rural Development, 4(14), 85-94. (in Polish).
- Kotler, P., Armstrong, G., Saunders, J., & Wong, V. (2002). *Marketing. Podręcznik europejski*. Warszawa: Polskie Wydawnictwo Ekonomiczne. (in Polish).
- Kowalski, W. (2021). E-commerce w Polsce ocena i perspektywy rozwojowe. In A. Fajczak-Kowalska (Ed.), Logistyka a rozwój współczesnych przedsiębiorstw. Wybrane problemy (pp. 7-14). Łódź: Politechnika Łódzka. (in Polish).
- Lambkin, M., Foxall, G., Raaij, F., & Heilbrunn, B. (2001). Zachowanie konsumenta. Koncepcje i badania europejskie. Warszawa: Wydawnictwo Naukowe PWN. (in Polish).
- Maciaszczyk, M. (2014). *Teoretyczne aspekty zachowań konsumenckich osób niepełnosprawnych ruchowo*. Lublin: Wydawnictwo Politechnika Lubelska. (in Polish).
- Mirońska, D. (2010). Zachowania nabywców na rynku trendy i wpływ na działanie przedsiębiorstw. International Journal of Management and Economics, 27, 114-132. (in Polish).
- Mruk, H., Pilarczyk, B., & Szulce, H. (2007). *Marketing, uwarunkowania i instrumenty*. Poznań: Wydawnictwo Akademii Ekonomicznej w Poznaniu. (in Polish).
- Nogieć, J. (2011). Prospołeczne zachowania młodych konsumentów. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Ekonomiczne Problemy Usług, 72, 503-515. (in Polish).
- Pangsy-Kania, S. (2012). Rola innowacji w sektorze usług. In M. Olszański & K. Piech (Eds.), *E-biznes innowacje w usługach. Teoria, praktyka, przykłady* (pp. 22-39). Warszawa: Polska Agencja Rozwoju Przedsiębiorczości. (in Polish).
- Pleśniak, A. (2004). Modelowanie zachowań konsumentów. Problemy Zarządzania, 2(4), 69-84. (in Polish).
- Rajendran, S. D., Wahab, S. N., Ling, Y. W., & Yun, L. S. (2018). The Impact of Logistics Services on The E-Shoppers' Satisfaction. International Journal of Supply Chain Management, 7(5), 461-469. https://doi.org/10.59160/ijscm.v7i5.2390
- Rybowska, A. (2010). Zachowania zakupowe klientów sklepów internetowych. Scientific Journal of Gdynia Maritime University, 65, 23-29. (in Polish).
- Skawińska, E. (2009). Wpływ warunków demograficznych na marketingowe zarządzanie przedsiębiorstwem przyszłości. Marketing i Rynek, 5, 24-30. (in Polish).
- Smyczek, S. (2007). *Modele zachowań konsumentów na rynku usług finansowych*. Katowice: Wydawnictwo Akademii Ekonomicznej w Katowicach. (in Polish).
- Śleszyńska-Świderska, A. (2017). Zachowania polskich konsumentów w warunkach globalnego kryzysu gospodarczego [Praca doktorska]. Białystok: Uniwersytet w Białymstoku. (in Polish).
- Światowy, G. (2006). Zachowania konsumentów. Warszawa: Polskie Wydawnictwo Ekonomiczne. (in Polish).
- Tokarski, D., & Motowidlak, U. (2023). Analysis of the types and effects of possible errors in the implementation of ecological reusable packaging into e-commerce using FMEA. Economics and Environment, 85(2), 221-235. https://doi.org/10.34659/eis.2023.85.2.602
- Tokarski, D., & Wawryniuk, D. (2023). Rola logistyczno-marketingowej obsługi klienta w e-commerce. In A. Sawicki & H. Mruk (Eds.), *Marketing. Koncepcje i doświadczenia* (pp. 166-182). Pelplin: Wydawnictwo Bernardinum. (in Polish).
- Tokarski, D., & Witaszewska, O. (2022). Rola logistycznej obsługi klienta w e-commerce. In A. Sawicki & H. Mruk (Eds.), *Marketing. Koncepcje i doświadczenia* (pp. 166-182). Pelplin: Wydawnictwo Bernardinum. (in Polish).
- Tokarski, D., & Wolak, D. (2023). The impact of logistics and marketing customer service on e-commerce. Scientific Papers of Silesian University of Technology. Organization and Management Series, 178, 693-704. https://doi.org/10.29119/1641-3466.2023.178.38
- Tur, H. (2019, July 5). *E-commerce w Polsce 2019*. https://www.internetstandard.pl/news/E-commerce-w-Polsce-2019,414193.html (in Polish).
- Wasielwski, J. (2020, September 17). *Zakupy online w Polsce 2020.* http://www.expertsender.pl/blog/zakupy-online-w-polsce-2020-raport-expertsender (in Polish).
- Wątroba, W. (2006). Homo informaticus w globalnym supermarkecie. In L.H. Haber & M. Niezgoda (Eds.), *Społeczeństwo informacyjne: aspekty funkcjonalne i dysfunkcjonalne* (pp. 98-110). Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego. (in Polish).

- Włodarczyk-Śpiewak, K. (2008). Aspekty teoretyczne racjonalności zachowań konsumentów. Zeszyty Naukowe Uniwersytetu Szczecińskiego. Prace Katedry Mikroekonomii, 12, 19-37. (in Polish).
- Wolanin-Jarosz, E. (2006). Zachowania konsumentów przegląd wybranych badań i teorii. Roczniki Wydziału Nauk Prawnych i Ekonomicznych KUL, 2(2), 83-99. (in Polish).
- Wolny, R. (2016). Zmiany w zachowaniach nabywczych polskich e-konsumentów. Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, 270, 285-293. (in Polish).

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OPTYMALIZACJA DECYZJI KONSUMENTÓW I WPŁYW WYBRANYCH CZYNNIKÓW NA ZACHOWANIA ZAKUPOWE W POLSKIM E-HANDLU

STRESZCZENIE: Artykuł ma na celu przedstawienie zachowań konsumentów w procesie zakupu towarów i usług w sklepach internetowych na polskim rynku. Zbadano wpływ wybranych czynników determinujących lub zniechęcających do zakupów online, a także wpływających na wybór sklepu internetowego przez młodych konsumentów reprezentujących pokolenie "Z". W badaniu pilotażowym wzięło udział 100 respondentów, kobiety stanowiły blisko 70% ankietowanej populacji. W zależności od potrzeb klientów o dokonaniu zakupów w Internecie lub przekonaniu ich do wyboru sklepu internetowego decydują różne czynniki. Dodatkowo, przez pryzmat różnych obaw i własnych doświadczeń, oceniają czynniki zniechęcające do zakupów w Internecie. Wyniki analizy mogą zostać wykorzystane w praktyce, w planowaniu kampanii reklamowej poprzez wprowadzenie skoordynowanych i zorganizowanych działań, wykorzystujących jeden lub szereg różnych, powiązanych ze sobą środków przekazu. W publikacji omówiono ponadto wpływ reklamy internetowej na zachowania konsumentów w handlu elektronicznym, łącząc interdyscyplinarne podejście w obszarach nauk o zarządzaniu i jakości z ekonomią i finansami. Badanie przeprowadzono w IV kwartale 2022 roku.

SŁOWA KLUCZOWE: zachowania konsumentów, handel elektroniczny, reklama internetowa