

DIGITIZATION OF TRADE AND CHANGES IN CONSUMER BEHAVIOR - SELECTED AREAS

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Abstract Contemporary retail is increasingly conducted in a hybrid form, with a clearly growing share of mobile technologies. Social media accompany consumers on a daily basis - they shape the potential of interpersonal relationships, but also aim to promote and sell products.

With the growing number of smartphone activities, the application market is developing dynamically and the availability of modern technologies is increasing. Online shopping is supported by a voice assistant, the customer can use virtual fitting rooms, talk to artificial intelligence (chatbot) and receive answers to asked questions. Both consumers and companies use this technology on a daily basis.

The aim of the study is to draw attention to the broadly understood digitization, which is changing the face of trade and consumer behavior. Changes in the purchasing behavior of generations living with the convenience of technology will be indicated. Understanding and adapting to these changes has become a necessity for companies.

The study focused on the shopping behavior of today's consumers, who are almost constantly connected to the Internet and to each other via mobile devices. The main focus will be on Poland, and the source base will be literature sources and industry reports. Selected areas of purchasing changes will be analyzed, and the obtained data will allow to diagnose differences in consumer preferences and the level of their digitization.

Keywords: digitization, e-commerce, consumer behavior, artificial intelligence (AI), technologies, metaverse

Introduction

The past years marked by the pandemic, war and high inflation have become one of the main factors of change in the retail trade. Companies began to introduce an integrated sales model, implement new consumer-oriented technologies and thus the role of innovation and automation in customer relations has clearly increased. There has also been a change in consumer mentality, which is extremely important for retailers.

In the modern economy, it is crucial for enterprises to gain a competitive advantage. To achieve this, various activities are undertaken, with a strong emphasis on digitization. Thanks to this approach, an increasing number of enterprises are subject to digital transformation, leading, among other things, to better quality of sales processes and raising customer service standards. Electronic sales, apart from the mere possibility of offering individual product categories online, also enables a certain increase in customer activity in business operations. What makes this possible, among other factors, is influencing the attitudes and purchasing decisions of other consumers, thanks to the system of comments and opinions. For many buyers, recommendations play an important role, as they can significantly reduce the time and effort needed to make purchases.

The purpose of the following considerations is to critically look at the changing trends in consumer behavior and the reaction of enterprises to these changes.

The intensive and rapid development of modern technologies creates a new group of consumers who expect companies to adapt to their shopping preferences. The companies which are aware of the challenges spend more on the development of e-commerce.

The study uses a deductive method supported by a descriptive analysis. The descriptive analysis was based in particular on books, articles and reports carried out by selected institutions.

The reality of the digital consumer

A digital consumer is a buyer who, during the purchasing process, but also before and after the purchase, uses the achievements of new technologies. They quickly adapted to the market reality in which technological solutions significantly influence their behavior. It is a consumer who has access to the Internet and uses it on a daily basis as a permanent and indispensable element of life. In some sense, it is also a way of life. These are primarily young people, but this trend is also followed by older generations of consumers. The digital customer is a reality in both the B2B and B2C segments.

Currently, five generation groups live side by side in the world - baby boomers, generation X, Y, Z and Alpha. Each of the generations is shaped by different experiences, socio-cultural surroundings and historical events, which means that the values they profess differ from each other and require a separate marketing approach. Division into generational groups is the simplest and most popular method of mass market segmentation (Kotler, 2021, p. 29-40).

The first generation are baby boomers, defined as people born between 1946 and 1964. The name "baby boomers" was coined due to the demographic boom that was recorded in the first years after World War II.

Generation X is called in Poland the generation of the Polish People's Republic. It is a group of people born in the years 1965-1980. It was a time of groundbreaking historical events - the rise of Solidarity, the fall of communism and the Cold War in Europe and the United States. Generation X has also experienced important technological changes.

Millennials, also known as Generation Y, are a group of people born in the 1980s and 1990s. According to W. Września, Generation Y in Poland is the generation of people born between 1984 and 1997 (Wrzesień, 2007).

Generation Z, also known as Zoomers or the Internet Generation, are people born in the late 1990s to 2009. As the first generation, they did not experience the times before the advent of the Internet and computers.

The Alpha Generation, i.e. those born in the years 2010-2025, are called digital natives because they are perfectly at home in the world of the Internet. Already in early childhood, they saw their parents and siblings spending time in front of the screens of their phones or computers, which were often more interesting to them than other elements of everyday life.

H. Mruk argues that it can be expected that the current change of generations, reaching 25 years, will be shortened to 7-10 years (Mruk, 2022, p. 16). The main reason is the ongoing social and technological changes. The next generations will be increasingly focused on the practical use of technology. This undoubtedly determines the need among companies to create many distribution channels - from traditional through hybrid to virtual ones.

It is the virtually unlimited access to information brought about by digitization that enables today customers obtain data on the offer of a specific company, compare prices or read the opinions of other users and perform this conveniently in relatively short time (KPMG, 2018).

However, as emphasized by Ph. Kotler, digitization of a company should not stop only at customer involvement, but should cover all touchpoints - from marketing, through sales, distribution, delivery, to service. All these digital touchpoints should create a synchronized consumer experience (Kotler, 2021, p.103).

The near future is shaped by many trends, which are shown in Figure 1.

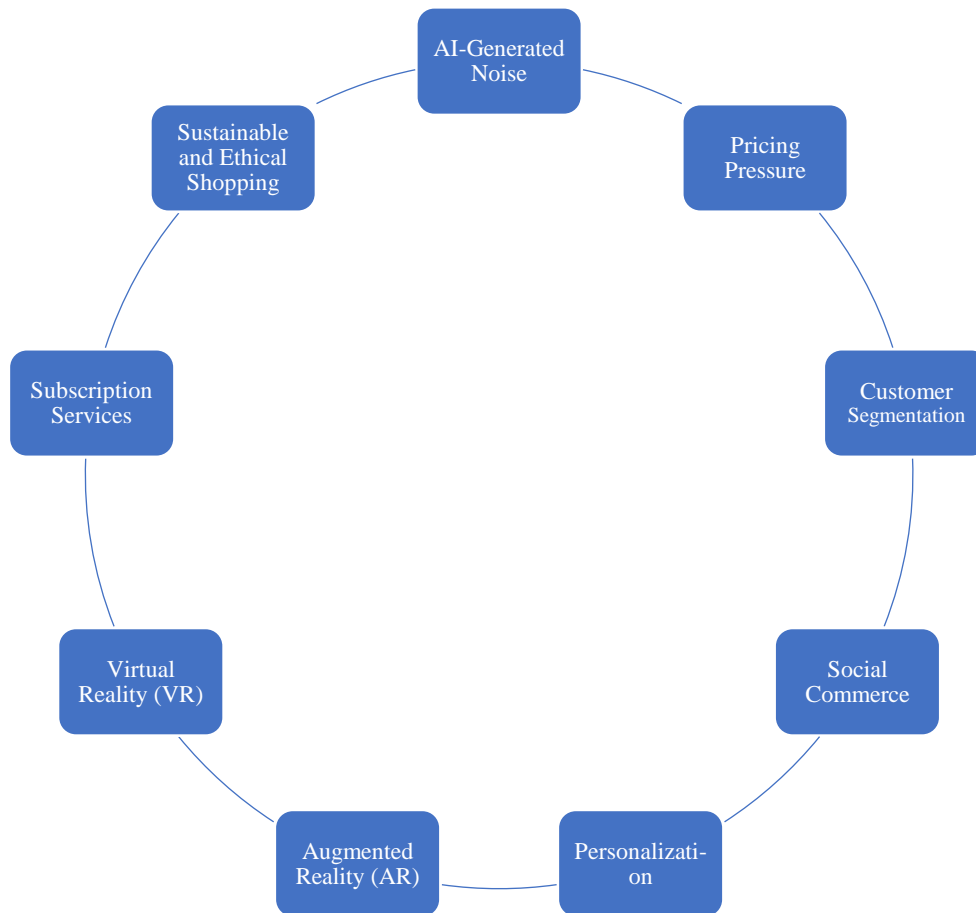


Figure 1. Trends in retail

Source: Own study based on: K. W. McLaren, 2023, *The Future Of E-Commerce: Trends To Watch In 2023*, <https://www.forbes.com/sites/forbesmarketplace/2023/03/21/the-future-of-e-commerce-trends-to-watch-in-2023/?sh=1c3631b7631e> May 2, 2023

The present world is bots instead of people working in call centers or refrigerators that inform about the expiration date of the products contained there. What until recently seemed impossible and unreal, today is a reality.

The pandemic lasting in 2020-2022 caused an increase in interest in electronic shopping, which, in turn, generated the need to process more and more data in order to learn about consumers' shopping preferences. It was also the time when a number of studies on consumer activity on the web and changes caused by the pandemic were carried out¹. The Internet of Things or augmented reality (VR) offer newer and newer market conditions in which customers can, among other things, use a virtual fitting room and see themselves in different variants of

¹ Wawrzuta, D.; Klejdysz, J.; Jaworski, M.; Gotlib, J.; Panczyk, M. Attitudes toward COVID-19 Vaccination on Social Media: A Cross-Platform Analysis. *Vaccines* 2022, 10, 1190. <https://doi.org/10.3390/vaccines10081190>; De Brabandere L, Hendrickx G, Poels K, et al, Influence of the COVID-19 pandemic and social media on the behaviour of pregnant and lactating women towards vaccination: a scoping review *BMJ Open* 2023;13:e066367. doi: 10.1136/bmjopen-2022-066367; Uzair Shah, Md. Rafiul Biswas, Raian Ali, Hazrat Ali & Zubair Shah (2022) Public attitudes on social media toward vaccination before and during the COVID-19 pandemic, *Human Vaccines & Immunotherapeutics*, 18:6, DOI: 10.1080/21645515.2022.2101835.

clothing or glasses frames. The metaverse² is also developing, seen as an imaginary borderless area where people can be met in virtual reality. The term itself is still evolving, however, the metauniverse can be defined as the convergence of the physical and virtual worlds. The essence of Metaverse from the customer's point of view is therefore immersion in the 3D world and a sense of its realism from the point of view of the avatar. PWC experts refer to the future of the Metaverse as a realistic world where people and organizations sell goods and services, sign and execute contracts, interacting with each other (PWC, 2023).

The chain of grocery stores Żabka Nano, which is developing in Europe, has the innovative AiFi platform used in all its stores. It is a camera-based solution that uses computer vision and so-called machine learning to recognize products that the customer reaches for from the shelves and automatically finalizes the payment after leaving the store (Żabka, 2022).

Changes in consumer behavior

Customers, regardless of whether they make purchases in an online or stationary store, use convenient communication channels and obtain information on the offers they are interested in (IBM, 2022). Therefore, in purchasing processes, companies should recognize the key moments during which the buyer needs support. It is in such moments that building a positive shopping experience becomes the most effective. Thus, digital technologies enable the delivery of selected information in real time during key purchasing stages, which, with the growing interest in electronic shopping, may be an opportunity to consolidate new habits among various customer groups.

The growing concern for the climate and the environment generate a demand for the purchase of used products, which is supported by sales platforms such as OLX, Vinted or Allegro, enabling direct exchange of products between consumers. The term re-commerce has already become part of everyday life on the web. It is both the sale of products in outlet stores or second-hand shops, as well as the sale of second-hand items, closely related to ecology and sustainable development (IBM, 2022). This is in line with the current situation, when a significant part of consumers do not have a good financial situation and allocate less funds for consumption - which is also noted by experts from the Capgemini Research Institute or PWC (Capgemini Research Institute 2023). According to Google statistics, searches for product names with the term "used" are increasing (IdoSell, 2023). An example worth citing is also socially responsible shopping, which is carried out on the Polish market by, for example, CCC or Modivo together with InPost, offering reusable packaging.

Consumers are also eager to use subscription services, which guarantee them convenience, speed and personalized product recommendations. Subscriptions now offer almost everything - from personalized products to meal kit deliveries and subscriptions to beauty and clothing products.

Another significant change is mobile shopping. An Insider Intelligence analysis shows that the share of m-commerce in total retail may reach 8.7% by 2026 (Mokka, 2022). An important factor in this growth is undoubtedly the development of mobile applications and their increasing popularity. Companies that already have a popularized application and a group of users certainly have greater opportunities to increase their range of sales and marketing activities.

² The metauniverse came into the public consciousness in October 2021 when Facebook changed its name to Meta.

One-click ordering is currently one of the most important trends in m-commerce, and its popularity is increasing year by year. This solution allows customers to complete their purchases without having to repeatedly enter payment and delivery information, which is important when using mobile devices. The function translates into an increase in sales, which was confirmed, among other providers, by Amazon, the pioneer of this solution on the market (IdoSell, 2023).

Another important area of change is the popularity of voice assistants, such as Amazon Alexa or Google Assistant, which enable users to make purchases in a simple and convenient way, which will translate into an increase in the popularity of voice shopping in m-commerce. The development of this type of purchase is favored, apart from the development of technology, by the increasing purchasing power of the younger generations, for whom this type of technology is more natural.

Instant payment is starting to play an increasingly important role when making purchases. In order to increase the chance of a successful transaction, an online store should provide customers with the fastest way to pay for transactions, without having to change the platform or register. Customers are increasingly willing to use one-click shopping options.

Deferred payments (buy now pay later) are also developing dynamically, giving the opportunity to purchase products without having to pay for them right away (IdoSell, 2023).

It is therefore clear that the significant acceleration of customer digitization, breaking the existing consumer habits and fears have resulted in significant changes in the way companies communicate with customers, sales channels and pre- and post-sales service.

The role of modern media

The impact of digitization drives marketing activities that have changed and will continue to evolve, thus improving the methods of product promotion. The evolution of marketing is due to changes in the technological and economic landscape, which allows marketing to move to a higher stage of evolution to marketing 5.0. Marketing 5.0 is a period of transition to technology for people, in which artificial intelligence, NLP³ technologies, sensory technologies and the Internet of Things play an important role (Kobec, 2022). In the concept of marketing 5.0, the consumer is in an intelligent, flexible digital environment and interacts with artificial intelligence as a full-fledged agent of the digital environment.

The development of information technologies leads to the growing pace of attracting people to the Internet. Data processing and analysis technologies are becoming essential for the existence of modern business. E. Brousseau and T. Penard (2007, pp. 81-114) pointed out that digital business models do not imply changes only in the digital sphere, and should be perceived as "intermodal" ones which are visible in various areas of the organization's functioning. In addition, digital business models are largely intertwined with traditional models, which results in the implementation of innovations as well as the use of marketing strategies also in industries that are not directly related to the digital market. This undoubtedly proves the complexity of the changes that are induced in modern business models. An example worth referring to is the model used within the Uber platform, which offers taxi services to customers. The sharing model uses a digital platform, thanks to which customers look for drivers offering transport services. The innovativeness of this model boils down to the fact that it is not embraced within any corporation or taxi companies present on the market, and therefore it is fully independent of them (Bartczak, 2023).

³ NLP is a technology that focuses on natural language processing to facilitate human-machine communication.

Technological progress causes, but also forces, constant changes that affect the market and consumers. One of the factors contributing to the development of technology that allows one to connect, enabling the interactivity of individuals, groups and organizations is undoubtedly social media. The progressing virtualization of socio-economic life raises the need to monitor the intensity of the ongoing changes. The functioning of companies is increasingly dependent on the attitudes and behavior of consumers. It is therefore worth knowing what values are important to them and how they will achieve their goals (Figure 2).

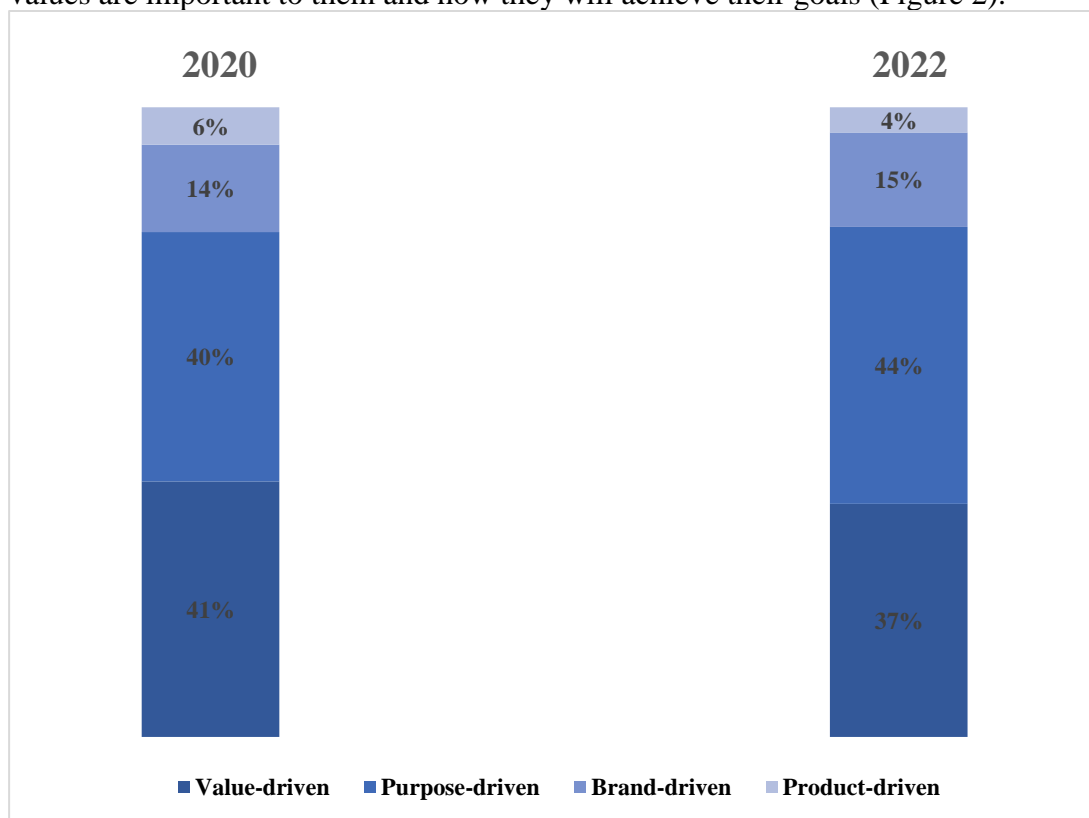


Figure 2. Goal-oriented consumer

Source: Own elaboration based on (IBM, Research Insights, (2022), p.13)

According to an IBM report (2022, p. 13) purpose-driven consumers (44%) are looking for products that align with their values. Environmental impact and taking care of sustainable development is very important to them. Value-driven consumers (37%) expect value, convenience, but are also willing to change habits limiting the negative impact on the environment. Brand-driven consumers (15%) trust and prioritize brands. Product-oriented consumers (4%) focus primarily on the functionality and value of the product and its price.

Among the modern digital technologies used in marketing, a set of measures for the use of social media as channels of marketing activities should be indicated, referred to as Social Media Marketing (SMM) - marketing in social networks. These are ways to reach a specific target group of users through interaction and direct impact on potential customers. Companies operating on the network should constantly be in the common communication space with their environment, both current and potential consumers, but also with partners or competitors, and regularly generate content about themselves and their offers (Bartczak, 2023).

Thus, the importance of social media is growing both as a source of information about products and as a place to make purchases. More and more intense marketing activity of companies in social media is being observed, as well as a change in the way that market players

communicate. There is equality of communication between the sender of information and its recipients (Matwiejczyk, 2020, p.174). Social media made it possible to post opinions, reviews, evaluate purchased products, and communicate with other product users in order to exchange opinions on them. This certainly translates into recommendations for other members of the community focused around the product or company. Therefore, social media can significantly contribute to building a company's competitive advantage.

It was through social media that influencer marketing was born, which, thanks to building its own community by influencers, has an impact on a specific group of recipients. Unlike traditional celebrities, influencers build their position on the Internet by sharing various content with the audience, also often of private nature. Thanks to this openness and ease of conveying messages, influencers seem closer to their recipients, which builds trust and credibility.

Shopping on social media allows one to increase the reach and interest of customers, and also allows to reach target groups more easily. Cooperation with influencers and the use of tools such as, for example, posts with the possibility of buying directly from the platform, clearly change the sales processes in m-commerce.

The business potential of social media requires new marketing tools that enable precise targeting and allow for a two-way flow of information, not only between the recipients and the brand, but also include the influencer who advertises the product. K. Stopczyńska (2021) indicates that for 70% of Internet recipients, the content created by influencers is the first source of information about products.

It is the possibility of freely creating, editing and duplicating various types of content that makes social media successfully used as the Internet marketing tool for many individuals. The role of the consumer has ceased to consist only in getting acquainted with the content of the advertising message, as was the case in traditional media, but it gives them the opportunity to interact, modify and express their personal feelings about the product (PWC, 2023).

D. Kaznowski (2016) divided social media based their functions into:

- used to present opinions and views, for example through blogs - Instagram, Twitter,
- for file sharing - YouTube, TikTok,
- focused on building and maintaining relationships - Facebook,
- for exchanging discussions, solving problems – these include Internet forums.

One of the main reasons for the popularity of social media among young people is the need to communicate with the brand and other people. Young people are more interested in social problems and willingly join discussions about them. Social media offers platforms where people can express their views and engage in debates on issues of concern to the society. In this context, television that is more one-sided and does not allow this interaction is becoming less attractive.

For the young generation, the opportunity to react to the content displayed on the Internet in real time is an opportunity to manifest their own views. Thanks to this, they feel that their opinion will be noticed not only by the brand or the creator of the content, but also by another group of Internet users. A popular tool for measuring the engagement of online audiences is the engagement rate, which is the ratio of interactions, i.e. likes, comments and shares, to the number of users' followers.

The report commissioned by the Chamber of Electronic Economy by the Mobile Institute shows that mobile consumers buy online more often and more than the average Internet user (Marszycki, 2023). The E-commerce in Poland report shows that mobile buyers also have higher expectations regarding the convenience of shopping, speed of delivery, availability of mobile payment methods and promotions (Gemius Polska, 2022).

E-commerce is characterized by high dynamics of change. This is due, on the one hand, to the development of new information technologies, increased competition, the emergence of new business models, and, on the other hand, to the development of the information society and increasing access to the Internet. With the development of technological tools and means, e-consumers of all ages are becoming customers of online stores.

The examples cited illustrate the potential of the digital economy, which has changed almost everything related to buying - from infrastructure to commerce and payment systems, to the psychology of consumer preferences and expectations.

Conclusions

Digitization is certainly an opportunity for companies to build knowledge about customer behavior and preferences. Progressing digitization has educated a new consumer who, on the one hand, has adapted to the technological offer offered by enterprises, and on the other hand, sometimes forced them to redefine the way they operate.

Undoubtedly, the multitude of information left by customers in the digital world allows entrepreneurs to better understand their shopping choices, as well as enables an individualized approach to the buyer. Thus, understanding what customers really expect may turn out to be a key factor determining market success.

Using modern technological solutions, it is possible to shape business activities and adapt marketing communication to changes taking place among consumers. The combination of the traditional and digital environment opens the door to the use of new tools of influence, as well as shaping models of behavior. This leads to the assimilation of the digital environment to the real one and the transfer of communication and decision-making process to the real environment.

The mentioned areas of research do not exhaust the subject, but they illustrate the multiplicity of areas of change and challenges faced by a number of companies.

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