

The new normal on the e-commerce market in Poland

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Key findings

E-commerce has become an integral part of the retail landscape in Poland, especially with this trend's acceleration as a result of the COVID-19 pandemic. Despite a certain correction after the pandemic, online shopping's share of the retail market has remained significant, which points to its lasting presence and importance in the country's retail structure. Global trends show that Poland is no exception, as many countries experience similar changes in their citizens' shopping behaviour.

While it is already well developed, the B2C segment is still experiencing meaningful growth, though it is significantly smaller than the B2B segment. The latter is much larger than consumer e-commerce and the potential for digital B2B sales continues to grow. Regardless of their size, companies are actively participating in e-commerce and adapting to its new landscape, which could have a crucial impact on the structure of intercompany trade in the coming years. Analysis of e-commerce in Poland points to the growing share of online sales in many industries. Traditional industries, such as the food and automotive industries, are also beginning to see the potential of online sales. Innovations such as social commerce show how the ways in which customers make purchases are evolving. Social media is no longer just a communication tool; it is becoming an important sales channel that is reaching younger generations.

In today's complex e-commerce environment, companies are not relying on a single sales channel; rather, many are successfully implementing multi-channel strategies. Companies' own online platforms give them full control over the purchasing process and the customer relationship, but external e-commerce platforms offer a wider reach and greater visibility. Traditional sales formats add credibility to companies' and brands' image. In addition, integrating online and offline environments is becoming the norm, providing customers with a consistent and complementary shopping experience.

The outlook for the e-commerce sector's development is optimistic. The sector is growing steadily and, despite the slowdown after the pandemic, its growth is powered by modern technologies and consumers' adaptive shopping habits. Poles' growing trust in online shopping — linked to convenience, the wide range of products and the ability to compare prices easily — is encouraging companies to continually invest in improving customer service and delivery processes. The sector's development is being fostered by digitisation, supported by regulations and political initiatives. Important regulatory changes that will affect the sector's future include the abolition of tax and administrative barriers linked to the Single VAT ID regulations, which could facilitate online trade between EU countries and open up new markets to Polish entrepreneurs. National and regional programmes supporting digitisation as part of the EU financial framework for 2021-2027 could benefit e-commerce, too.

The e-commerce sector in Poland faces a variety of challenges, which often result from its rapid development. One of the main problems is increased competition, which is prompting companies to keep introducing innovations to attract customers. Adapting to advancing technology requires companies to constantly invest in order to meet the changing standards of online shopping. This kind of progress could also lead to the emergence of new business models that may put pressure on less competitive players. Legal regulations and political decisions, which – although they often support the sector’s development – may lead to additional obligations and costs, add to the changing landscape. The situation is complicated by geopolitical instability, which affects supplies and costs, as well as the changing economic climate, which affects consumption and companies’ operating costs. All these factors are developing against the backdrop of the growing expectations of consumers, who now look for transparency, efficiency and competitiveness when shopping online.



1 Introduction:

How the pandemic affected the e-commerce market

Although it is primarily known as a health crisis, COVID-19 also became an unforeseen but powerful catalyst for the e-commerce sector. As shops around the world closed their doors, the digital gates opened even wider, welcoming waves of consumers seeking a safe shopping experience. Like everywhere else, the pandemic accelerated existing trends in Poland, forcing the sector to evolve more rapidly.

It was not just a matter of switching from brick-and-mortar shops to online platforms. Consumer behaviour underwent a profound transformation. Pandemic-related concerns and the need for social distancing accelerated the digitisation of shopping. At the same time, taken aback by the unexpected shop closures, people were searching for products that had not been that popular online before the pandemic – from home exercise equipment to groceries.

The pandemic not only changed shopping habits; it also had a profound impact on companies themselves. Traditional retailers that had previously resisted the digital transition were now rushing to keep up with the competition and move their operations online.

Lockdowns meant that companies had to quickly find alternative ways of doing business also in the B2B sector.

These rapid changes not only affected consumers. The B2B e-commerce segment has also adapted to the new world of digital transactions. Previous resistance to digital solutions in the sphere of intercompany transactions was pushed into the background as companies were forced to adapt to the new reality. Lockdowns meant that compa-

nies had to quickly find alternative ways of doing business. Traditional sales meetings, trade fairs and business trips were limited or completely suspended. In response to these challenges, companies turned to digital transaction channels to maintain continuity of operations and business relationships. B2B e-commerce platforms started to play a key role in maintaining and expanding global trade relationships.

Moreover, companies started to notice additional benefits of the digital transition in B2B. The digitisation of commercial processes offered greater transparency, efficiency and the ability to personalise the company's range of products for specific business clients.

Many companies began to invest in advanced technologies and B2B e-commerce platforms, enabling process automation, integration with supply chain management systems and data analysis. This helped them to better understand customer needs and respond to changing market conditions more rapidly.

On the one hand, many companies decided to develop their operations on existing B2B e-commerce platforms. On the other hand, in the face of growing competition and the need to adapt to various markets' specific requirements, many companies expanded to new platforms or even created their own e-commerce solutions.

Multichannel sales became the key to B2B sales strategy. Companies increasingly offered their products and services via a variety of platforms – from their own online shops, through global trading platforms, to traditional brick-and-mortar sales channels. Even companies previously sceptical about e-commerce began to notice its benefits and potential. As a result of

Multichannel sales became the key to B2B sales strategy. Even companies previously sceptical about e-commerce began to notice its benefits and potential.

the pandemic and the related lockdowns, the B2B e-commerce segment has undergone a lasting transformation. These changes not only enabled companies to survive tough times, but also opened up new possibilities for the future of intercompany commerce in the digital age.

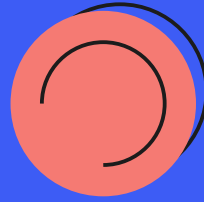
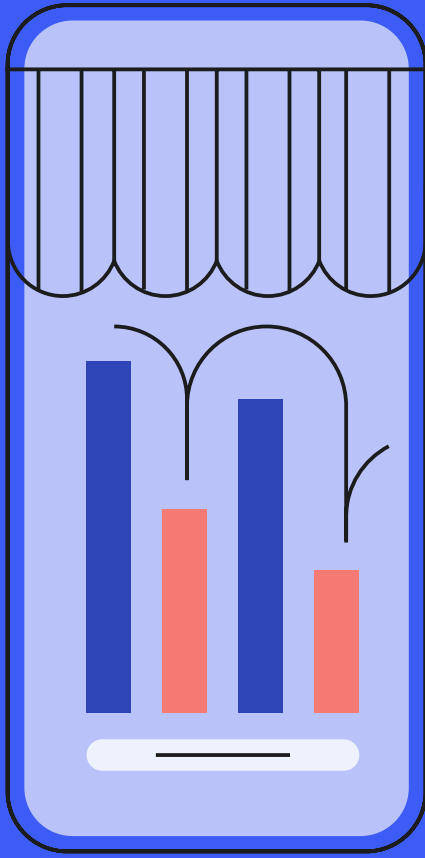
However, this digital evolution has been accompanied by new challenges, especially in logistics. Rising customer expectations when it comes to shorter delivery times or free shipping have forced companies to rethink their logistics strategies. To meet these growing needs, large e-commerce companies have started investing in the development of their own advanced logistics systems.

This is a fascinating period of transition for the e-commerce sector, full of unexpected challenges and opportunities. While we are currently observing a certain „return to normal,” not much in e-commerce is what it used to be. We encourage you to read our report to understand the full scope of these changes and what innovations may lie ahead in the post-pandemic era.



In our report, we focus on the rapid development of the e-commerce market in Poland in 2020-2022, analysing the key trends and factors that influence this sector. We present an in-depth overview of market data, from the rise of e-commerce before and after the pandemic, through analysis of the size of the market in the B2C and B2B segments, to the development of various online sales channels. In addition, we consider the relationship between companies' size and their e-commerce strategy, and analyse the market's industry and product dimensions. Next, we focus on the entrepreneurs' attitudes, analysing business sentiment, experiences, and challenges faced during and after the pandemic. In the following chapter, we look at market conditions, from competition in the e-commerce sector, through the negotiating power of suppliers and customers, to the broad market environment, taking into account political, economic, social, environmental and technological factors. Finally, we present our reflections on the opportunities and challenges for the development of the e-commerce sector in Poland, offering readers a full picture of the direction that it is heading in.





2 Data:

The e-commerce market in 2020-2022 – key data broken down by type of activity and company size



Introduction

E-commerce is developing rapidly in Poland. For several years, we have been observing an increase in online sales as a percentage of companies' overall turnover. This was particularly visible during the COVID-19 pandemic, which accelerated the transition from traditional to online retail. However, now that the lockdowns have ended, this raises questions about whether this trend will continue and its significance for various industries and companies of various sizes. This chapter analyses these issues, focusing on the development of e-commerce before and after the pandemic, its impact on various industries and enterprises of various sizes, and the online sales channels used.

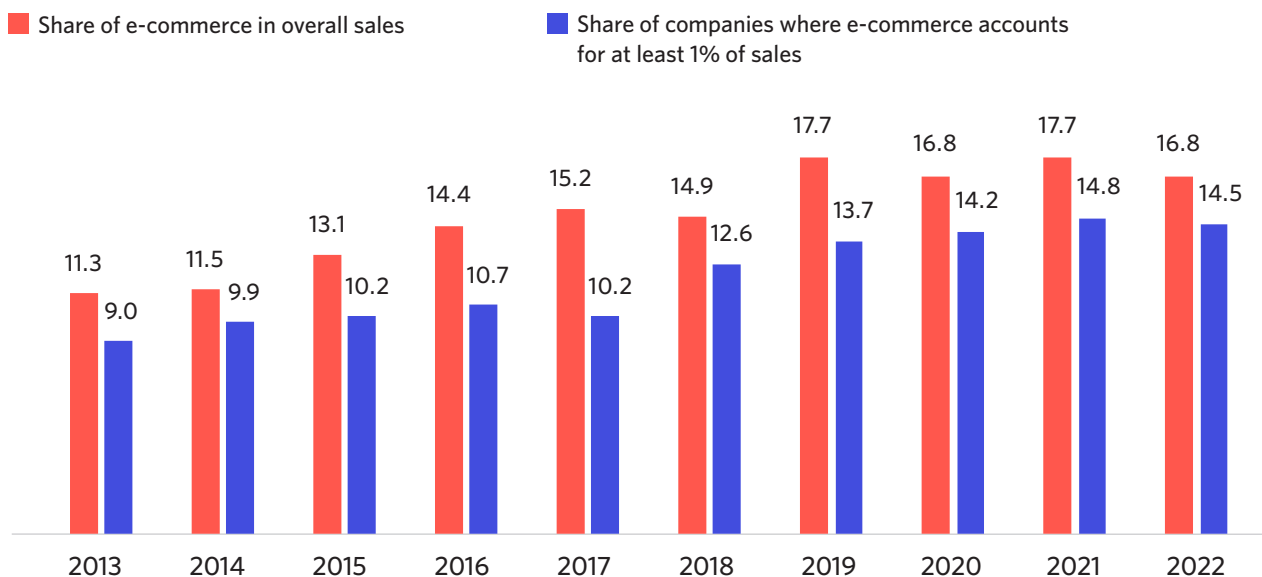


The rise of e-commerce before and after the pandemic

Chart 1 presents the percentage of companies in Poland where online sales account for at least 1% of total sales in terms of value, as well as income from e-commerce sales as a percentage of companies' total sales. It points to a steady increase in the share of e-commerce in companies' sales revenue between 2013 and 2022, from 11.3% to 16.8%. This reflects the growing popularity of e-commerce as a sales channel. It is worth adding that e-commerce as a share of sales revenue peaked in 2019 and 2021. In those two years, e-commerce as a share of companies' total turnover reached a record high, which further confirms the growing popularity of this business model in Poland. The percentage of companies where e-commerce accounted for at least 1% of turnover fluctuated somewhat, although it increased from 9% in 2013 to 14.5% in 2022.

In this context, with particular reference to 2020-2022, it should be noted that the impact of the pandemic-related lockdowns was part of the broader rise of e-commerce, a trend that was already present in Poland. The lockdowns acted as a catalyst, accelerating an existing process, rather than creating it from scratch. This highlights the importance and persistence of this trend in the Polish economy.

CHART 1. SHARE OF E-COMMERCE IN SALES AND POPULARITY OF E-COMMERCE AMONG COMPANIES (%)

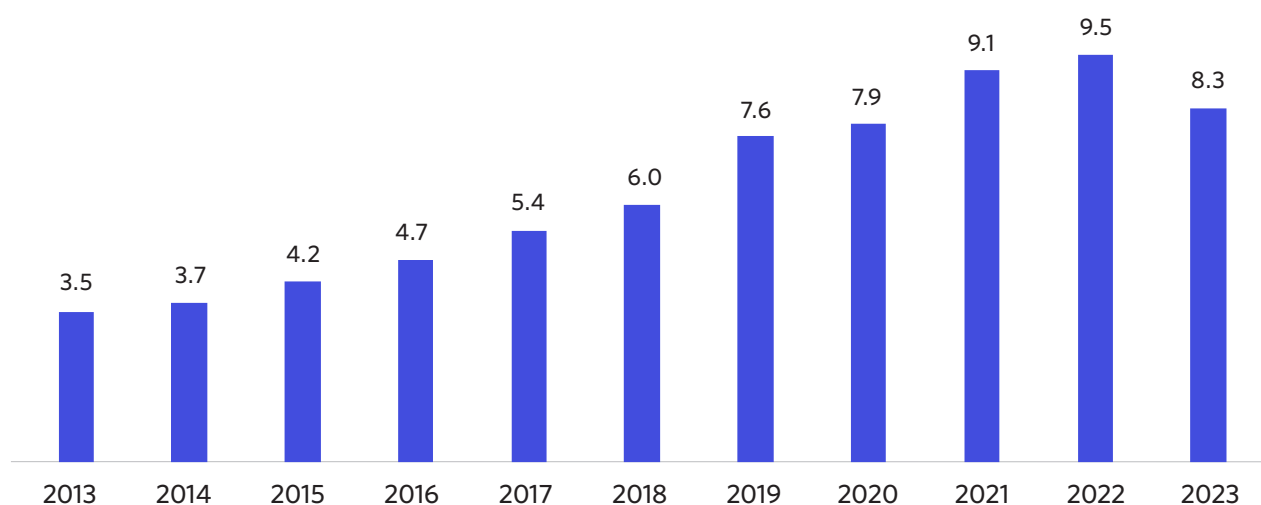


NOTE: THE DATA CONCERNS COMPANIES WITH MORE THAN NINE EMPLOYEES.
SOURCE: PREPARED BY THE AUTHORS BASED ON DATA FROM (EUROSTAT, 2023E, 2023B).

After the pandemic, there was a slight downward correction in e-commerce growth in Poland. While both the indicators mentioned above were higher in 2021 than in 2020, they decreased slightly in 2022. Several factors may have influenced this. Firstly, with the easing of pandemic restrictions, some companies may have returned to more traditional forms of retail, which may have resulted in the slightly smaller share of e-commerce in overall turnover. Secondly, the increase in competition in the e-commerce sector has forced companies to compete for customers and markets, which may have slightly lowered individual companies' share in the overall e-commerce market. However, the correction is not significant and e-commerce as a percentage of overall turnover is still higher than before the pandemic. The rise of e-commerce in Poland is still a major part of the retail and business landscape and, to be successful, companies will still have to invest in the development of their e-commerce strategies and adapt to changing customer preferences.

The data on online retail sales presented in **Chart 2** also shows the growing importance of e-commerce. The key trend it illustrates is the rapid increase in e-commerce sales as a percentage of retail sales between 2013 and 2022. Over this period, this share increased significantly: from 3.5% in 2013 to 9.5% in 2022. This is clear evidence of the transformation of the retail market, where online shopping has become increasingly popular among and important for both consumers and businesses. There was a particularly noticeable surge in growth in 2020 and 2021, which can be attributed to the pandemic, which prompted consumers to shop online more due to the restrictions on brick-and-mortar retail. This also suggests that e-commerce has become an integral part of today's retail landscape, with the potential to continue growing. However, data from 2023 points to a certain downward correction in this long-term trend, which may result from the end of the lockdowns, the surge in inflation, and other factors affecting the behaviour of consumers and companies on the e-commerce market.

CHART 2. SHARE OF E-COMMERCE IN RETAIL SALES AT CURRENT PRICES (%)



NOTE: THE DATA FOR 2020-2023 IS BASED ON UNWEIGHTED AVERAGES FOR MONTHLY DATA (2023 COVERS THE PERIOD FROM JANUARY TO JULY).
SOURCE: PREPARED BY THE AUTHORS BASED ON DATA FROM (STATISTICS POLAND, 2023B).



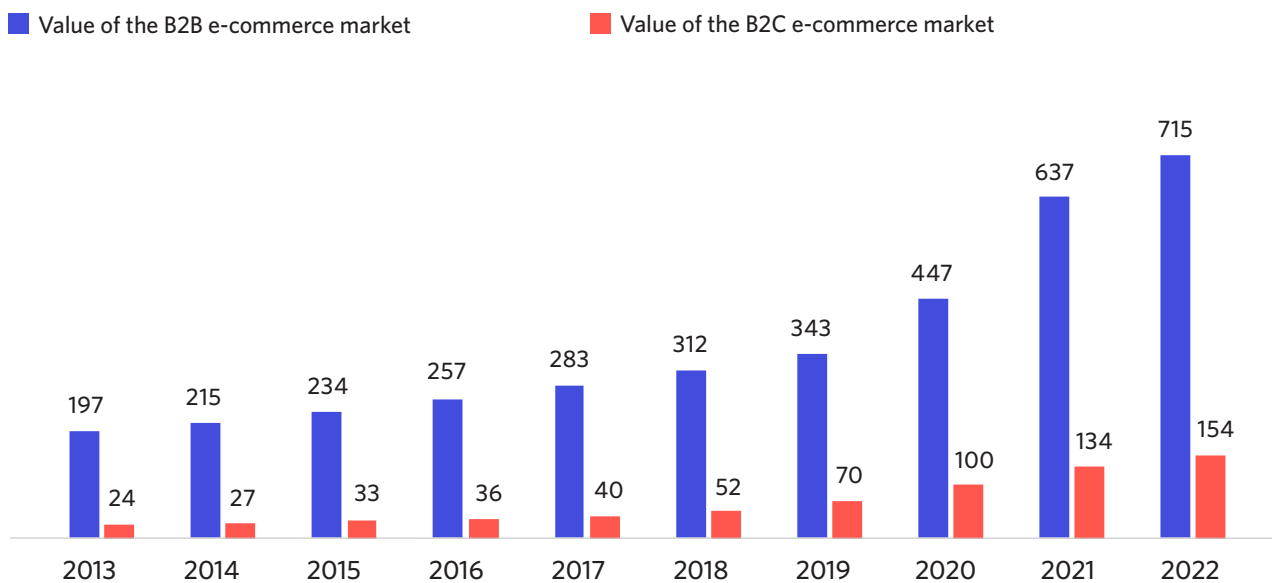
The size of the e-commerce market in the B2C and B2B segments

It is worth supplementing the trends described above with analysis of the value of the e-commerce market in the B2B and B2C segments, which provides more detailed data on the market's scale and growth potential. The data on this topic presented in **Chart 3** was compiled by Poland's Chamber of Electronic Commerce (IGE, 2023). When assessing the e-commerce market based on this data, it should be noted that this market has grown very rapidly in Poland in the B2C segment, which reflects the growing importance of online shopping for consumers. There has been steady growth over the past few years, with a particularly sharp jump in 2020, when the COVID-19 pandemic prompted many consumers to switch to online shopping. At the time, the market was worth PLN 100 million. The upward trend continued after the pandemic, as the data for 2021 confirms (PLN 134 million). Forecasts at the end of 2022 suggested that the B2C e-commerce market would continue to grow, reaching PLN 154 million. In the B2B segment, the value of the e-commerce market was much higher and growing rapidly. An especially sharp increase was recorded in 2020, when it was worth PLN 447 million, as companies increasingly had to use online platforms to continue their operations during the pandemic. The B2B market is still growing; in 2021, it was worth PLN 637 million, and forecasts for 2022 suggest a further increase to PLN 715 million. This points to the growing importance of e-commerce as an effective tool for companies in the purchasing and sales process.

An especially sharp increase of the e-commerce market value was recorded in 2020, as companies increasingly had to use online platforms to continue their operations during the pandemic.

To sum up: the e-commerce market in Poland is growing rapidly in both segments, B2C and B2B, which reflects its growing importance for both consumers and companies. The COVID-19 pandemic accelerated the development of online retail, especially in 2020, but the upward trend has continued after the pandemic. It is worth noting that the Chamber of Electronic Commerce data does not show the correction that can be seen in the Eurostat data, which points to the stability and durability of the e-commerce sector's growth in Poland, or reflects the optimism of the Chamber's forecasts.

CHART 3. VALUE OF THE E-COMMERCE MARKET IN POLAND (PLN BILLION)



NOTE: THE NUMBERS FOR 2021 AND 2022 ARE ESTIMATES.
SOURCE: PREPARED BY THE AUTHORS BASED ON DATA FROM IGE (2023).



Company size and the use of e-commerce

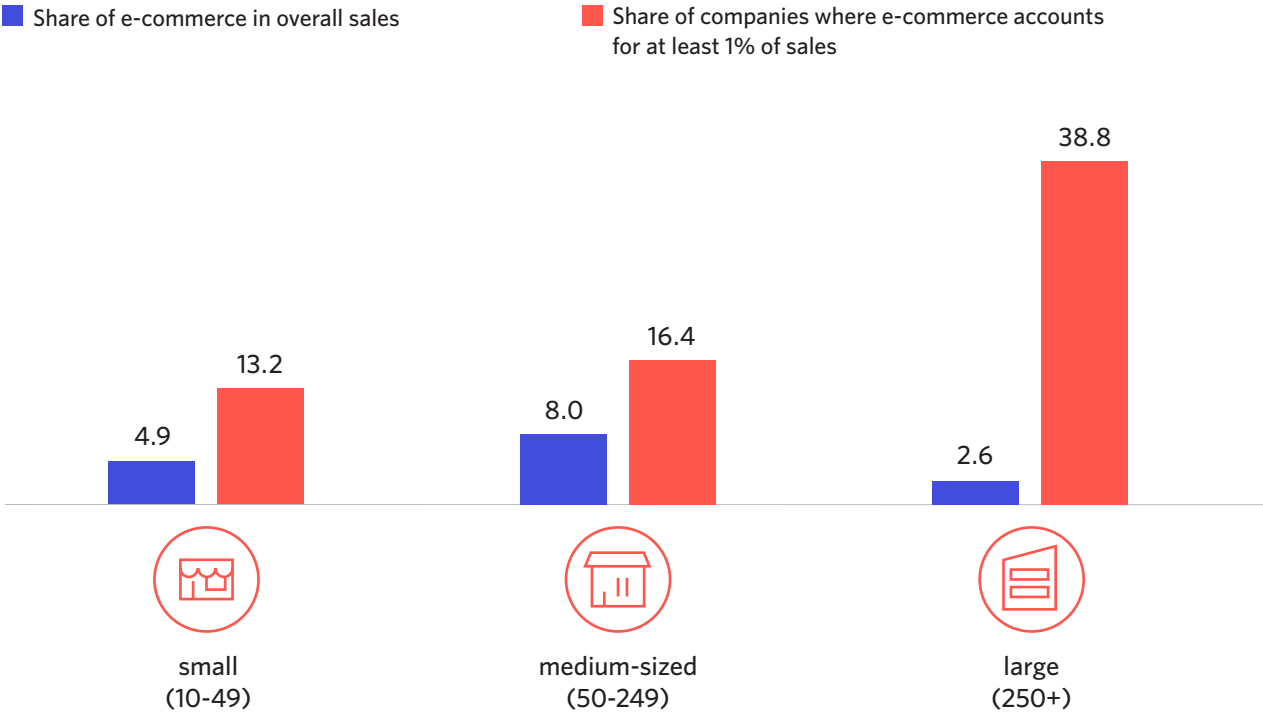
Analysing the data on the share of e-commerce in total sales and the percentage of companies where at least 1% of turnover comes from online sales in the context of company size offers a better understanding of the relationship between a company's size and its involvement in e-commerce. The data used for this analysis is presented in **Chart 4**. The first important conclusion is that e-commerce accounts for a much lower percentage of total sales at large companies with at least 250 employees (2.6%) than at small (4.9%) and medium-sized companies (8%). This may be because large companies operate in more diverse markets, where e-commerce is only part of their business, while SMEs focus more on adapting to online customers' needs. Large companies may also have a much more developed sales network than smaller ones. However, the data on the percentage of companies where e-commerce accounts for at least 1% of sales shows that large enterprises are more advanced when it comes to using e-commerce as a major sales channel. The surprisingly high percentage of large companies (38.8%) where online sales account for at least 1% of turnover suggests that they are more advanced when it comes to using e-commerce in

In almost 40% of large companies, online sales account for at least 1% of turnover, which is almost three times more than in the case of small companies.

their business strategy. Although the share of e-commerce at small companies (10-49 employees) is relatively low, it accounted for at least 1% of turnover at 13.2% of them. This may mean that some small businesses are actively developing their online presence despite limited resources. Meanwhile, medium-sized enterprises (50-249 employees) are somewhere in between, both in terms of the share of e-commerce in total sales (8%) and the percentage of companies where at least 1% of turnover comes from online sales (16.4%).

The analysis above shows that the relationship between company size and e-commerce is complex. For large companies, e-commerce may account for a lower percentage of total sales, but they are more advanced when it comes to using this sales channel. While the share of online sales is higher at small companies, they still need to strive for greater engagement. Medium companies constitute an intermediate group that has the potential for further growth in e-commerce. This shows that there is room for a variety of strategies, depending on the company’s size, but developing an online presence is becoming increasingly important to remain competitive.

CHART 4. E-COMMERCE AS A PERCENTAGE OF SALES AND THE POPULARITY OF E-COMMERCE AT COMPANIES, BY COMPANY SIZE (%)



NOTE: THE DATA ON THE SHARE OF E-COMMERCE IN SALES IS INCOMPLETE. THE DATA ON SMALL ENTERPRISES IS FROM 2019, THAT ON MEDIUM-SIZED COMPANIES FROM 2020, AND THAT ON LARGE COMPANIES FROM 2021. THE DATA ON THE PERCENTAGE OF COMPANIES WHERE E-COMMERCE ACCOUNTS FOR AT LEAST 1% OF SALES COMES FROM 2022. SOURCE: PREPARED BY THE AUTHORS BASED ON DATA FROM (EUROSTAT, 2023C, 2023F).



The development of online sales channels: companies' own websites vs. e-commerce platforms

The data in **Chart 5** presents the share of companies selling online via their own websites or apps and via e-commerce platforms in 2017-2022. This data allows us to understand the changes in the importance of various online sales channels over this period.

In 2017, 7.8% of companies were selling via their own websites or apps while 4.4% were using e-commerce platforms. Over time, both these channels became more important. In 2022, these percentages had risen to 11.7% and 9.1%, respectively.

On the one hand, these changes reflect the increasing importance of companies' own websites and apps. As companies have gained experience and developed their online presence, there has been a noticeable increase in the share of them selling via their own online channels. This suggests that companies see the benefits of having control over their online shops and direct contact with customers. On the other hand, e-commerce platforms have developed rapidly. While companies' own websites and apps remain an important sales channel, e-commerce platforms have also become more popular. This is often the result of access to a larger customer base, as well as the tools and services offered by these platforms, which makes it easier for companies to expand their reach and sell their products more effectively.

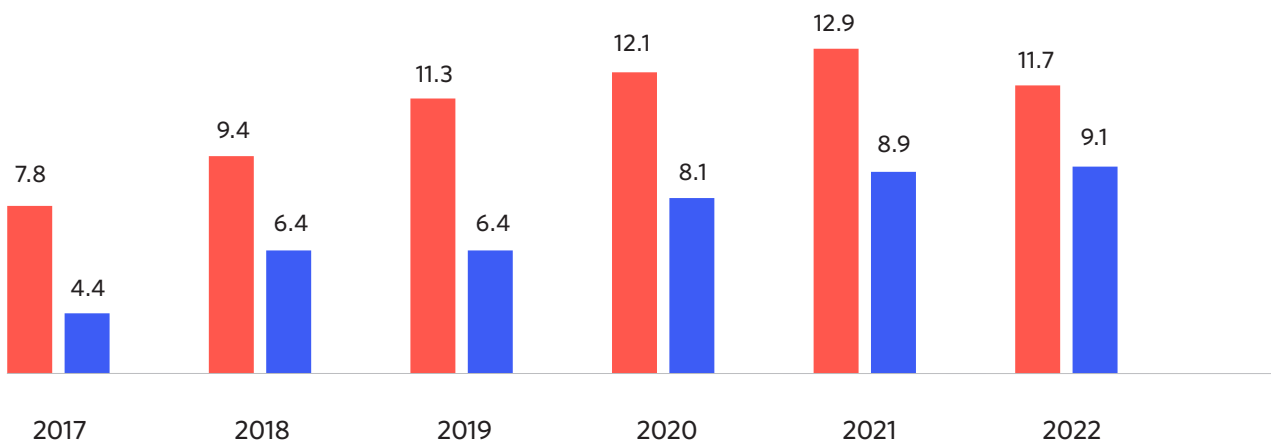
CHART 5. COMPANIES SELLING ONLINE VIA THEIR OWN WEBSITES OR APPS AND VIA E-COMMERCE PLATFORMS (%)



■ Companies selling online via their own websites or apps



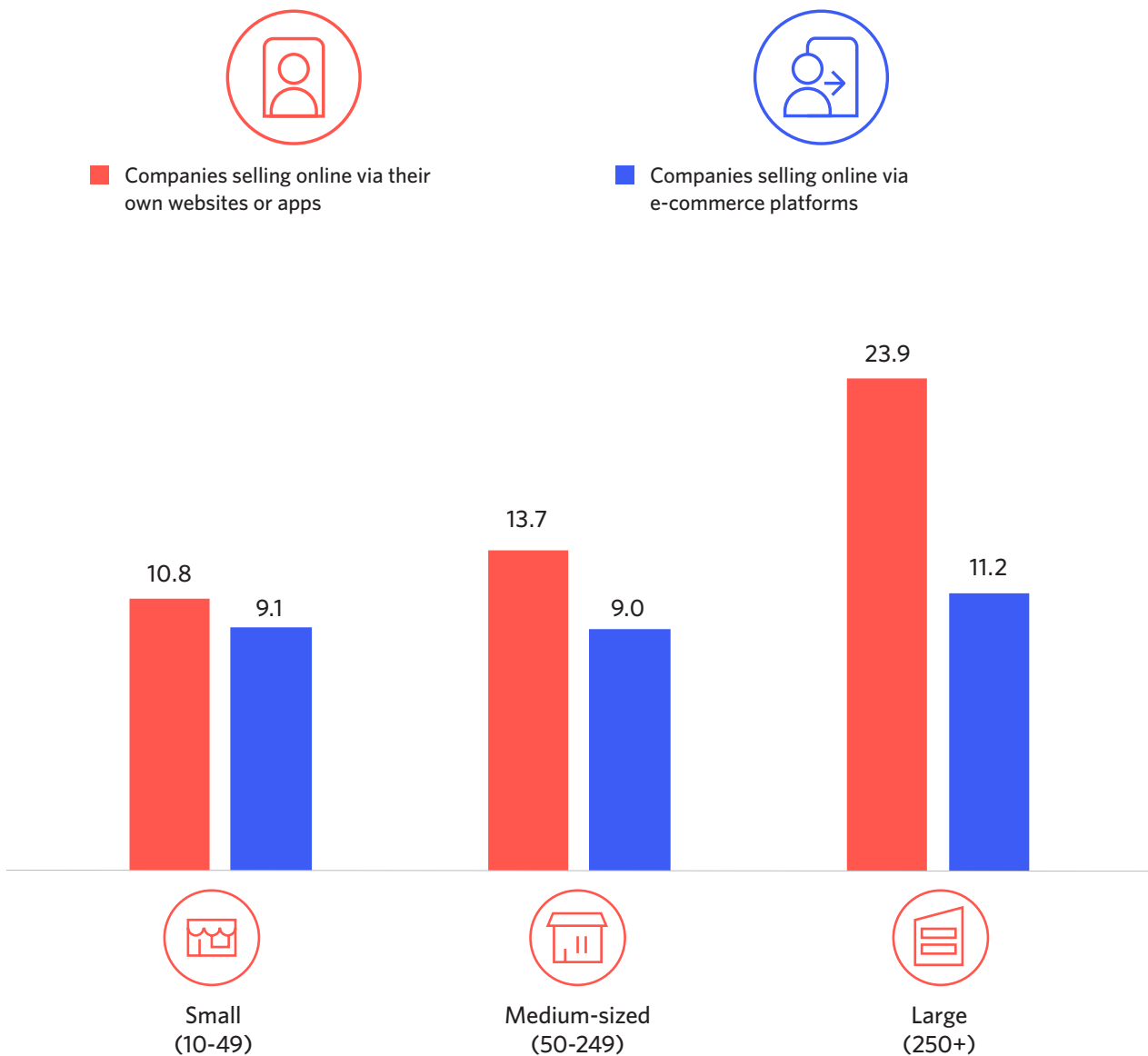
■ Companies selling online via e-commerce platforms



NOTE: THE DATA CONCERNS COMPANIES WITH MORE THAN NINE EMPLOYEES.
SOURCE: PREPARED BY THE AUTHORS BASED ON DATA FROM (EUROSTAT, 2023D).

In 2020, during the pandemic, there was a particularly noticeable increase in the importance of both these channels. Companies increased their online presence to adapt to the pandemic-related restrictions and customers, who were avoiding traditional shops, switched to online shopping. During this period, companies' own websites and apps became key tools, enabling them to stay in touch with customers and continue selling their products. Interestingly, during the post-pandemic correction in 2022, the percentage of companies selling via their own websites or apps decreased slightly. In contrast, there was no correction in the case of e-commerce platforms.

CHART 6. COMPANIES SELLING ONLINE VIA THEIR OWN WEBSITES OR APPS AND VIA E-COMMERCE PLATFORMS IN 2022 (%)



SOURCE: PREPARED BY THE AUTHORS BASED ON DATA FROM (EUROSTAT, 2023C, 2023F).

Analysing the differences in the importance of online sales channels for small, medium-sized and large enterprises – based on the data presented in **Chart 6** – reveals several patterns. The data shows that the choice of online sales channel partly depends on company size. Among small companies (10-49 employees) the difference between the percentage of entities that rely on their own websites and apps (10.8%) and the percentage that use platforms (9.1%) is relatively small. However, the data suggests a slight preference for the companies' own websites or apps, perhaps due to the limited resources they have to dedicate to external platforms. Medium-sized companies (50-249 employees) show a slightly greater preference their own websites and apps (13.7%) over e-commerce platforms (9%). This may be because they have more resources to develop and maintain their own websites or apps for online sales. Nevertheless, the percentage of small and medium-sized enterprises that use external platforms is similar. Large companies (250+ employees) have the highest

share of sales via their own websites and apps (23.9%), although they use platforms (11.2%) slightly more than SMEs. This suggests that, to reach as many customers as possible, large companies have more diversified online sales strategies that include both channels they control and external platforms.

Additional data on the use of online sales channels by companies of various sizes is presented in **Table 1**. Analysing trends using the data above enables us to understand how sales strategies have evolved over the past few years.

To reach as many customers as possible, large companies have more diversified online sales strategies that include both channels they control and external platforms.

Small enterprises (10-49 employees) have steadily increased the use of their own websites and apps, as well as e-commerce platforms. The share of online sales via their own websites and apps increased from 6.8% in 2017 to 12.2% in 2021, before decreasing slightly to 10.8% in 2022. This suggests that small businesses are increasingly realising the value of their own websites or apps, but that their use of them may fluctuate somewhat. At the same time, the share of small enterprises using e-commerce platforms rose from 4.2% in 2017 to 9.1% in 2022, which may result from easier access to potential customers on external platforms.

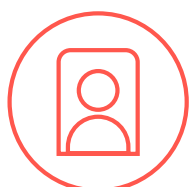
Similar trends can be seen in the case of medium-sized enterprises (50-249 employees). During the period studied, the use of both their own websites and apps (from 11.2% in 2017 to 13.7% in 2022) and e-commerce platforms increased (from 5.1% in 2017 to 9% in 2022). Sales via their own websites or apps as a percentage of overall sales peaked in 2019 at 14.8%. Since then, this share has stabilised and declined.

Throughout the period studied, large enterprises (250+ employees) were the most likely to sell online using their own websites and applications, as well as e-commerce platforms. This suggests that they are maintaining a stable and significant presence on their own websites and apps while using third-party e-commerce platforms to expand their reach in the online marketplace.




To sum up, despite the differences between them, online sales – both via their own websites and apps, as well as via e-commerce platforms – are becoming more important for companies of various sizes. The rapid growth in the use of these channels can partially be attributed to the COVID-19 pandemic, which prompted companies to broaden their

online sales strategies. However, the differences in these trends suggest that companies of different sizes have their own unique approaches to using online sales channels, depending on their resources and business strategy.

TABLE 1. CHANGES IN COMPANIES' USE OF THEIR OWN WEBSITES OR APPS AND E-COMMERCE PLATFORMS IN 2017-2022






COMPANIES SELLING ONLINE VIA THEIR OWN WEBSITES OR APPS

	2017	2018	2019	2020	2021	2022
 small (10-49)	6.8	8.4	10.2	11.3	12.2	10.8
 medium (50-249)	11.2	12.8	14.8	14.6	14.6	13.7
 large (250+)	16.9	18.3	21.9	22.1	23.9	23.9



COMPANIES SELLING ONLINE VIA E-COMMERCE PLATFORMS

	2017	2018	2019	2020	2021	2022
 small (10-49)	4.2	6.1	6.3	7.9	9.0	9.1
 medium (50-249)	5.1	7.7	7.0	9.0	8.6	9.0
 large (250+)	5.8	7.6	7.9	8.8	10.0	11.2

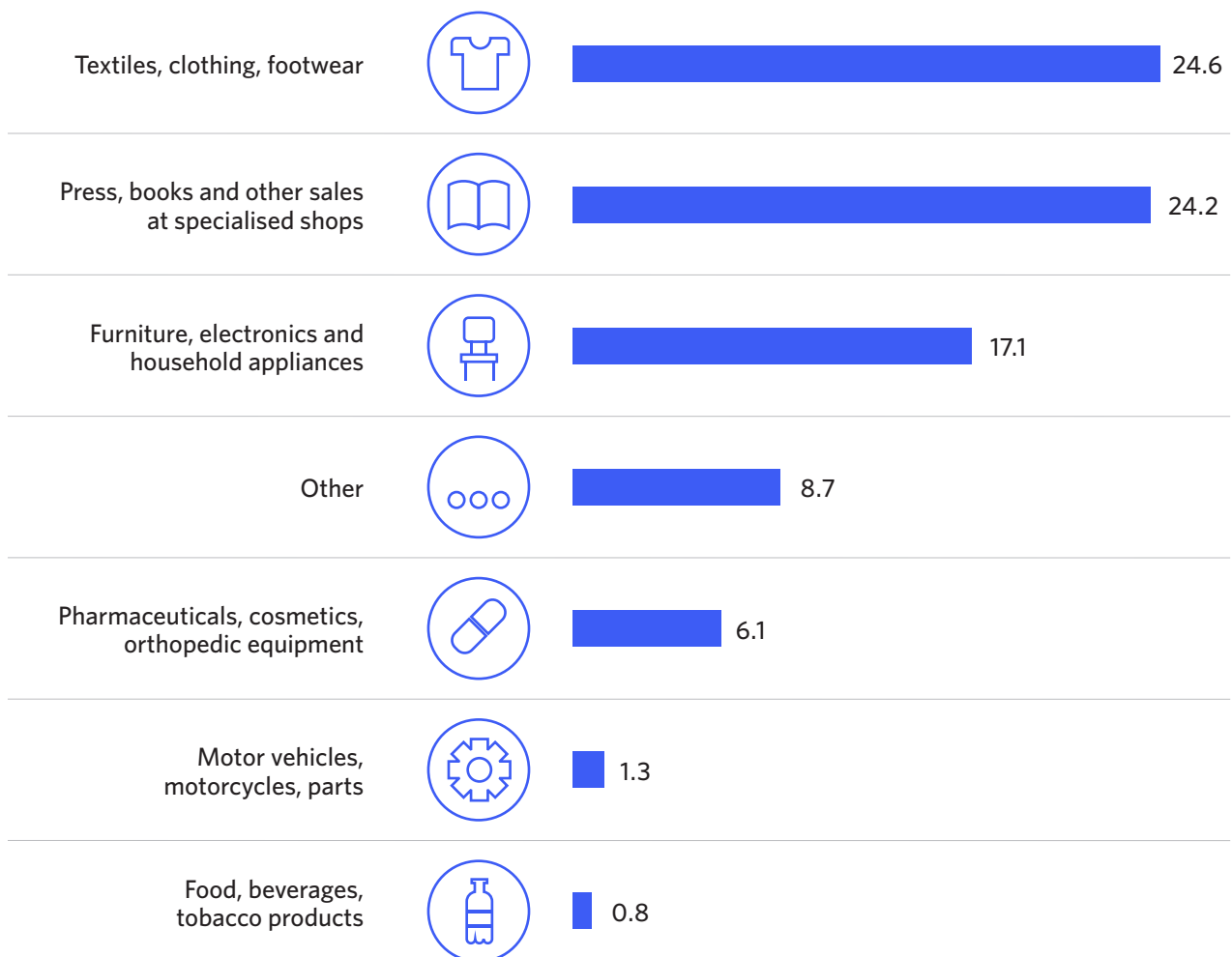
SOURCE: PREPARED BY THE AUTHORS BASED ON DATA FROM (EUROSTAT, 2023C, 2023F).



The product and industry dimension of e-commerce

The data on the average share of e-commerce in retail sales in various product groups in 2020-2023 (presented in **Chart 7**) makes it possible to analyse the structure of e-commerce in the retail segment in terms of products. The data points to considerable variation in the share of e-commerce depending on the product group. In groups of products such as “press, books, other sales at specialised shops”, “textiles, clothing, footwear” and “furniture, electronics and household appliances”, e-commerce is very important, accounting for 24.2%, 24.6% and 17.1% of retail sales. There is high potential for online sales in these groups due to the convenience of online shopping. In contrast, the share of e-commerce is much lower in groups such as “food, beverages and tobacco products” and “motor vehicles, motorcycles and parts”; it accounts for just 0.8% and 1.3% of retail sales in terms of value. This is understandable because certain products, such as fresh produce or vehicles, may need to be purchased offline. It is worth noticing that the share of e-commerce is also significant in the “pharmaceuticals, cosmetics, orthopaedic equipment” group (6.1%).

CHART 7. AVERAGE SHARE OF E-COMMERCE IN RETAIL SALES IN 2020-2023



NOTE: DATA FOR 2020-2023 BASED ON UNWEIGHTED AVERAGES FOR MONTHLY DATA FROM 1 JANUARY 2020 TO 31 JULY 2023.
SOURCE: PREPARED BY THE AUTHORS BASED ON DATA FROM (STATISTICS POLAND, 2023B).

The data on the percentage of companies in various industries where e-commerce accounts for at least 1% of sales (**Chart 8**) offers a more general picture of the structure of e-commerce. It indicates that the significance of e-commerce varies significantly between industries. It is particularly important in the media and content production, where as many as 37% of companies with over nine employees use this sales channel. Interest in e-commerce is also very high in the vehicle production and transport industry (22.5%). Understandably, ICT is a crucial segment, with e-commerce accounting for 20.3% of sales. Other industries where a significant percentage of sales are made online include textiles, clothes and leather products (19.6%), food, beverage and tobacco production (16.7%), and software, IT consulting and IT services (16.1%). E-commerce is also used in sales of a variety of food products and publishing activities (15.7%). It is also becoming more important in electronics, machinery and furniture (15.2%) and production of electrical equipment and machinery (14.3%). It is also worth e-commerce accounts for a significance percentage of sales in sectors such as the production of furniture, jewellery and toys (13.7%), chemical, rubber and plastics production (13.6%), and industrial processing and energy (13.2%). For enterprises involved in plastic, rubber and non-metallic production (12.6%), wood, paper and printing (11.3%), advertising, professional and academic services (10.3%), and the production of metal products (10%), e-commerce is becoming an important sales channel. Despite differences in the popularity of e-commerce between industries, it is clear that many companies are starting to appreciate this sales channel's potential, which is contributing to its rapid development.



CHART 8. POPULARITY OF E-COMMERCE AMONG ENTERPRISES IN VARIOUS INDUSTRIES (%)



NOTE: GROUPS OF PKD SECTIONS IN 2007. THE DATA SHOWS THE PERCENTAGE OF COMPANIES WITH OVER NINE EMPLOYEES WHERE E-COMMERCE ACCOUNTS FOR AT LEAST 1% OF SALES. SOURCE: PREPARED BY THE AUTHORS BASED ON DATA FROM (EUROSTAT, 2023A).



Summary

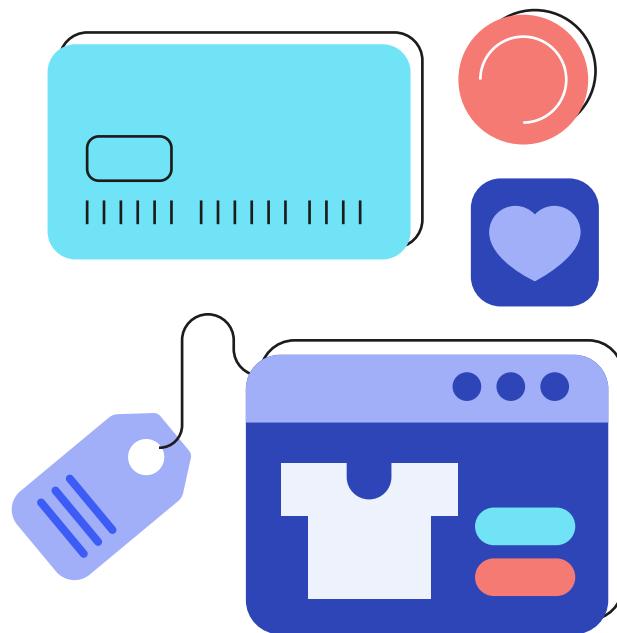
E-commerce has become an integral – and growing – part of the Polish retail landscape. The COVID-19 pandemic accelerated the growth in online sales, a trend that had already been present earlier. Despite a correction after the pandemic, the share of e-commerce in overall sales remains higher than before, which demonstrates its lasting importance.

The value of the e-commerce market has increased rapidly in both the B2C (consumer sales) and the B2B segment (intercompany sales). Intercompany e-commerce is well developed and continues to grow, but consumer e-commerce is also gaining importance.

Our analysis of the importance of company size shows that both large and small companies are active in e-commerce. While it may account for a lower percentage of sales at large companies, their use of this channel is more advanced. Small companies play a key role in e-commerce due to the flexibility that it offers them. Medium-sized companies appear to have the potential for further growth in e-commerce.

In terms of online sales channels, both companies' own websites and apps on the one hand, and e-commerce platforms on the other hand, are becoming more important. Companies appreciate the benefits of controlling their e-commerce channels while using platforms to increase their visibility.

Our analysis also shows that certain industries have more online sales potential than others. In industries linked to clothing, furniture and cosmetics, e-commerce accounts for a significant percentage of retail sales. Even in traditional industries, such as food and the automotive industry, e-commerce is becoming increasingly important. This shows that many companies from a variety of industries are starting to appreciate the opportunities offered by this sales channel.





3 Attitudes:

Business sentiment in e-commerce after the pandemic



Introduction

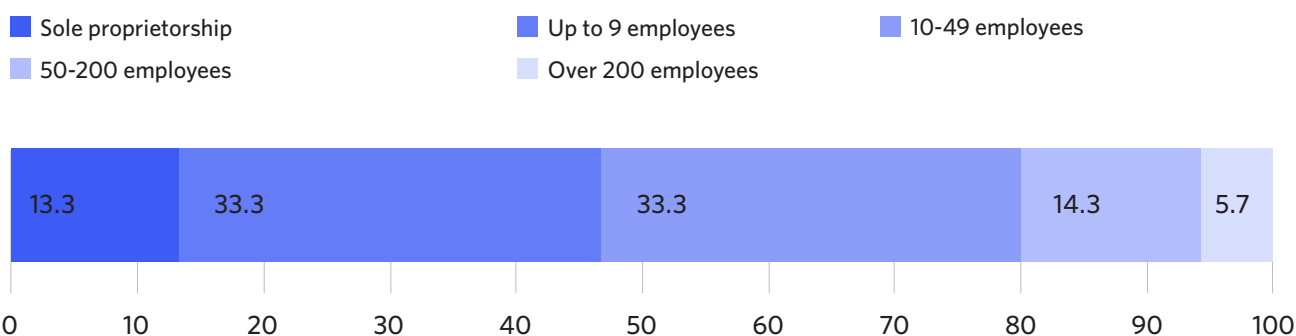
Analysis of the e-commerce market usually focuses on the needs and expectations of customers – the people buying the products. Meanwhile, in the e-commerce landscape, relationships between sellers and buyers are not limited to the exchange between the customer/user and the manufacturer or distributor of the goods. Very often, intermediaries – sales platforms (marketplaces) – are involved. To illustrate the experience of entrepreneurs who sell their products on e-commerce platforms, a survey was conducted on behalf of Amazon among entities that use the following companies' services: Goni.to, Baselinker, Taxology, GS1, Trusted-Shops, iCEA Group, ekomercyjnie.pl, Global24, cross-broder.pl and KIG. 105 respondents completed the survey. The sample was not representative.



Who took part in the survey? Respondents' characteristics

One-third of the respondents were representatives of companies with up to nine employees. Companies with 10 to 49 employees accounted for a similar share. 13.3% of the respondents had sole proprietorships, and 14.3% of respondents were representatives of companies with 50-200 employees. The rest of the sample consisted of companies with over 200 employees.

CHART 9. NUMBER OF PEOPLE EMPLOYED BY THE COMPANIES WHERE THE RESPONDENTS WORK (%)

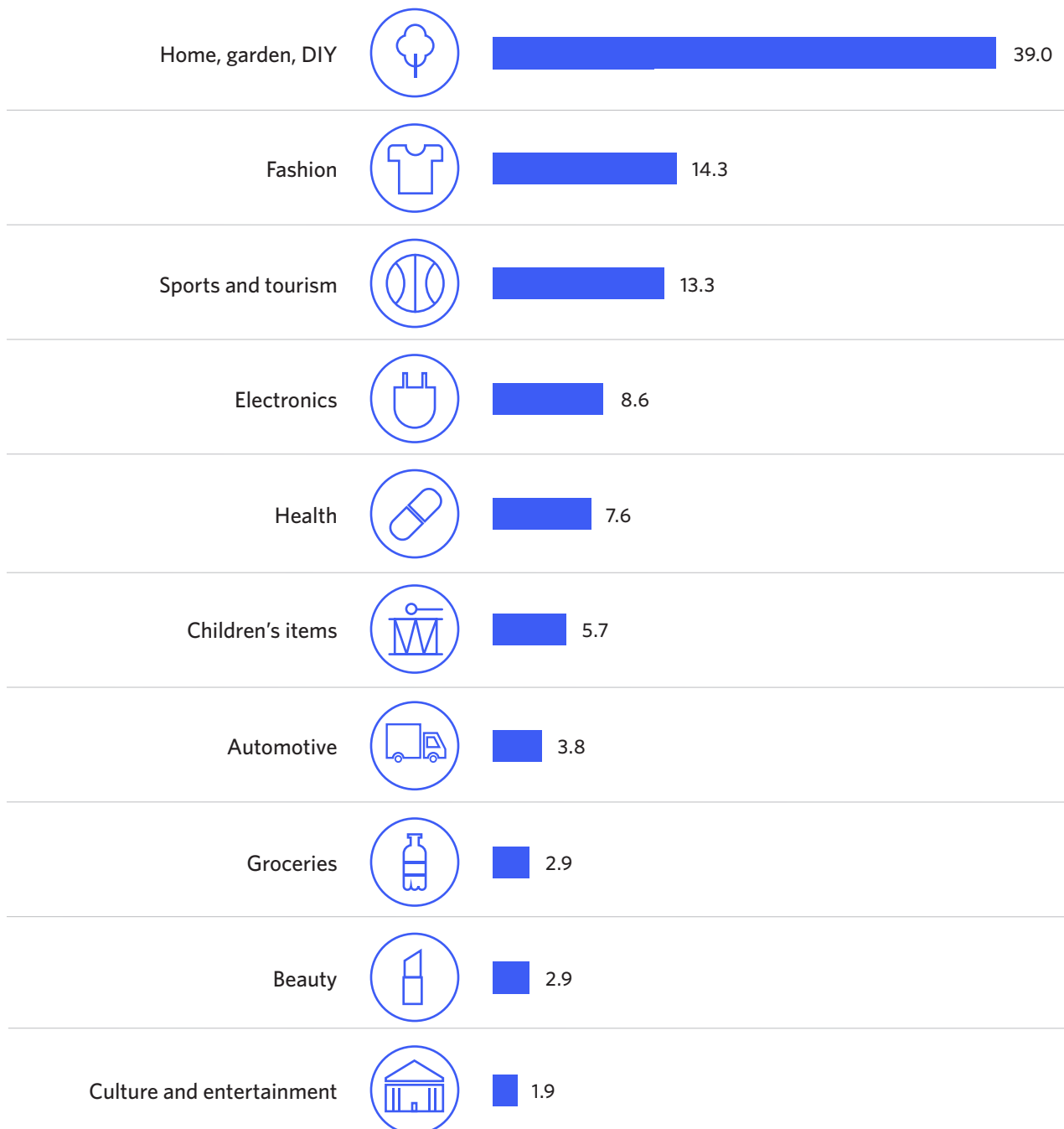


SOURCE: PREPARED BY THE AUTHORS.

Among the company representatives surveyed, the largest area of activity was “Home, garden, DIY” (almost 40%), followed by fashion (14.3%), and sports and tourism (13.3%). Electronics and health accounted for between 5% and 10%.

By far the most popular sales platform used by respondents’ companies is Allegro; this answer was chosen by as many as 97.7% of them. Amazon came second, with 70%. eBay, Etsy and EMAG’s results were more than 45 percentage points lower than Amazon’s. One-fifth of respondents also chose the option “Other”.

CHART 10. MAIN AREAS OF ACTIVITY OF RESPONDENTS' COMPANIES (%)



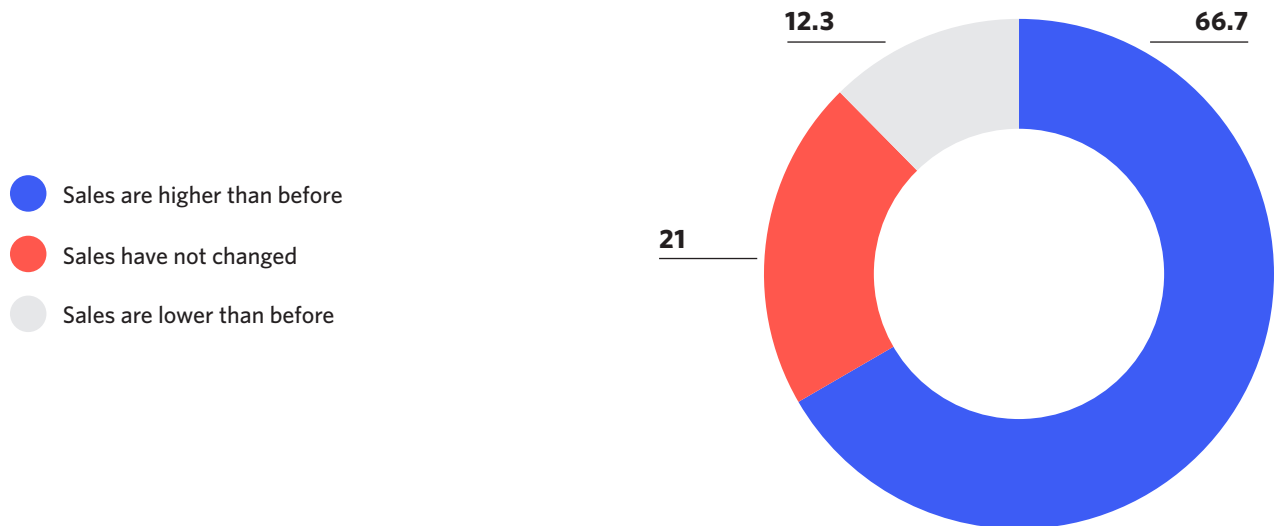
SOURCE: PREPARED BY THE AUTHORS.



How the pandemic and inflation have affected the surveyed companies' sales volume

The vast majority of respondents (66.7%) said that their total sales volume increased due to the pandemic. One-fifth replied that it did not change.

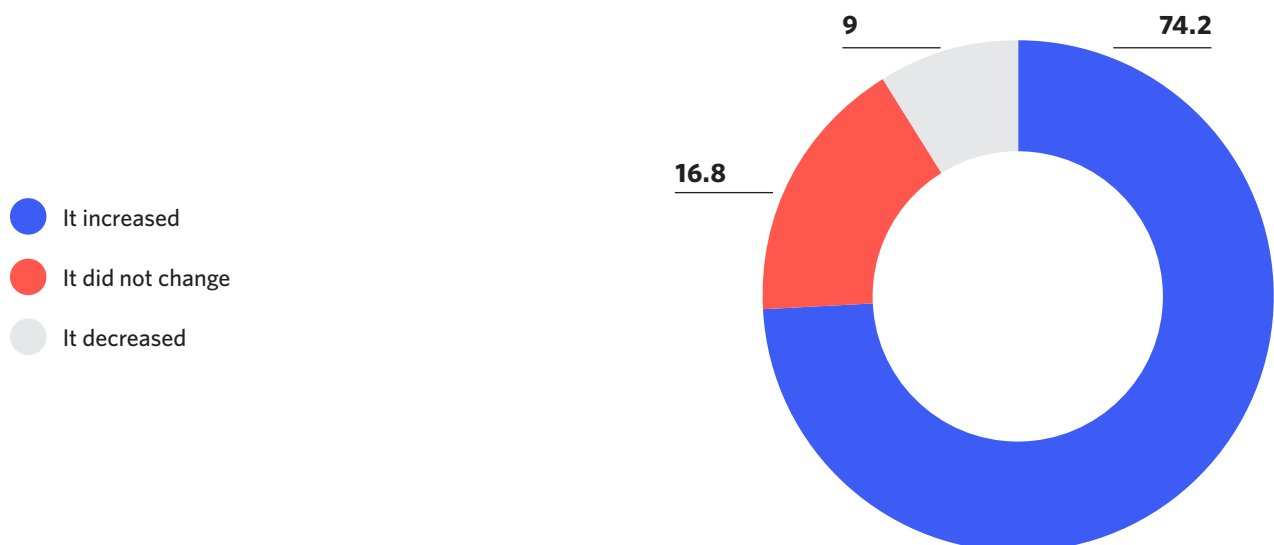
CHART 11. CHANGE IN TOTAL SALES VOLUME DUE TO THE PANDEMIC (%)



SOURCE: PREPARED BY THE AUTHORS.

As noted earlier, the pandemic had a positive impact on the development and size of the e-commerce market in Poland. This is also confirmed by the results of the survey conducted among sellers on marketplaces. Participants in the survey commissioned by Amazon indicated that their online sales on e-commerce platforms also increased due to the pandemic; three-quarters of the group surveyed responded in this way.

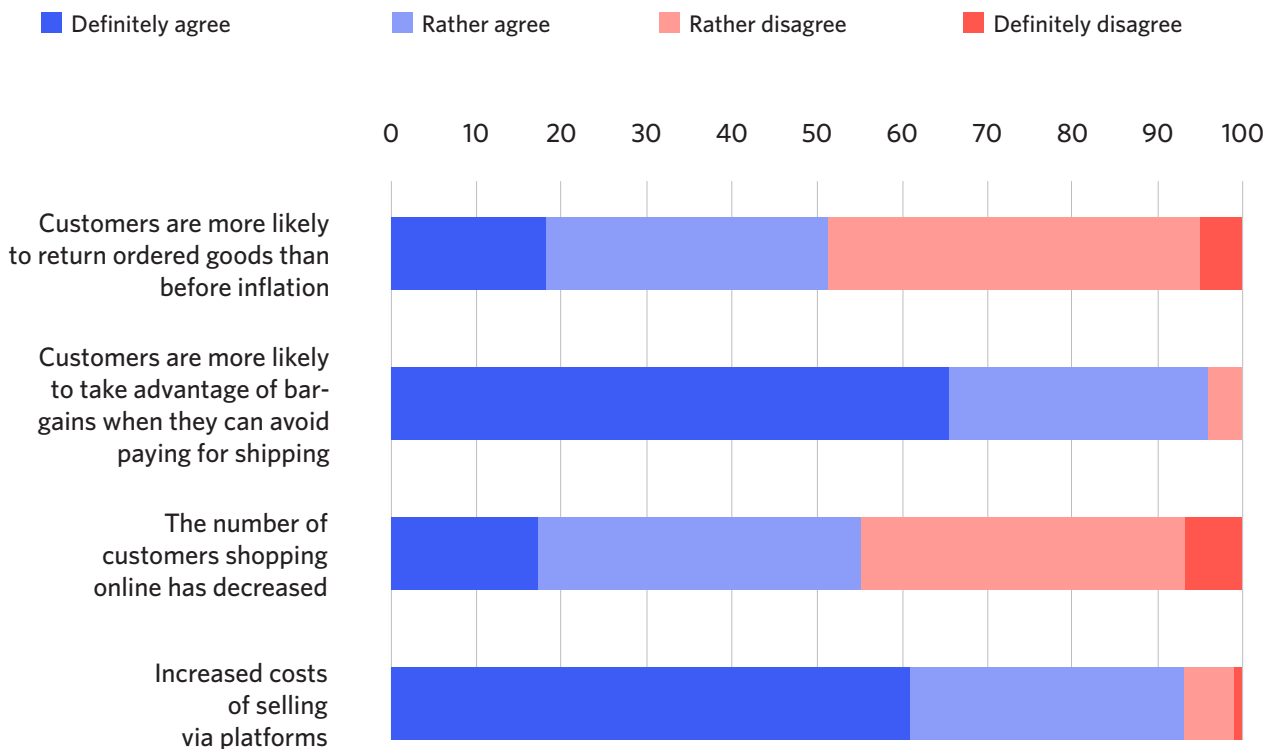
CHART 12. CHANGE IN RESPONDENTS' COMPANIES' SALES VOLUME ON E-COMMERCE PLATFORMS DUE TO THE PANDEMIC (%)



SOURCE: PREPARED BY THE AUTHORS.

Asked about the impact of inflation, respondents unanimously replied that the cost of handling sales on e-commerce platforms has increased due to inflation, and that customers are more eager than before to find ways to avoid paying for delivery. About half the respondents said that they have seen a decline in the number of customers on e-commerce platforms and that consumers are returning items more often than before. Inflation has slowed down the growth in the importance of sales via e-commerce platforms, but it has not stopped it.

CHART 13. IMPACT OF INFLATION ON E-COMMERCE VIA SALES PLATFORMS (%)



SOURCE: PREPARED BY THE AUTHORS.

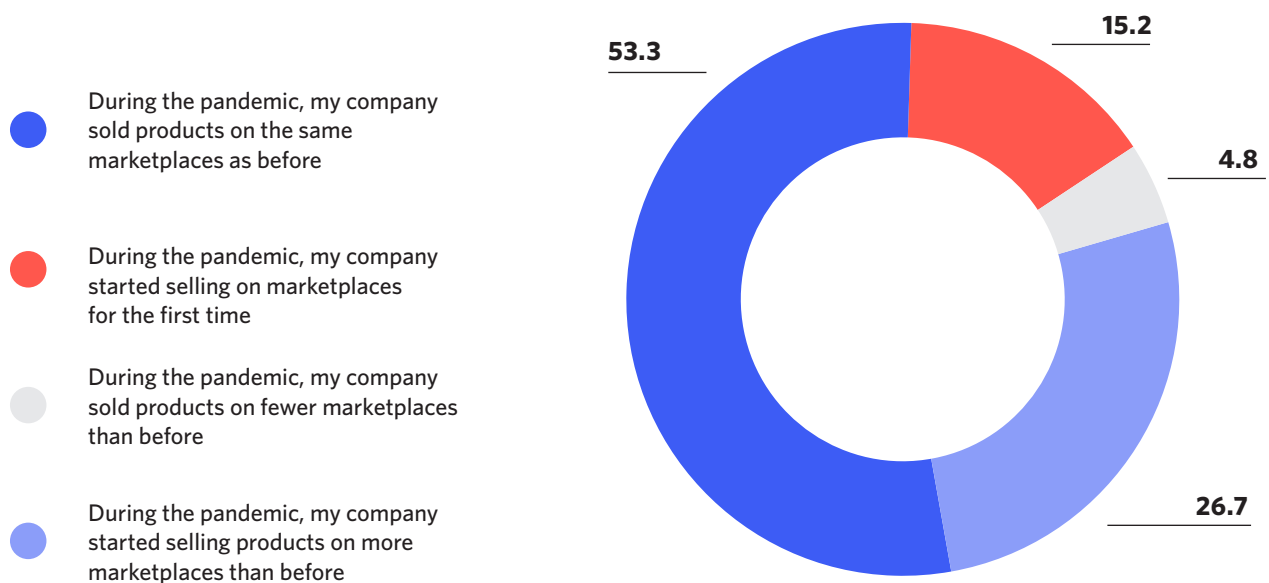


The impact of the pandemic on the surveyed companies' activity on sales platforms

In terms of the number of marketplaces that respondents operate on, just 4.8% of them said that they were selling on fewer platforms during the pandemic than before it. During this period, the vast majority expanded their operations on marketplaces; as many as three-quarters developed their business on marketplaces where they had sold products before. Over 40% of respondents said that they expanded into new markets or new sales platforms during the pandemic. Expanding to global marketplaces involves additional burdens for sellers, such as the need to adapt to the platform's guidelines or ensure a specific delivery time (Polityka Insight 2022). However, being present on a sales platform allows them to reach a much wider group of potential customers, compared to their own online shop.

Multi-channel sales are becoming an increasingly common trend in online sales, even though they increase the financial burden on companies. Customers can not only purchase the product via the seller's online shop, but also via (one or more) sales platforms, which is often accompanied by the opportunity to view, purchase and/or collect the goods at a brick-and-mortar shop. This results in phenomena such as ROPO (research online, purchase offline), the practice of checking a product being sold online at a brick-and-mortar shop before buying it, or reverse ROPO (research offline, buy online), which involves viewing a product offline and then buying it online. Additionally, for some customers, the existence of a brick-and-mortar shop confirms the seller's credibility; in the E&Y study from 2022, as many as 36% of consumers did not trust (or had only minimal trust in) sellers whose business was fully online, without roots in the offline world (EY, 2022).

CHART 14. IMPACT OF THE PANDEMIC ON RESPONDENTS' ACTIVITY ON SALES PLATFORMS (%)



SOURCE: PREPARED BY THE AUTHORS.

Despite the pandemic's positive impact on the volume of online sales, most of the sellers surveyed (61.9%) did not introduce new e-commerce solutions. This may have resulted from a lack of certainty that the upward trend in sales via e-commerce platforms (currently undergoing a correction due to inflation) would continue, or a lack of the necessary programming skills. Sellers may also have been leaving the development of e-commerce solutions to sales platforms' operators.

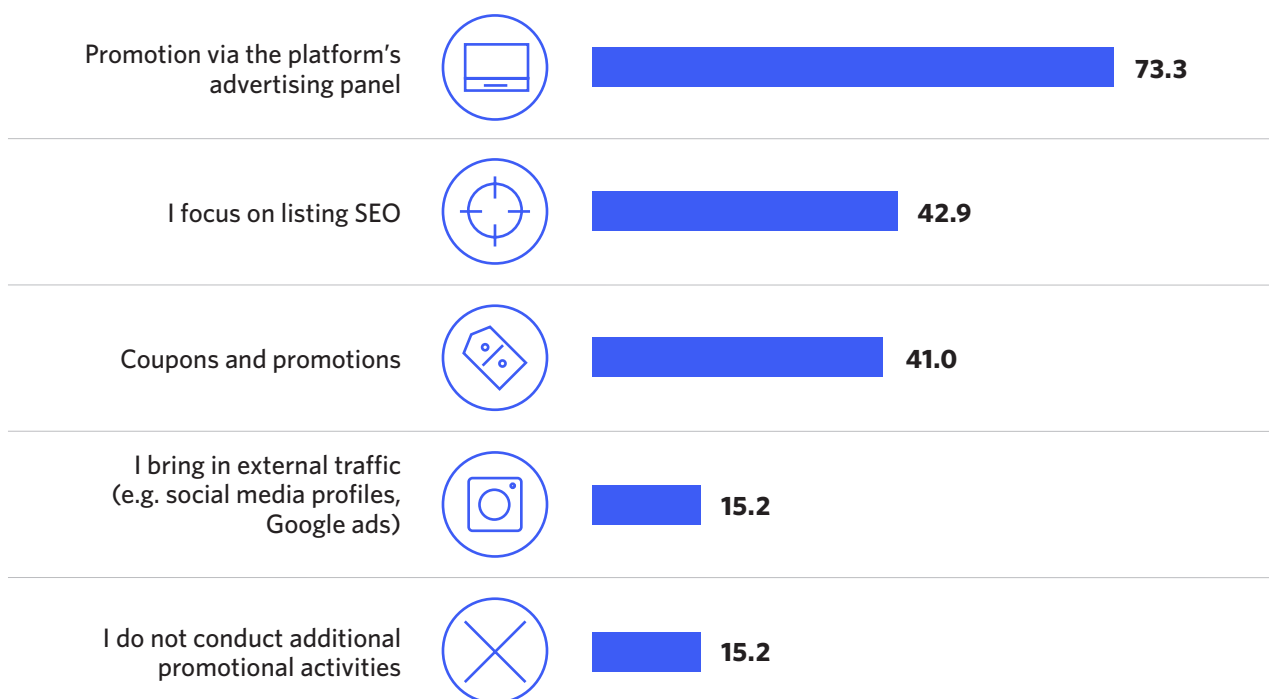


The benefits for sellers of using sales platforms

Respondents in the Amazon survey were primarily motivated to sell their company's products via online sales platforms by the opportunities offered by marketplaces: they provide the opportunity to develop the company on a global scale (72.4%) and constitute an additional marketing channel for promoting and increasing the brand's reach (54.3%). Being present on marketplaces is also viewed as necessary due to their growing popularity (58.1%); sellers cannot afford to be absent from them because it might send customers the wrong message. Unsatisfactory sales results on the Polish market are another reason to operate via sales platforms (35.2%). The advantage of not having to deal with logistics on sales platforms was highlighted by just over 10% of respondents. "Out of curiosity, it is a learning tool" received the lowest percentage of responses. Sales platforms are not seen as an "interesting new tool" – potentially because they are no longer a new solution for sellers or customers (whom the sellers are also likely to be, to a large extent).

Companies' presence on marketplaces gives them new opportunities to advertise their products. Almost three-quarters of the companies surveyed promote their products using the platform's advertising panel. This is the most common type of action taken by these companies in the marketplace environment. Two-fifths of the companies focus on optimising SEO listings, while a similar percentage offer their customers a variety of coupons and promotions. Just 15.2% bring external traffic to the marketplace where they sell their products. The same percentage of respondents does not conduct additional promotional activity on marketplaces.

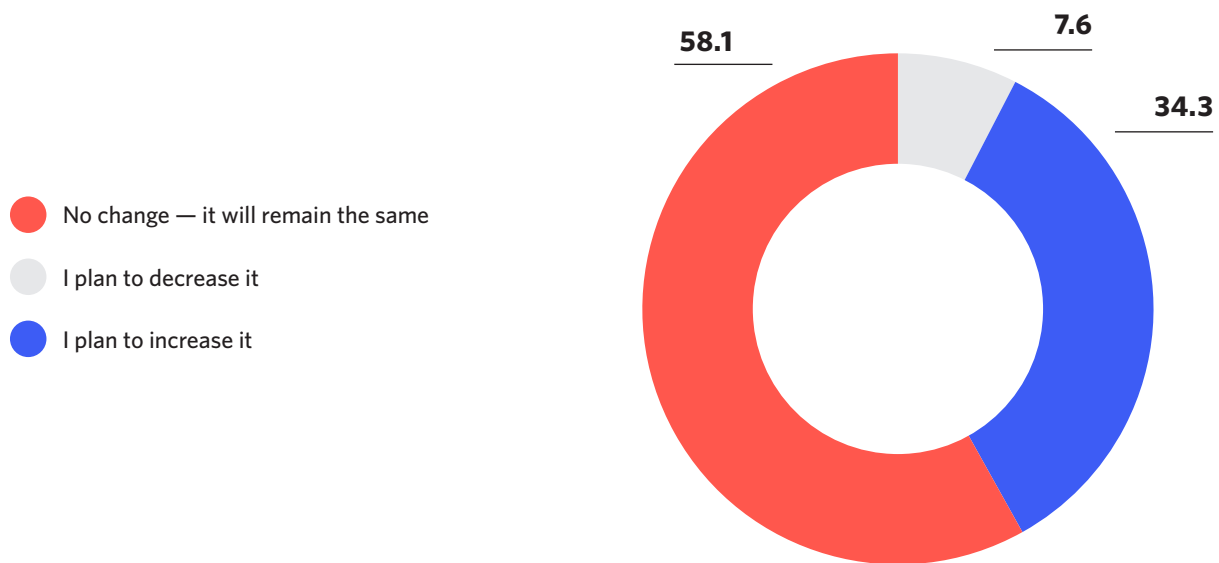
CHART 15. MARKETING EFFORTS BY RESPONDENTS' COMPANIES ON MARKETPLACES



SOURCE: PREPARED BY THE AUTHORS.

The relatively high percentage of companies (34.3%) that intend to increase their budget for advertising on sales platforms in the fourth quarter of 2023, compared to the fourth quarter of 2022, shows the importance and expected effectiveness of marketing on sales platforms. Just 7.6% plan to reduce it.

CHART 16. RESPONDENTS' PLANS FOR THE BUDGET EXCLUSIVELY DEDICATED TO SALES PLATFORMS IN THE FOURTH QUARTER OF 2023, COMPARED TO THE FOURTH QUARTER OF 2022 (%)



SOURCE: PREPARED BY THE AUTHORS.



Barriers to using sales platforms

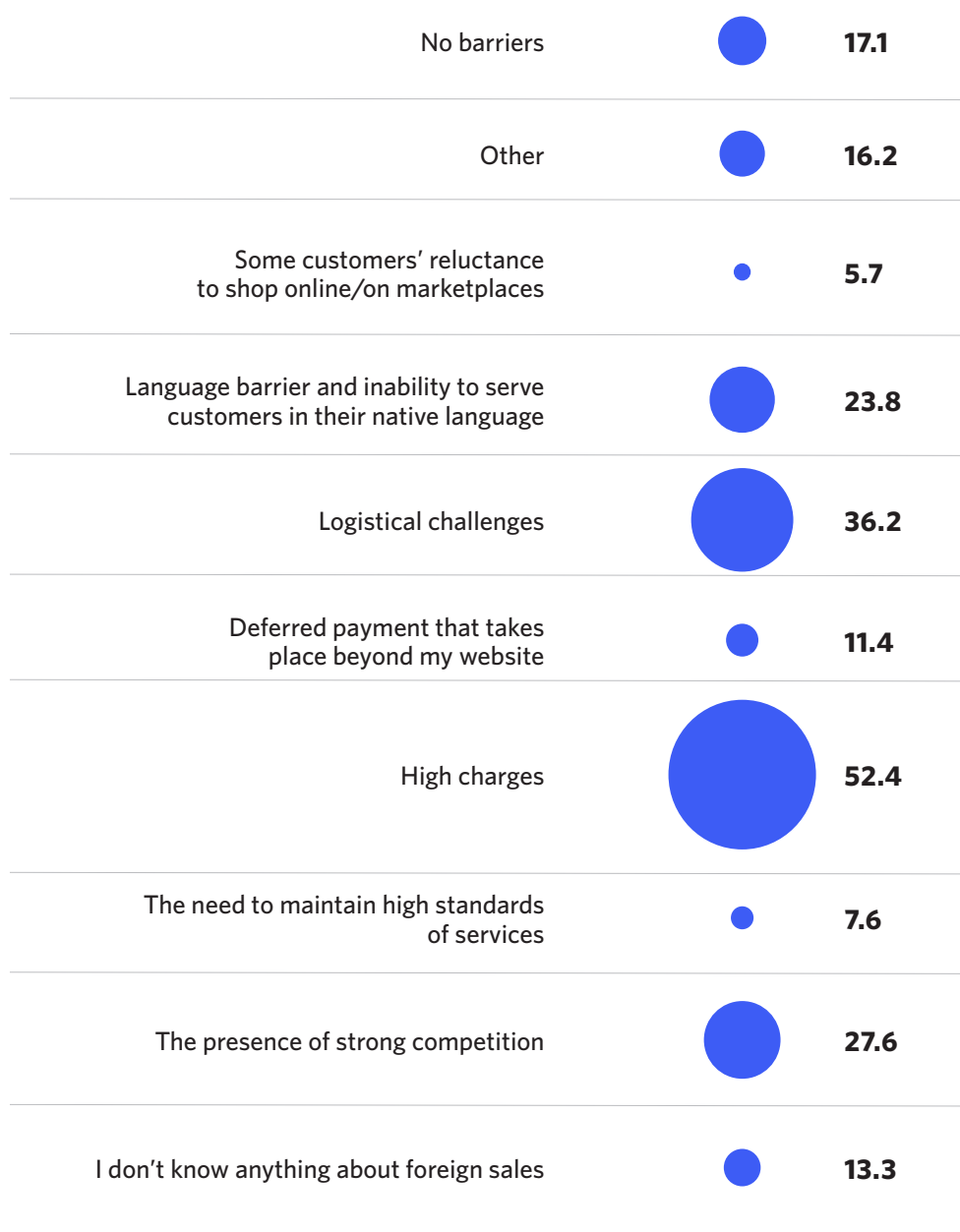
The report *Export barriers for small and medium-sized enterprises* published by Polityka Insight in April 2022 identifies the following barriers to the development of exports by SMEs on the Internet: know-how barriers, economic barriers, legal and tax barriers, and psychological barriers. What makes it difficult for the entrepreneurs surveyed to sell their products on online platforms? The key issue are the high fees associated with being present on marketplaces — this response was chosen by over half of respondents. Logistics and the associated difficulties in the marketplace environment were the next most common response (36.2%). Sales platforms are also seen as a space with active competition between sellers (27.6%), which may result from the presence of many entities offering similar products and the opportunity

The key issue are the high fees associated with being present on marketplaces.

for customers to compare these products. As noted in the report cited above, sellers' use of international platforms forces them to standardise their products as much as possible. In this context, the product price and delivery costs become the key factors.

In the survey commissioned by Amazon, 23.8% of respondents drew attention to the problem of having to serve customers in a language other than their native language. For one-tenth of respondents, a negative feature of operating on sales platforms is the feeling of lack of control over the process; the payment is not made via the seller's own website. Just 6% of respondents pointed out that some customers do not trust online shopping. This dimension, once cited as a barrier to the development of online sales, is now somewhat less significant.

CHART 17. BARRIERS TO ENTRY TO SALES PLATFORMS FOR COMPANIES (%)



NOTE: THE PARTICIPANTS COULD CHOOSE UP TO THREE ANSWERS.
SOURCE: PREPARED BY THE AUTHORS.

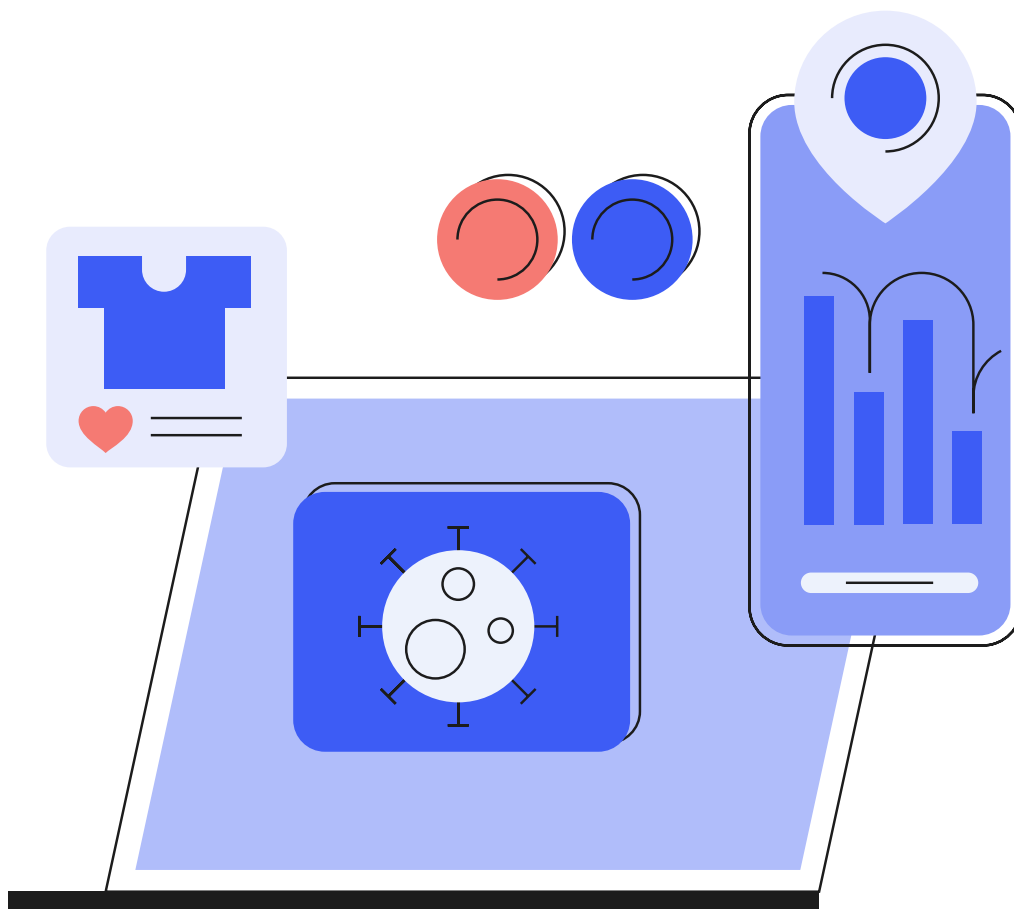


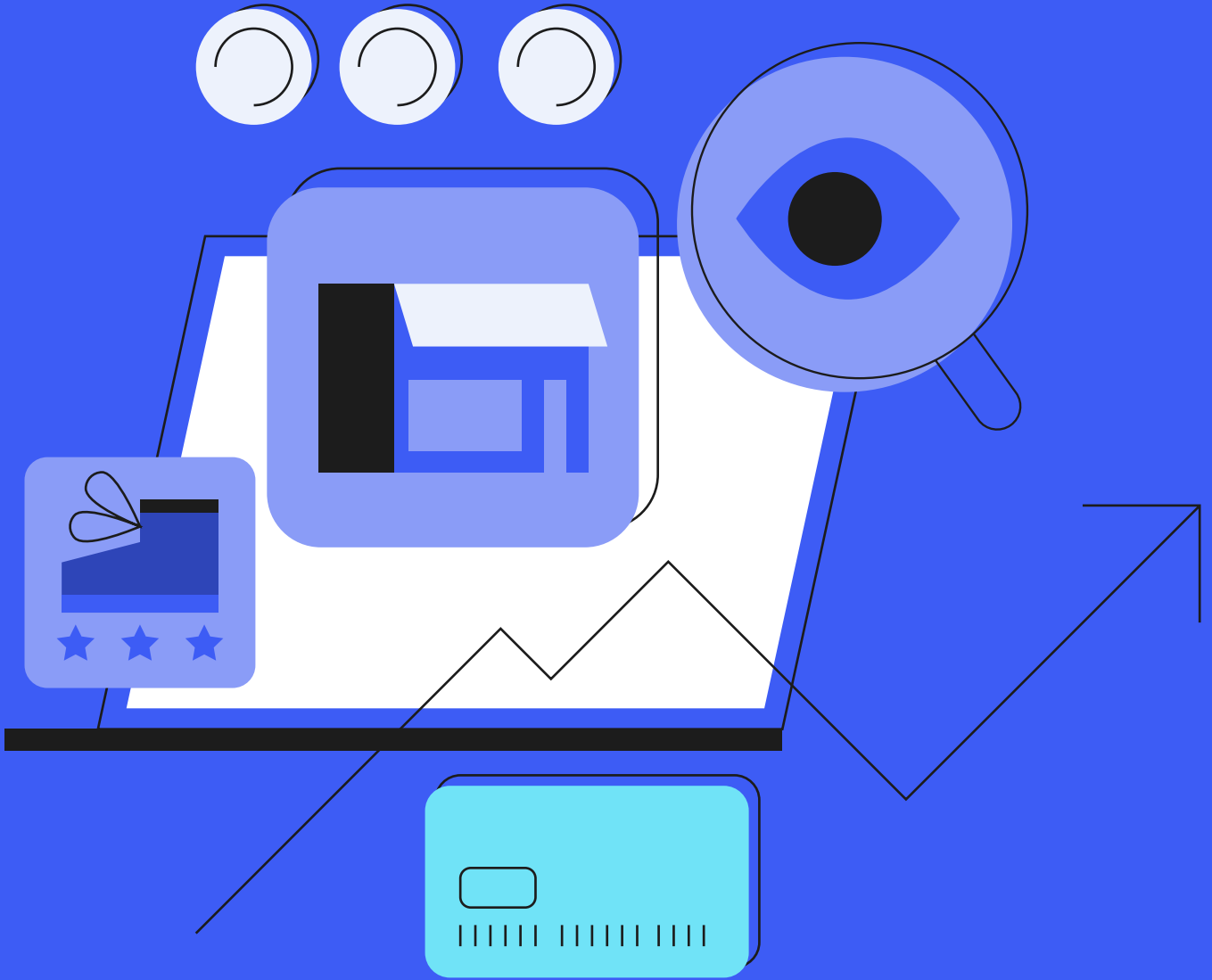
Summary

The pandemic supported (and partly brought about) the development of the e-commerce market in Poland. As the survey cited above shows, despite the decline in sales on marketplaces due to the pandemic in terms of value, most sellers did not opt to reduce their activity on the e-commerce market.

Selling via marketplaces forces sellers to expand their marketing and logistics efforts, but there is a widespread belief among respondents that companies cannot afford to be absent from them now. In terms of the entry barriers to sales platforms, some of them, such as high fees, affect both sellers and customers. Others, such as strong competition from other sellers, including ones in other countries, and the ability to compare the prices of goods from a variety of sellers, work to the benefit of buyers.

Our analysis of the data from the survey above points to the need to analyse the e-commerce market not only from customers' perspective, but also from the perspective of the companies selling their products via various sales channels.





4

Conditions:

What will affect the development of e-commerce in Poland



Introduction

The development of e-commerce in Poland is constantly evolving and affects our everyday lives. The Internet has become an integral part of our reality, and new technologies and changes in the organisation of the market are influencing the transformation of both e-commerce platforms and the entire value chain in this sector, including deliveries, payment methods and customer experience. This dynamic market adapts to consumers' changing needs and preferences, which are shaped by factors related to the close market environment in the e-commerce sector, but also to broader political, regulatory, economic and social conditions.

This includes the introduction of the Single VAT ID, which could result in the rapid development of the EU internal e-market; a major opportunity for companies, including Polish ones. Support programmes may prove equally important, including regional operational programmes that support companies' digitisation and investment in e-commerce as a way to scale regional businesses.

As Campisi et al. (2023) note, based on a broad review of the literature on the e-commerce market, the systematic growth of e-commerce can currently be observed in every product category, with the food and clothing sectors considered the most promising. This is primarily due to the availability of numerous delivery services and online shopping apps. At the same time, changes are taking place in logistics, and new shopping habits affect not only sales volumes, but also delivery times and methods. Deliveries are becoming more decentralised and consumers expect flexibility in choosing delivery dates and locations. The demands of customers – who want punctuality, delivery to a specific floor, or during specific hours – are also growing. This is a challenge for delivery companies. The digital transition and modern technologies mean that digitising processes and shortening implementation times has become a priority and also affects logistics and payment processes. Technological innovations include the development of the e-grocery market and the use of electric vehicles in deliveries. Sustainable development and environmentally-friendly deliveries are a separate trend that e-commerce market participants are increasingly paying attention to. Electric delivery vehicles are becoming steadily more popular, and sustainability is increasingly being discussed in the context of e-commerce.

According to a report by the Chamber of Electronic Commerce (IGE, 2023) focusing on trends in Polish e-commerce, the further rapid growth of the online commerce market, including an increase in the number of offers available and consumers' growing openness to online shopping, is the most likely scenario. It also notes the continuing impact of the pandemic, as well as the war in Ukraine. It points to problems with deliveries, the availability of raw materials, and inflation, which pose significant challenges for the e-commerce sector. The growth forecasts for the Polish e-commerce market quoted by IGE show that it could be worth PLN 94 billion in 2027. Promising product categories include fashion, electronics, health and beauty. The development of new technologies, including artificial intelligence and related

tools, such as chatbots or recommendations, could have a vital impact on customer experience and help reach new groups. This means that the development of this technology is becoming very important for the market. The report also mentions an increase in the importance of the silver economy, which involves increasing the share of older people in the e-commerce market. Senior citizens are increasingly willing to shop online, which creates new opportunities for the sector. The increase in the number of e-consumers will also have a positive impact

on the e-commerce market. In Poland, it is expected to increase by 3.4 million by 2027.

The growth forecasts for the Polish e-commerce market show that it could be worth PLN 94 billion in 2027.

In this context, to understand what will influence the future of e-commerce in Poland now and in the future, we must consider the external factors that affect the sector. We use two analytical tools, including Porter's Five Forces model and PEST/PESTEL analysis. The former improves our understanding of the trends in the close market environment in the e-commerce sector, including those relating to competitors, suppliers, customers, and so on. The latter offers a broader understanding of the impact of trends relating to political, economic, social, technological, environmental and legal factors on the e-commerce market. This interdisciplinary analysis allows us to delve deeper into the context of the business environment and better understand how regulations, consumer trends, technological innovations and economic changes will affect the future of e-commerce in Poland.



The close market environment

Porter's Five Forces model is an important tool for assessing the attractiveness of the e-commerce market in Poland. This report presents a preliminary analysis of these forces in this market, focusing on competition, the bargaining power of suppliers and customers, as well as threats from substitute products and new players. E-commerce is developing rapidly in Poland and it is crucial that entrepreneurs and investors operating in this sector understand the factors that shape competitiveness. **Infographic 1** summarises the main themes in the analysis. Each of the themes is discussed below.

INFOGRAPHIC 1. DIRECT MARKET ENVIRONMENT OF THE E-COMMERCE SECTOR IN POLAND



COMPETITION

- » **High, but varying competitive pressures**
 - » Selling products and services using e-commerce
 - » Providers of services and solutions for e-commerce
 - » Processes of consolidation and vertical integration
-



SUPPLIERS

- » **Diversified negotiating power**
 - » Impact of processes of consolidation and vertical integration
 - » High significance of market differentiation and segmentation
-



CUSTOMERS

- » **High bargaining position encapsulated by new regulations**
 - » Different perspectives of large, medium and small companies
 - » The importance of new regulations
-



SUBSTITUTES

- » **High importance of new developments and technologies**
 - » Specific in industry and product segments, as well as in relation to different services and e-commerce solutions
-



NEW PLAYERS

- » **Low barriers to entry stimulate the emergence of new players**
 - » Particularly big opportunities for new players with innovative business models
 - » The consolidation and integration of the sector is a way to protect existing players' position
 - » Innovation and following technological and market trends strengthens existing players' position
-

SOURCE: PREPARED BY THE AUTHORS.



Competition in e-commerce

The e-commerce sector in Poland is one of the most dynamic in Europe. It includes enterprises that use e-commerce as a sales channel for their goods or services, as well as ones that provide e-commerce services and solutions.

As noted in the first chapter, companies selling online can be divided into many product and industry segments. Between these, the intensity of competition varies, as do companies' competitive strategies — from price competition, through diversification strategy (products, distribution and customer experience), to unique niches. For companies selling goods and services online, the entry barriers to the e-commerce market are relatively low, but the competition is quite intense.

In recent years, we have been seeing intense competition, but also consolidation, among providers of services and solutions for the e-commerce sector.

Competition between e-commerce service providers is also relatively strong, but the entry barriers are higher and depend on the specifics of the e-commerce service providers' segment. Key categories of e-commerce service providers include e-commerce platforms, hosting services, logistics and delivery services, payment gateways, customer service solutions, online marketing and advertising, analysis services and tools for conversion optimisation, and cybersecurity.

In recent years, we have been seeing intense competition, but also consolidation, among providers of services and solutions for the e-commerce sector. Vertical integration and competition have also been intensifying; for example, e-commerce platforms are developing their own distribution channels and payment systems. In addition, smaller, local online stores are competing with global giants. This environment favours innovation, but leads to constant price pressure. Despite the low entry barriers, which encourage new entities to start e-commerce operations, consolidation in the service provider sector could change this dynamic. On the one hand, suppliers with greater bargaining power can offer more advanced and integrated solutions. On the other hand, too much consolidation could reduce competition among suppliers, which may ultimately affect the costs and quality of the services offered to online shops (Bartodziej, 2023a).

Consumers benefit from the competitive e-commerce market. Competitive pressure leads to price reductions, promotions and new products that make online shopping more attractive. It also increases the importance of innovation as a factor that enables companies to maintain their competitive advantage. This may involve new sales channels, new business models or investments in innovation and data protection. However, if the consolidation of service providers leads to the creation of monopolies, this may ultimately reduce choice and increase prices for consumers, as well as limit innovation.

To sum up, the e-commerce market in Poland is dynamic and full of innovation, but it faces challenges linked to consolidation among service providers. With large platforms like

Amazon or Allegro competing against smaller shops and global giants, competition leads to constant price reductions and new products. However, service providers' growing bargaining power as a result of consolidation could affect the cost and quality of the services offered to online shops. In this context, striking a balance that benefits both consumers and businesses in the sector is key.



Suppliers' negotiating power

In e-commerce, the impact on suppliers' negotiating power is complex and depends on many factors. One of the key elements is the availability of many suppliers on the market. When many companies offer similar products or services, e-commerce companies have the opportunity to choose between multiple sources of supply. This increases competition between suppliers and can lead to more favourable negotiating terms for e-commerce companies. However, if a supplier offers unique products or services, it may have a significant advantage, and e-commerce companies that depend on these kinds of suppliers may be more susceptible to changes in supply conditions, which will affect their margins.

An important factor influencing suppliers' negotiating power is the scale of orders. Companies that order large quantities of goods or services often have more negotiating power. Suppliers typically want to maintain relationships with more profitable customers, which can result in better delivery terms for larger e-commerce players. The integration of value chains in the e-commerce market makes it possible to increase control over the supply process and reduce costs. Viewed as a whole, the e-commerce market has many links. Consolidation and integration will both strengthen and weaken the position of suppliers, depending on which market segment these processes concern.

To sum up, it should be noted that suppliers' negotiating position on the e-commerce market varies and depends on the segment being analysed. The processes of consolidation and integration observed on the e-commerce market will have a variety of impacts on this position, depending on which element of the value chain is being analysed.



Customers' negotiating power

Customers play an increasingly active role on the e-commerce market in Poland, which is changing the relationship dynamics between consumers and companies. What was once a one-sided purchase transaction is now becoming an interactive process in which the customer has more and more control. This shift partly results from the fact that consumers have easier access to a wider range of entrepreneurs, making it easier for them to compare products being sold online. Access to a wide range of online shopping options, as well as the ability to compare prices and reviews, give customers significant negotiating power. They are no longer limited to local or brick-and-mortar shops. With the Internet, they can easily browse products and services offered by both domestic and international companies. Shopping

experience also influences customers' negotiating power. They expect not only access to products, but also high-quality service and satisfying interactions with e-commerce companies. Good shopping experiences are becoming a key element in building customer loyalty. In contrast, negative opinions and reviews can damage a company's reputation significantly. Customers who have bad experiences might not only refrain from making further purchases, but also share their negative opinion, which could put off potential customers in the future. E-commerce companies must therefore look after the quality of customer service, on-time deliveries and product quality, and solve customers' problems in an effective and friendly way (PTWP - Dlahandlu.pl, 2023; Wiadomości Handlowe, 2023b).

This situation means that companies selling goods and services online must compete on prices and quality and look after customers' shopping experience to attract and retain them. For this reason, sellers' expectations towards providers of e-commerce services and solutions are rising. As mentioned in the first chapter, large companies opt for e-commerce solutions much more often than SMEs; their position in negotiations with providers of e-commerce services relatively strong. Meanwhile, SMEs are more likely to choose standard solutions offered by service providers.

Consumer rights, including those introduced by the Omnibus Directive, have also a significant impact on customers' negotiating position on the e-commerce market¹. They include the right to withdraw from the contract, which affects the returns and complaints processes in e-commerce. Customers can return products and request a refund in certain cases. This forces companies to provide flexible and understandable return procedures and respond quickly to complaints. They must also ensure that the services they offer are performed at the highest possible level. Ignoring legal regulations can have a negative impact on a company's reputation and force it to resolve legal disputes, which can be costly. These regulations force service providers to adapt the of services and solutions they offer (for example, by automating their return process, and so on).



The threat of substitution

In today's e-commerce world, new solutions are constantly being created. Often, these improve old systems, but they also introduce innovations that competitors might not be ready for – replacement products or services. On the e-commerce market, a particularly large number of substitute products and services concern new solutions, such as voice shopping, augmented reality or personalised recommendations, which are changing how we shop online. For e-commerce companies, they are both a challenge and an opportunity (PTWP – Dlahandlu.pl, 2023).

Replacement products offer customers new, convenient ways to shop. This means that e-commerce companies must compete for customers' attention by offering unique benefits and personalised solutions. Competition for customers is becoming increasingly fierce. This means that e-commerce companies must be flexible and ready to adapt to new technologies and

¹ Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules.

customer preferences. In this context, it is also worth noting the growing influence of social commerce, both in Poland and throughout Europe; an additional challenge for existing players on the e-commerce market. Social media platforms, where it is becoming more and more convenient for consumers to buy products, are becoming a substitute for traditional online shops. Only companies that take on the challenge will be able to survive in the competitive e-commerce market.

Moreover, the challenge of dealing with substitute products and services in each product or industry segment of e-commerce will differ and depend on the specificity of a given market. Similar substitute solutions may appear in the segments of e-commerce services and solutions; for example, various forms of payment.



The threat of new entries

Due to relatively low entry barriers, the e-commerce market in Poland is susceptible to the emergence of new competitors. This includes both companies using e-commerce to sell their own products or services and providers of e-commerce services and solutions. The easy access means that the e-commerce market in Poland is open to potential new competitive companies, especially ones with innovative business models. The emergence of new players could increase competition and encourage existing companies to modify their strategies. The arrival of new Internet platforms operating abroad on the Polish market is also a considerable threat. The vertical integration mentioned earlier is also way for new players to enter various segments of the e-commerce market.

Companies in Poland that wish to maintain or strengthen their competitive position on the e-commerce market need to adapt to this changing reality. Investing in social commerce strategies is increasingly crucial, as is the development of omnichannel strategies, or consolidation and integration. In this noisy environment, companies need to stand out and grab consumers' attention. In addition to building brand awareness, they should focus on commercial solutions that will enable them to sell directly via social media (PTWP - Dlahandlu. pl, 2023; Commercial News, 2023b).



The broad market environment

There is a whole range of external factors that influence the formation and development of the e-commerce sector in Poland. The second, alongside the close market environment analysed above, is the broad market environment, which includes political, economic, social, technological, ecological and legal factors. Our analysis of them using the PEST/PESTEL approach offers an understanding of the challenges and opportunities faced by the e-commerce sector in Poland. The factors summarised in **Infographic 2** are discussed in further detail below.

INFOGRAPHIC 2. BROAD MARKET ENVIRONMENT FOR THE E-COMMERCE SECTOR IN POLAND



POLITICAL AND REGULATORY FACTORS

- » Changes in the law - Single VAT ID registration
- » Changes in the law - implementation of the Omnibus Directive
- » Digitalisation support programmes: FENG, FENC, regional programmes
- » EU strategies - Digital Compass
- » The impact of the war in Ukraine



ECONOMIC CHALLENGES

- » High inflation and its effects
- » Slowdown in economic growth
- » Growth opportunities
- » Variability and competition on the e-commerce market



SOCIAL AND ENVIRONMENTAL FACTORS

- » Changes in shopping habits
- » E-commerce and social media
- » Changes in shopping habits among various generations
- » Personalisation, flexibility and integration
- » Sustainable development and ESG



TECHNOLOGICAL FACTORS

- » Importance of technological innovation
- » Artificial intelligence in e-commerce
- » Improvement in logistics
- » Omnichannel development

SOURCE: PREPARED BY THE AUTHORS.



Political and regulatory factors

Key elements of the political and regulatory environment that currently influence — and will continue to influence — the development of the e-commerce sector in Poland include regulations and policies linked to the digitisation of the economy, including regulatory changes resulting from the changes being discussed regarding the Single VAT ID, the implementation of the Omnibus directive, the implementation of policy supporting digitisation in Poland, including the FENG², FERC³, programmes, regional operational programmes that partly concern digitisation, and the implementation of the EU Digital Compass programme⁴. An important ongoing, separate factor influencing the development of the e-commerce sector on a macropolitical scale is the war in Ukraine, which is having a multidimensional impact — on retail, the labour market, supply chains and the macroeconomic situation.

Cross-border online retail in the EU is currently weighed down by a complicated VAT settlement system between member states, which significantly hampers intra-EU trade. The European Commission has presented proposals for changes in the VAT regulations that introduce a Single VAT ID; companies will no longer have to register multiple times in member states when storing stocks or selling products there. It will enable businesses to report VAT transactions along the entire EU supply chain via one central portal; they will no longer need multiple VAT registrations in individual member states. This change will make cross-border operations significantly easier, especially for SMEs, and reduce complicated and costly obligations linked to doing business in different jurisdictions. According to KIG (2023), the proposed VAT 2.0 one-stop shop will enable all tax liabilities to be reported via a single digital portal, which is meant to streamline companies' operations, but also improve compliance with tax regulations within the EU. These changes could boost turnover in intra-EU online trade.

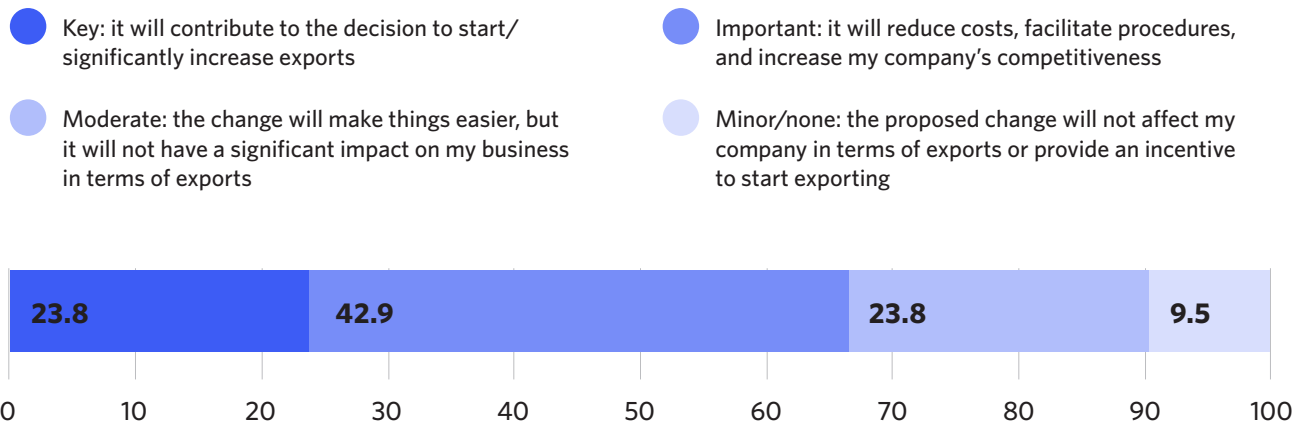
The importance of the proposed solutions regarding the Single VAT ID for e-commerce enterprises was also confirmed by the research conducted for the purposes of this study. It shows that, for over 65% of respondents, the introduction of a uniform VAT registration system is key or important for entrepreneurs. Of these, 23.8% of respondents said that the new regulations will help make decisions about exporting or increasing exports, and 42.9% said that the new regulations will reduce costs, simplify procedures and increase companies' competitiveness. Just 9.5% of respondents said that the new regulations' impact will be small or non-existent, and 23.8% that it will be moderate.

² The European Funds for a Modern Economy (MFIPR, 2023a).

³ The European Funds for Digital Development (MFIPR, 2023b).

⁴ The Digital Compass for 2030: the European way for the Digital Decade (European Commission, 2021)

CHART 18. DISTRIBUTION OF ANSWERS TO THE QUESTION: WHAT IMPACT WILL THE INTRODUCTION OF THE SINGLE VAT ID HAVE ON COMPANIES IN E-COMMERCE (%)



SOURCE: PREPARED BY THE AUTHORS.

The Omnibus Directive was implemented in Poland at the beginning of 2023 by amending laws including the Consumer Rights Act and the Civil Code. The resulting changes were widely described in the press and in the literature. It is worth mentioning a number of new regulations in the field of consumer protection and e-commerce. The key changes concern the ban on false promotions, the need to inform customers about price history, the requirement to ensure that customer reviews are real, the standardisation of products sold under the same brand, and the introduction of penalties for violating the regulations. As a result, entrepreneurs are obliged to inform consumers about the product's lowest price in at least the past 30 days. This is meant to prevent consumers from being misled, enable them to make informed choices, and help them assess whether a price reduction actually benefits them. Reviews must come from real consumers and negative ones cannot be blocked. Products sold by a given brand cannot differ significantly between EU countries, unless this is justified by, say, the seasonality of ingredients. Failure to comply with the regulations on informing consumers about a product's price history during a promotion may result in the company being fined by the trade inspection. Violating these regulations three times within twelve months may result in higher fines. On the one hand, the changes introduced by the implementation of the Omnibus Directive increase consumer protection, prevent unfair commercial practices, and further harmonise the market in the EU. On the other hand, they could contribute to the growth of the e-commerce market by increasing customer confidence in this form of retail.

The European Funds for a Modern Economy 2021-2027 programme offers support in the areas of R&D and digitisation, which favours innovation in e-commerce. The funding enables new technologies to be implemented at online shops, improving how they function. At the same time, the emphasis on making enterprises more environmentally friendly promotes ecological strategies in e-commerce logistics, responding to consumers' expectations. Meanwhile, the European Funds for Digital Development 2021-2027 programme focuses on building a gigabit society in Poland and developing advanced e-services. Key aspects for e-commerce are ensuring cybersecurity and the development of high-quality open data. The beneficiaries include telecommunications entrepreneurs and the public administration. Regional operational programmes (RPO) also play an important role, especially in terms of the development of companies in the regions. It is therefore worth thinking about how these programmes can

be used to support the e-commerce sector's development to these companies' benefit. This is particularly important in the context of the development of the B2B and B2C e-commerce segments, as well as growing opportunities to enter foreign markets as cross-border online trade becomes easier. Moreover, by allocating funds for investment in infrastructure, education and innovation, these programmes offer businesses support relating to digitisation, enabling them to operate more effectively and competitively on the online market. Support from RPOs also enables e-commerce companies to invest in new technologies, train staff in digital skills, and develop effective marketing and logistics strategies.

The Digital Compass for 2030: the European way for the Digital Decade is a 2021 strategic initiative by the European Commission setting out the EU's digital ambitions for the next ten years. Key aspects that will impact e-commerce in Poland include increasing investment in digital infrastructure, promoting digital skills among citizens, establishing digital standards, increasing cybersecurity, supporting technological innovation, introducing new regulations on data flow, and promoting the green transition in the digital sector. Polish e-commerce companies face opportunities in connection with these initiatives, but also challenges: they must adapt to new regulations, invest in new technologies, and take care of security and sustainable development.

The war in Ukraine has had a huge impact on the e-commerce market in Poland. After the Russian invasion, many Ukrainians sought refuge in Poland, which has had significant consequences for the labour market, especially in the e-commerce logistics segment, where it has increased the availability of employees. It also became necessary to adapt the products and services being sold to a new group of customers, the Ukrainians coming to Poland. Initially, the war caused a short-term slowdown in retail due to interrupted supply chains, sanctions and uncertainty linked to the events beyond Poland's eastern border. However, the situation stabilised and the arrival of the large number of refugees from Ukraine to Poland increased demand for food, pharmaceuticals and cosmetics, including those available online. As a result, despite the difficulties linked to the war, the e-commerce market in Poland has continued to grow and the forecasts are moderately optimistic. However, it is important to note the risk of war, including in the B2B segment. This segment is developing rapidly, but the war could affect raw material availability and logistics, resulting in a decline in sales, including online.



Economic factors

The broad economic environment is also having a significant impact on the development of the e-commerce sector in Poland. In recent years, the sector has gone through many changes, shaped by many years of almost continuous growth in GDP and consumption. To understand the depth of these changes and their impact on the sector's future, it is worth considering the key economic factors that determine the development of e-commerce in Poland. We identified the following: the high inflation and its effects, the slowdown in economic growth, variability and competition in the e-commerce market, and the moderately optimistic growth forecasts.

The high inflation in Poland in 2022 pushed up the nominal value of the e-commerce market. Concerned about rising prices at brick-and-mortar shops, consumers increasingly sought better deals online. However, inflation has also had downsides for entrepreneurs: the 40-60% increase in the prices of raw materials and energy has had an adverse effect on market participants, including the furniture industry (Wiadomości Handlowe, 2022a). Moreover, high inflation has had a negative impact on the operating costs of e-stores, especially in terms of the cost of deliveries and the purchase of goods (Bartodziej, 2023b). In this context, it is also worth taking into account the deferred payments market. Although buy-now-pay-later (BNPL) has brought online shops benefits, rising interest rates, which are part of the response to inflation, could reduce the profitability of companies that offer deferred payments (Duszczuk, 2023).

While Poland is one of the leaders in e-commerce in Europe in terms of growth, a slowdown is taking place in this market and in the economy as a whole. Nevertheless, the e-commerce market in Poland still remains an attractive area for companies that can adapt to the changing conditions. The slowdown in the domestic market is stimulating the growth of the cross-border e-commerce market, a potential way to develop because companies that sell abroad grow more rapidly than their competitors that only operate in Poland. Moreover, despite the slowdown, there are still opportunities for development, especially for companies focused on selling their products directly, which require exceptional personalisation and quality (Bartodziej, 2023b).

While Poland is one of the leaders in e-commerce in Europe in terms of growth, a slowdown is taking place in this market and in the economy as a whole.

The growth opportunities of both the sector and the economy as a whole are important for the e-commerce market's development. According to OECD estimates (2023), real GDP growth will slow down to 0.9% in 2023 due to high uncertainty, high inflation and restrictive monetary policy, which will reduce demand. At the same time, according to the forecast for 2024, Poland's GDP is expected to grow by 2.1%, mainly thanks to the EU funds for reconstruction and resilience, although delays in their payment could affect the pace of growth. Inflation, which peaked in early 2023, is likely to remain high and above

the target until the end of 2024 due to domestic inflationary pressures related to dynamic labour markets and fiscal spending. The fall in demand can also be seen in Statistics Poland (2023a) data, which points to a decline in retail sales in August 2023. Despite this slowdown, the forecasts for the e-commerce sector itself are moderately optimistic, especially in the long term. They still suggest that the outlook for e-commerce in Poland is positive. Categories such as fashion, electronics and health are particularly promising, and growth in them has the potential to drive the market's overall value (PwC, 2022).

Variability and competition constitute significant challenges in the e-commerce environment in Poland. The rapid development of technology, changing consumer preferences, and seasonal trends mean that companies must be flexible and adapt to changing conditions (Wiadomości Handlowe, 2022b). In addition, the increasingly fierce competition on the market — from both domestic and international e-commerce platforms — focuses on prices and promotions, which could reduce margins. Companies competing in this sector must invest in marketing, technology and logistics to maintain their position in the market, but also offer value through additional services and customer service. However, competition

benefits consumers, offering them a greater choice of products and services – and, potentially, lower prices. For companies, adapting quickly to changing conditions and responding flexibly to customers' needs will be key.



Social and environmental factors

The COVID-19 pandemic had a fundamental impact on e-commerce in Poland. The sector's development gained enormous momentum as a result of the acceleration of the online shopping trend due to the need for social distancing and avoiding contact with others. Customers gained greater confidence in online shopping, which was reflected in the e-commerce market's rapid development in Poland. However, the heightened interest in online shopping has also raised customers' expectations. They have become increasingly demanding, especially in terms of delivery speed, the quality of customer service, and payment systems' flexibility. This is forcing e-commerce companies to constantly adapt and innovate to meet growing expectations (Bartodziej, 2023b).

Retail via social media platforms such as Instagram or Facebook has become an integral part of modern shopping culture. Social media is playing a key role in the development of e-commerce in Poland and Europe more generally. In 2022, the value of the social commerce sector in Poland reached PLN 12.25 billion and 46% of Poles had made a purchase via social media in the past six months. Social media not only fosters sales, but also promotes new products and builds brand awareness. Brand posts have a stronger influence on purchasing choices than influencers (Wiadomości Handlowe, 2023b).

The increase in online shopping triggered by the pandemic is affecting the shopping habits of different generations. The younger generations are naturally more inclined towards e-commerce, which translates into increased demand for the products and services available in this sector. However, this does not mean that older generations are not shopping online. The pandemic also prompted some older people to experiment with online shopping, which increased e-commerce's overall share in the market (Wiadomości Handlowe, 2022b, 2023a; IGE, 2023).

Personalisation, flexibility and integration are the key determinants of the development of the e-commerce sector in Poland. Customers increasingly expect personalised offers, flexible delivery options and consistent shopping experiences across all retail channels. Introducing these elements is a challenge for e-commerce companies in Poland, but it is necessary in the context of consumers' rising expectations. Adapting to these trends can offer companies benefits, in the form of building customer loyalty and helping them remain competitive. Providing personalised offers and flexible delivery options while ensuring that customers have a consistent shopping experience, whichever channel they choose, can increase conversions and profits, too (ISBnews, 2022; PTWP - Dlahandlu.pl, 2023).

Sustainable development and ESG-related principles are playing an increasingly important role in the e-commerce sector, especially in the context of reducing energy consumption. E-commerce companies are increasingly investing in green solutions, such as warehouses powered by renewable energy or optimised delivery routes, to reduce the negative impact on the environment. At the same time, they are focusing on social issues, such as improving working conditions and protecting customer data, which help build customer trust and companies' long-term success in the e-commerce sector. This focus on sustainability not only benefits the environment, but also supports the sector's long-term development by fostering customer trust and helping companies build a positive image (IGE, 2023).



Technological factors

E-commerce is constantly evolving and innovative technological solutions are key to success in a competitive market. Companies must adapt to market needs by introducing new technologies. One example is the social commerce trend, which uses social media as a new sales channel. Companies must adapt their strategies to this type of innovation to remain competitive. The introduction of modern analytical tools and recommendation systems is also becoming an integral part of e-commerce strategies, which helps companies understand and serve customers, and increase conversions (Bartodziej, 2023b; PTWP – Dlahandlu.pl, 2023).

Artificial intelligence (AI) is playing a key role in e-commerce, revolutionising how online shops conduct their operations. One of the main ways is personalisation: AI analyses data on customers' purchases and behaviour, which enables the company to offer them personalised product and content recommendations. In addition, AI can be used to forecast market trends, which allows shops to adapt their range of products to customers' changing preferences.

Processes such as customer service or warehouse management can be automated more effectively using AI. Investments in AI are crucial for the development of the e-commerce sector because they enable companies to increase their competitiveness and streamline operations (PTWP - Dlahandlu.pl, 2023).

AI analyses data on customers' purchases and behaviour, which enables the company to offer them personalised product and content recommendations.

In e-commerce, perfecting what a company can offer encompasses many aspects that improve customers' shopping experience. Free and increasingly rapid delivery

is becoming standard, and technological progress in logistics is enabling online stores to meet customers' growing expectations. The increase in the number and location of parcel collection points and parcel machines provides customers with convenient options for collecting the products they order. The role of investing in environmentally-friendly technologies is growing, too. This is not only important in terms of customer satisfaction, but also for e-commerce companies' reputation (Wiadomości Handlowe, 2022b; IGE, 2023).

Developing an omnichannel strategy is becoming an integral part of e-commerce operations. It integrates sales channels, both online and offline, to create a consistent shopping experience. Technology plays a key role here, enabling companies to personalise the products they offer customers, understand their behaviour using analytical tools and AI, and automate processes, including customer service. The goal is to provide customers with personalised product recommendations and consistent experiences across platforms. The integration of logistics infrastructure enables products to be distributed more efficiently, while advanced marketing technologies and analytical tools improve customer service (ISBnews, 2022).





5 Summary:

Opportunities and challenges for the development of e-commerce in Poland

Infographic 3 outlines the main opportunities and challenges accompanying the evolution of e-commerce in Poland. The opportunities section highlights seven fundamental areas that could contribute to the sector's further expansion significantly. The challenges section lists six key challenges that companies face. How companies respond to them will determine their success in the rapidly changing world of e-commerce.

In terms of the sector's development opportunities, e-commerce in Poland is currently experiencing sustainable growth, which, despite the slowdown after the pandemic, is still being powered by modern technologies and consumers' adaptive shopping habits. Confidence in online retail is growing; as a result, more and more Poles are treating e-commerce as their main shopping channel. This is linked to convenience, the variety of products, and the ability to compare prices. This trust is driving companies to invest in improving customer service and delivery. New forms of online sales, such as social commerce, are developing and technological innovations are emerging. Social media is becoming not only a place of communication, but also a shopping platform. Through integration with e-commerce mechanisms, sellers can reach younger generations in their natural environment. Shopping experiences are also being integrated. More and more companies are combining online and offline shopping experiences, creating a consistent shopping experience for customers, regardless of whether they purchase an item at a brick-and-mortar shop or via an app. Digitisation, supported by regulations and policy initiatives, is also fostering the sector's development. Government programmes that support digitisation could prove beneficial for e-commerce in Poland, especially in the area of innovation and access to new technologies. Regulatory factors also matter. For example, the abolition of tax and administrative barriers could accelerate cross-border retail in the EU and open new markets for Polish entrepreneurs. As a result, cross-border e-commerce could increase.

The development of the e-commerce sector in Poland faces numerous challenges, which largely result from it. High competitive pressure forces companies to constantly innovate to offer more attractive products, services and promotions in the face of the growing number of competitors. Adapting to new technologies is a challenge because evolving online shopping standards are forcing businesses to constantly invest in technology. Innovation and new technologies could also lead to the emergence of new, more competitive business models, which will create further challenges for less competitive companies. Changing legal regulations

and political decisions, which may impose additional requirements and costs on the sector, could create further challenges. However, many of the new regulations are having a positive impact on the sector's development, which is why this factor is also listed in the opportunities section. Geopolitical instability in the region is having an impact on supply, costs and product availability, forcing companies to be more flexible. At the same time, fluctuations in the economic climate are affecting consumers' ability to spend and entrepreneurs' operating costs. All this is happening in the context of growing expectations among consumers, who are more aware in the digital era and expect transparency, rapid delivery, high-quality service and competitive prices.

INFOGRAPHIC 3. OPPORTUNITIES AND CHALLENGES FOR THE DEVELOPMENT OF E-COMMERCE IN POLAND



OPPORTUNITIES

- » Longterm growth trends
- » Increased trust in online retail
- » Social commerce and technological innovation
- » Digitisation and political initiatives
- » Improvement in e-commerce regulations
- » Development of cross-border online retail
- » Integration of consumers' experience

CHALLENGES

- » High competitive pressure
- » Adaptation to new technologies
- » Legal regulations and political decisions
- » Geopolitical events
- » Economic climate
- » Consumers' high expectations



SOURCE: PREPARED BY THE AUTHORS.

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