

INNOVATION AS AN OPPORTUNITY TO INCREASE THE COMPETITIVENESS OF SMALL AND MEDIUM-SIZED ENTERPRISES IN POLAND PRESENTED ON THE EXAMPLE OF MAŁOPOLSKIE VOIVODSHIP

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Purpose: The aim of this paper is to examine the role of innovation as a factor influencing the growth of competitiveness of small and medium-sized enterprises (SMEs) in Poland, using the Małopolskie Voivodeship as a case study. The paper aims to analyse how innovation can be used to increase the competitiveness of SMEs and to identify factors determining the success of innovative activities in a regional context.

Methodology: A survey was used to investigate the level of innovation and competitiveness of small and medium-sized enterprises (SMEs) in Poland, with a particular focus on the Małopolskie Voivodeship. The research was conducted according to the following plan:

1. **questionnaire design:** a survey questionnaire was developed containing questions on innovation, development strategies, challenges and support in the context of SME competitiveness;
2. **selection of the research sample:** a representative sample of SMEs from the Małopolskie Voivodeship was selected, taking into account the diversity of industries and sizes of enterprises;
3. **conducting surveys:** survey questionnaires were sent out to selected companies by e-mail, as well as delivered in person or by post;
4. **data analysis:** the collected data were analysed using statistical tools, such as statistical analysis, to obtain results and conclusions;
5. **interpretation of results:** the results obtained were interpreted in the context of the research objectives, taking into account the specific nature of SMEs in the Małopolska region.

Findings: Between 2022 and 2023 key factors for improving competitiveness included the introduction of new products and services, reduction of tax and social security contributions, improvement of quality of and service and support from public institutions. Improving product quality was key to building a positive brand image and gaining customer loyalty. Support from public institutions, including subsidies, training and regulatory facilitation, had a significant impact on companies' ability to achieve their business goals. The research also showed that less than half of the surveyed enterprises used the services offered by support institutions, suggesting the need to intensify activities promoting the benefits of cooperation with these institutions and eliminating barriers to establishing such cooperation.

Keywords: innovation, competitiveness, small and medium-sized enterprises sector.

Category of the paper: Research paper.

Introduction

Dynamic changes taking place in the market, expressed in the change of customers' expectations, globalisation of markets, as well as Poland's integration with the European Union and rapid technical and technological progress, determine the need to develop and modify the directions of activity and development strategies of enterprises. The basic condition for the functioning and survival of enterprises on the global market is the ability to skilfully manage through the creation and effective implementation of innovations, which may be the result of competent use of information obtained through research and development activities. Competition between companies, sectors, regions and countries in a broad sense is considered to be a driving force for innovation.

In order to meet the demands of the market, companies must improve the efficiency of their operations and frequently introduce innovative product, organisational and technological solutions, as well as constantly look for new ways to differentiate themselves from the competition. One of the most important factors shaping a company's level of competitiveness is its innovativeness. Innovation is influenced by a company's human resource management and human capital. The implementation of innovation enables companies to achieve a competitive advantage in the market and is an important factor for their development.

Factors and determinants of business competitiveness

Competition as commonly understood is closely related to rivalry and competition between people, groups, but also organisations that want to achieve the same goal. Its intensity depends on many factors. The effect of competition is competitiveness, which shows how an enterprise will fight for the favour of potential customers. It can be said that the competitiveness of a company is the ability to strengthen the company and to compete with others.

Two approaches can be identified when defining business competitiveness. The first one pays attention to concepts such as profit, income generation, profit on sales, which are fundamental quantities in microeconomics and mesoeconomics. The second focuses attention on transnational aspects, analysing the doings of foreign markets. Much of this is characterised by universality, which is applicable at any level of competition (Szymanik, 2016).

Table 1.
Chosen definitions of competitiveness

Author	Definition
A.J. Abbas	The company's tendency to innovate and to be adaptable, which helps it gain a competitive advantage
J. Bossak, W. Bieńkowski	The competitiveness of a company is assessed by comparing its business profits with those of its competitors
W. Bieńkowski	Through acceptance of the company's products comes the ability to face competition
I. Dunbar, M. McDonald	Exploiting the prevailing market opportunities and the company's set of strengths increases competitiveness
S. Flejterski	A predisposition to design, sell and produce goods whose visual characteristics and prices and quality are more attractive than competing goods
W. Jakóbiak	Relative ability to push for intentions or values, but also own purpose
M. Lubiński	Ability to maintain and increase the company's market share and ability to grow sustainably in the long term
J. Maxwell	By improving human capital, more economic benefits are generated
P. Uri	Potential to generate more revenue
D. Orłowski	Ability to sell
A. Zorska	Competitiveness is the ability to exploit and create a competitive advantage over other domestic, but also foreign companies

Source: based on: Szymanik, pp. 110-111; Misala, 2011, pp. 64-68; Guzal-Dec, Zwolińska-Ligaj, 2006, p. 55; Kolterman, 2013, p. 46; *Konkurencyjność przedsiębiorstw...*, 2002, p. 73 i nast.; Flak, Głód, 2009, pp. 34-38.

Most often, the definition of competitiveness is geared towards the strongest competitors. However, in today's market it is possible to distinguish between facilities with high, medium and low competition, so it can be argued that the definition of competitiveness should take this into account. It should be defined by showing the characteristics and set of features of the object under study in relation to other objects operating in the market.

A company's competitive advantage is susceptible to a variety of risks, arising from both internal management inadequacies and inertia, and external changes in the environment, including the actions of competitors. Internal factors such as slow development and acquisition of core competencies, limited organisational learning, lack of flexibility in operations, business model inertia, suboptimal use of strategic resources, ineffective competitive strategy and underdeveloped skills in key phases are typical risks. External factors, on the other hand, include changes in customer preferences, value shifts, changes in key success factors, overcoming barriers of access, entry and imitation, as well as innovations and revolutionary changes in a sector or several sectors.

Innovativeness of the SME sector

Present understanding of innovativeness is strongly influenced by the views of J. Schumpeter formulated at the beginning of the twentieth century, who saw innovation in long-range changes and the views of P. Drucker, who puts the requirement for systematic innovation, which is based on an organised and purposeful search for change and continuous

analysis of opportunities for economic or social innovation, at the forefront. He breaks down the sources of innovation into two groups. The first group includes phenomena such as:

- unexpected failure or success,
- a discrepancy between reality and perceived reality,
- innovation resulting from the needs of the process,
- gradual development in the structure of the industry and the market.

The second group consists of sources that are influenced by changes in the organisational environment, resulting from changes in perceptions, moods and values and the state of knowledge as well as demographic changes. Over the years, interest in the economy has evolved (Zuzek, 2008).

Innovation arises through social, technical, legal, economic, organisational and cultural processes that can be shaped. Innovation is also a visionary change in the social system, as well as in the economic structure, and in technology or leadership (Marciniak, 1997).

In modern times, innovation is needed to improve competitiveness. The main essence of innovation is a company's ability and motivation to conduct research, develop new inventions and patents, which leads to an increase in the company's level and improvement in comparison with its competitors. A company's competitive position is closely linked to its level of innovation. It can be assumed that innovation is the most important factor enabling a company to compete successfully on the market. Innovation is very important not only at a company level, but also for regions or sectors of the economy or the country as a whole. In highly developed countries, it can be seen that adequate competition based on innovation and highly knowledge-based competition has contributed to the development of the economy (Kornecki, 2011).

Role of innovation in generating competitive advantage

Creating competitive advantage through innovative activities requires a comprehensive approach to corporate innovation, taking into account both external and internal factors in the management of innovation processes. It is important to achieve competitive advantage by considering the type of innovations introduced to the market - both revolutionary and evolutionary. Revolutionary innovations change the market by replacing current standards, products or technologies with new ones that offer completely new value to customers.

In order to compete effectively, companies need to respond flexibly to changing market conditions and innovate accordingly. In the area of organisational structure, innovations should focus on reducing information flow time and reacting quickly to current market and economic events. An important element of these changes is to invest in modern tools that enable rapid analysis of data from the environment.

The low level of innovation in the area of environmental protection can be attributed to a number of factors, such as the lack of promotion of environmental ideas, low public interest in the subject, lack of awareness of the long-term effects of environmental degradation, inappropriate state policy, lack of experience in this area and insufficient knowledge of alternative energy sources. Financing opportunities for SME enterprises, including their investments, are crucial for their ability to compete in an increasingly demanding market and for their long-term development (Zuzek, 2015).

It is crucial to treat innovation as a systemic process, where all elements are interrelated and a change in one area can affect the others. A lack of coordination between various functional areas of a company can lead to a loss of the benefits of the innovations being introduced, or even create crisis situations. When making decisions regarding the management of innovation, management must take into account many factors, both internal and external, that affect it. It is important to maintain synergies between innovation strategy and corporate development strategy. The innovation strategy should take into account the requirements of customers, the actions of competitors and the financial situation of the company, in order to ensure financial stability and the profitability of operations. It is worth noting that each company has a unique set of these factors, which evolves as the organisation grows. Therefore, it is important to continuously improve the innovation management system in order to build and maintain competitive advantage through innovation. In business practice, managers are often faced with the dilemma of choosing between achieving short-term profits and creating long-term goodwill (Mielcarek, 2016).

Results of the research

Rapid market changes, Poland's integration into the European Union and the increasing uncertainty and volatility of the business environment have made doing business increasingly challenging. Poland's accession to the EU has opened up new opportunities on foreign markets, but has also increased competition on the domestic level. In these complex conditions, small and medium-sized enterprises (SMEs) have to continuously improve their competitiveness, which depends on many different factors (Makarski, 2011).

A key aspect that determines survival in the market is the ability to make efficient use of available resources, the constant search for new or improved solutions and the ability to adapt to the changing environment and the requirements of the market economy. There are several important sources that constitute the foundation of sustainable competitive advantage, such as the price and quality of the products or services offered, the range of assortment, product diversity, brand reputation and image, as well as the degree of technological sophistication and innovation (Brodawska-Szewczuk, 2009).

In a rapidly changing market environment, entrepreneurs need to pay attention to a number of key factors affecting their competitiveness. Price (56.90%) plays a fundamental role in attracting customers, while the ability to adapt to customer expectations (52.90%) is essential to meet their needs and maintain loyalty. Effective advertising and marketing (45.10%) increase brand recognition, while innovation (34.30%) enables the introduction of new products and improvements that differentiate the company from its competitors. Availability of products and services (30.40%) and quality of production (27.50%) are key to customer satisfaction and return. Focusing on a specific group of customers (25.50%) allows the company to better understand and meet their specific needs. The education level of employees (23.50%) and the degree of mastery of technology (17.60%) have a direct impact on the company's ability to innovate and maintain high quality standards. Speed of delivery (15.70%) and efficiency of company management (15.70%) determine operational efficiency and the ability to respond quickly to market changes. The ability to raise capital (13.70%) enables the investment required for growth and expansion, while the tax regime in place (11.80%) and unit production and marketing costs (9.80%) affect the operating costs and profitability of the business. Together, these factors form a complex picture of the determinants of competitiveness that entrepreneurs must take into account in order to compete effectively in the market.

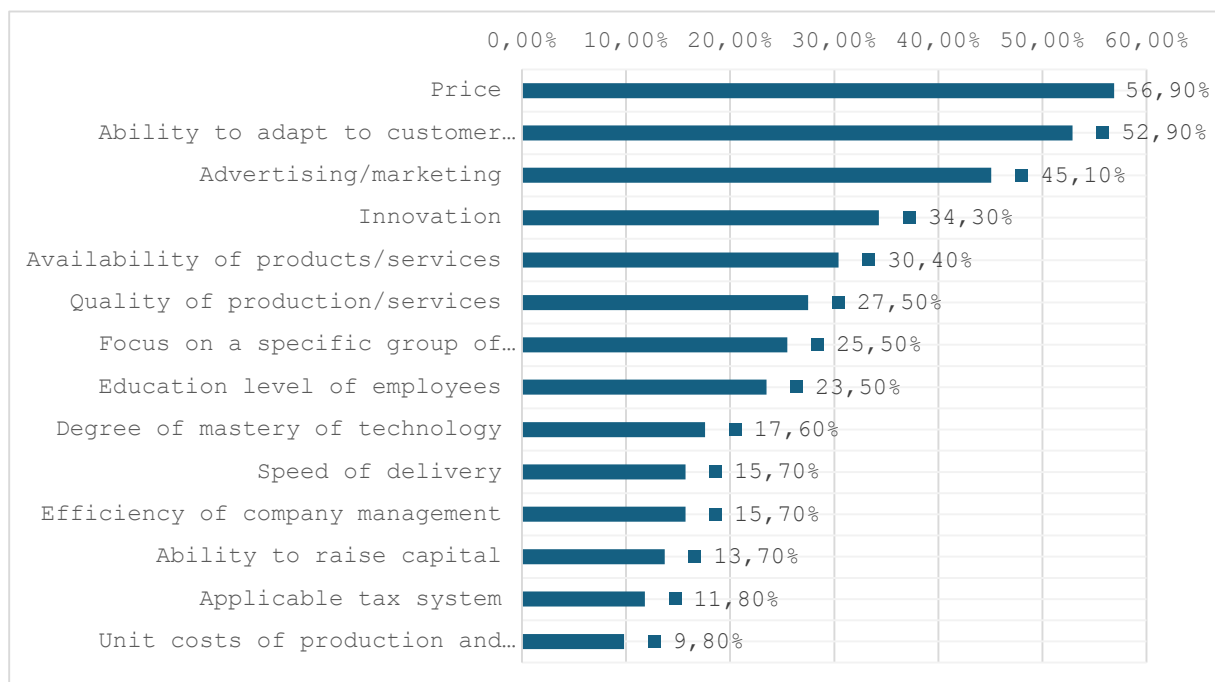


Figure 1. Determinants of competitiveness in the surveyed companies in 2023.

Source: own study.

Analysis of the results of the questionnaire survey indicates that the key factors for improving the competitiveness of enterprises were the introduction of new products/services, reduction of tax and social security contributions (22.60% on average), improvement of product/service quality (19.40% on average) and support from public institutions (19.60% on average). These factors received the highest ratings from respondents, suggesting their crucial

importance for companies' success in the market. Product and service innovation affects the ability of companies to attract new customers and retain existing ones. Reducing tax and social security contributions contributes to lower operating costs, which can increase the profitability and competitiveness of companies. Improving the quality of products/services is key to building a positive brand image and gaining customer loyalty. Support from public institutions can take a variety of forms, such as subsidies, training or regulatory facilitation, which can help companies achieve their business goals. In contrast, liberalisation of the labour code appears to be less important compared to the other factors, suggesting that flexibility in labour regulations may be important, but that other factors have a greater impact on business competitiveness. These findings may be relevant for policy makers and businesses, helping them to develop strategies to make the economy more competitive.

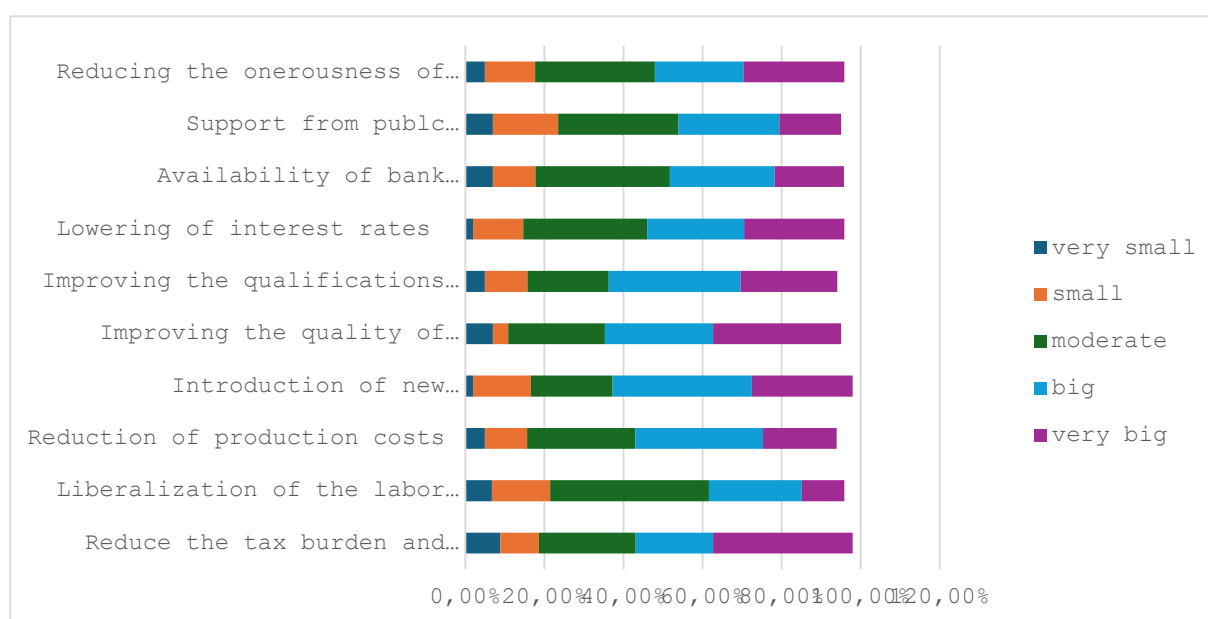


Figure 2. Assessment of factors influencing improvement of business competitiveness.

Source: own study.

On the basis of the conducted research, it was concluded that for small and medium-sized enterprises from the Małopolska Voivodeship, the key factors for success in building a competitive position are price and the ability to adapt to customer expectations, as well as effective advertising and marketing. In addition, the surveyed companies pointed to the reduction of tax burdens and social security contributions as a key factor in improving their competitiveness. These findings highlight the importance of adequate adaptation to customer needs and effective cost management for success in the market. Additionally, taking measures to improve brand image and increase market visibility can contribute to building a sustainable competitive position for the company.

A decisive factor in surviving in the market is the ability to effectively use available resources, the constant search for new or improved solutions as well as adaptation to the changing environment and the requirements of the market economy. There are numerous key sources that constitute the foundation of a sustainable competitive advantage, such as the price

and quality of the products or services offered by a company, the range of available offers, the diversity of products, the image and reputation of the company, as well as the level of technological advancement and innovative approaches (Michalski, Koszaliński, 2014).

The research shows that in 2023, companies were most likely to introduce a new or improved product or service, as 56.9% of companies declared. Market and marketing research to create new products or services also played an important role, which was used by 46.1% of companies. Changing or improving the existing organisational structure was practised by 45.1% of companies. In turn, 43.1% of companies applied new or improved delivery, production or logistics processes. New or significantly changed operating strategies were implemented by 42.2% of companies, and the same number of companies decided to use new, cheaper sources of supply. A significant change in marketing strategy was implemented by 40.2% of companies. These various forms of innovative activity allowed companies to better adapt to market needs and increase competitiveness. As a result, innovative approaches contributed to increased operational efficiency, cost optimisation and better resource management, which are key to maintaining a competitive advantage in a dynamically changing market.

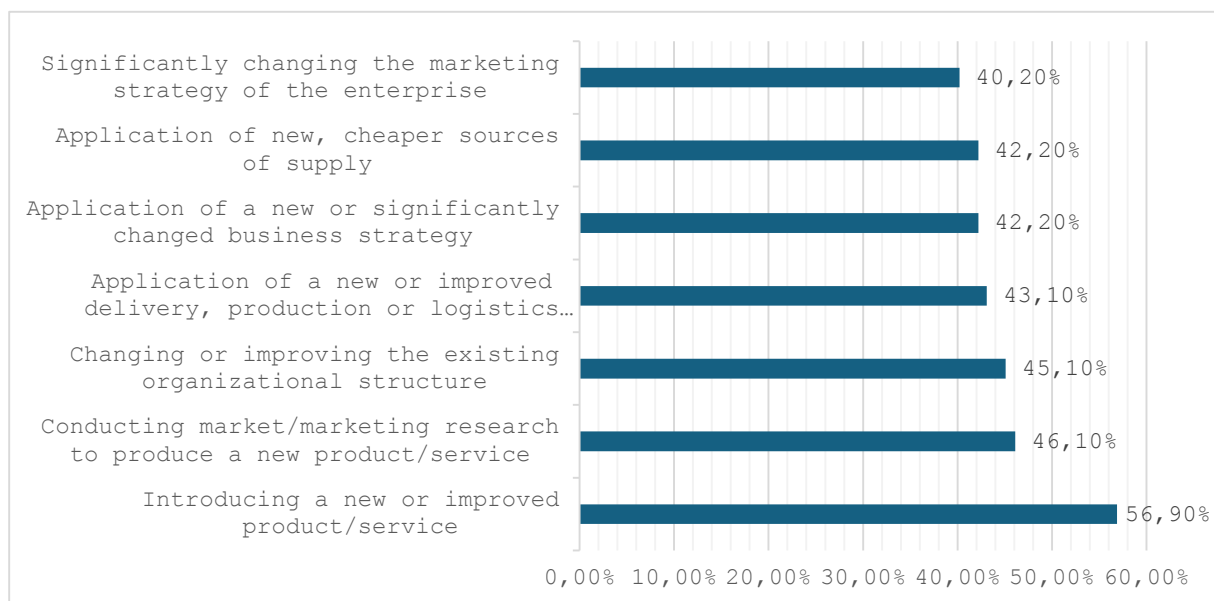


Figure 3. Examples of innovative activities applied in companies in 2023.

Source: own study.

The survey revealed that companies have achieved numerous positive effects through innovation activities in 2023. The most important of these was the improvement of production flexibility, which was declared by 29.3% of companies. This enabled companies to respond more quickly to changing market needs and manage their resources more efficiently. An increase in the number of products or services offered, reported by 26.8% of companies, demonstrates their ability to develop and differentiate their offer, allowing them to better meet customer needs and increase competitiveness. An increase in production capacity, reported by 13.4% of companies, enabled them to produce more products, which is key to scaling their

business and meeting growing demand. Participation in new markets or increased participation in existing markets, achieved by 12.2% of companies, indicates successful market expansion strategies, leading to an increased customer base and revenue. Reducing unit production costs, declared by 6.1% of companies, contributed to improved profitability and a better competitive position in the market. Implementation of regulations, norms or standards, as confirmed by 3.7% of companies, was indicative of attention to regulatory compliance and improved corporate image. Improvements in product or service quality, achieved by 2.4% of companies, indicated an increase in customer satisfaction and brand loyalty. Also, 2.4% of companies reduced or ceased environmentally harmful activities, indicating a growing commitment to sustainability and social responsibility. Finally, 1.2% of companies reduced material and energy intensity per unit of product, contributing to more efficient use of resources and reduced operating costs.

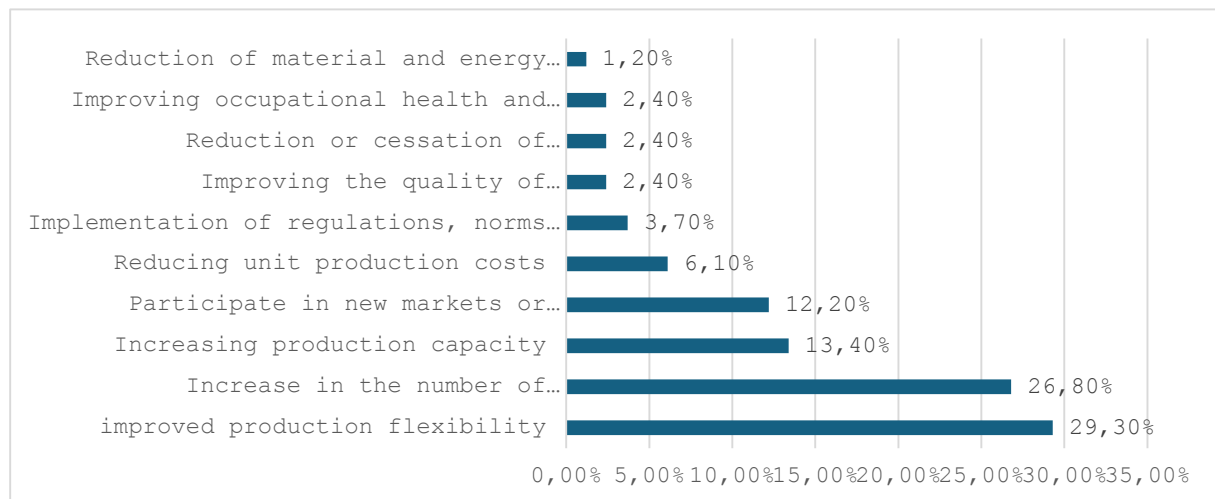


Figure 4. Effects of innovation activities of companies.

Source: own study.

The results of the research indicate that companies often innovate, focusing mainly on introducing new products/services, conducting market research and changes in organisational structure and production processes. These activities bring a variety of benefits, such as improved production flexibility, increased range of goods on offer, cost reductions and improved product/service quality. Innovation also promotes expansion into new markets and contributes to the implementation of norms and standards, as well as to improved working and environmental conditions. These results highlight the key role of innovation in building competitiveness and sustainability of businesses.

According to entrepreneurs, the main sources of innovation in the surveyed companies are diverse. First and foremost, customers (31.40%) are the key motivation for innovative solutions, as their needs and expectations are the main trigger for action. Competition (22.50%) also plays an important role, as awareness of companies' competitive activities motivates continuous improvement of products and services. Additionally, meetings and conferences (17.60%) are platforms for sharing experiences and gaining new knowledge, which stimulates the creation

of new ideas. Suppliers (10.80%) also have a place in the innovation process, as cooperation with them can lead to the introduction of new technologies or materials. Universities and research institutions (6.90%) are a valuable source of the latest scientific and technological developments. In addition, participation in fairs and exhibitions (4.90%) can lead to inspiration and new business contacts. Research and development units (3.90%) also contribute to the innovation process by providing new technologies and solutions. Cooperation with local government agencies and offices (2%) can be a source of funds for innovation, which further supports business development (Figure 5).

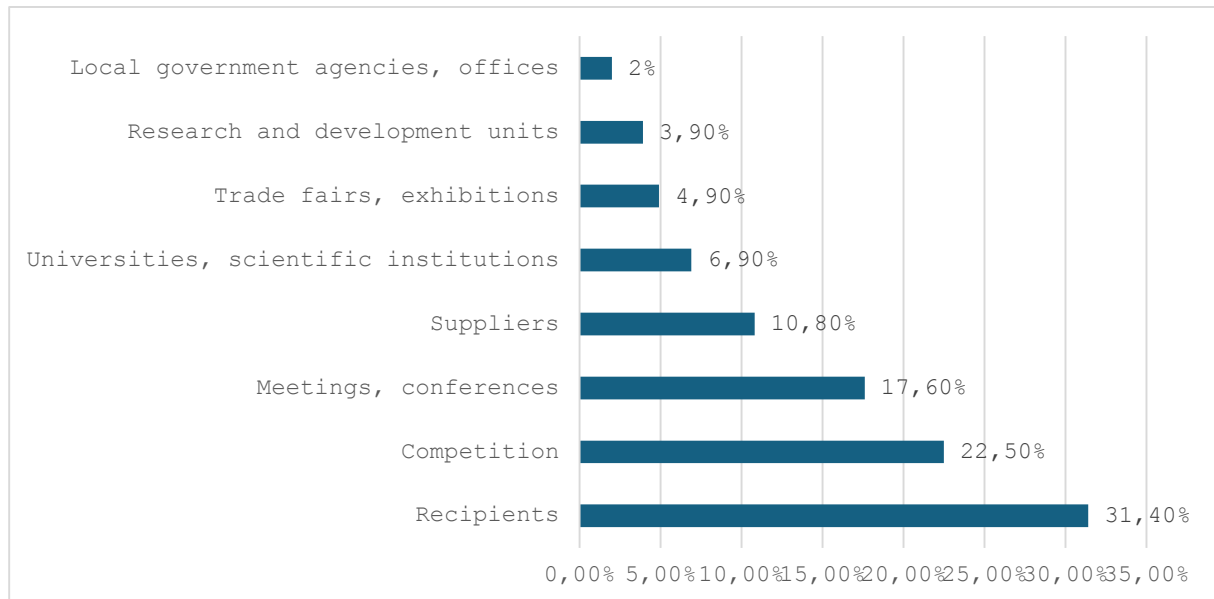


Figure 5. Sources of information on innovation in the surveyed companies.

Source: own study.

Over the last 5 years of their activity on the market, the companies analysed have used a variety of tools to increase innovativeness. The most frequently used tool were e-banking services, which accounted for a 31.40% share among the companies surveyed. Creating their own website was another popular solution, used by 27.50% of companies to reach a wider range of customers and promote their products or services online. Participation in trade fairs and exhibitions also had a significant impact on company innovativeness, representing a 23.50% share. Having their annual balance sheet audited by an independent company was used by 10.80% of companies to assess their financial health and growth strategy. The hiring of university graduates represented a smaller share, at 5.90%, but was important for introducing new perspectives and fresh insights into company processes. Registering a trademark or design was the least popular tool, used by only 1% of the companies surveyed, although it can be important for intellectual protection and avoiding the risk of copyright infringement. These various tools testify to the involvement of Małopolska enterprises in the search for innovative solutions and development strategies (Figure 6).

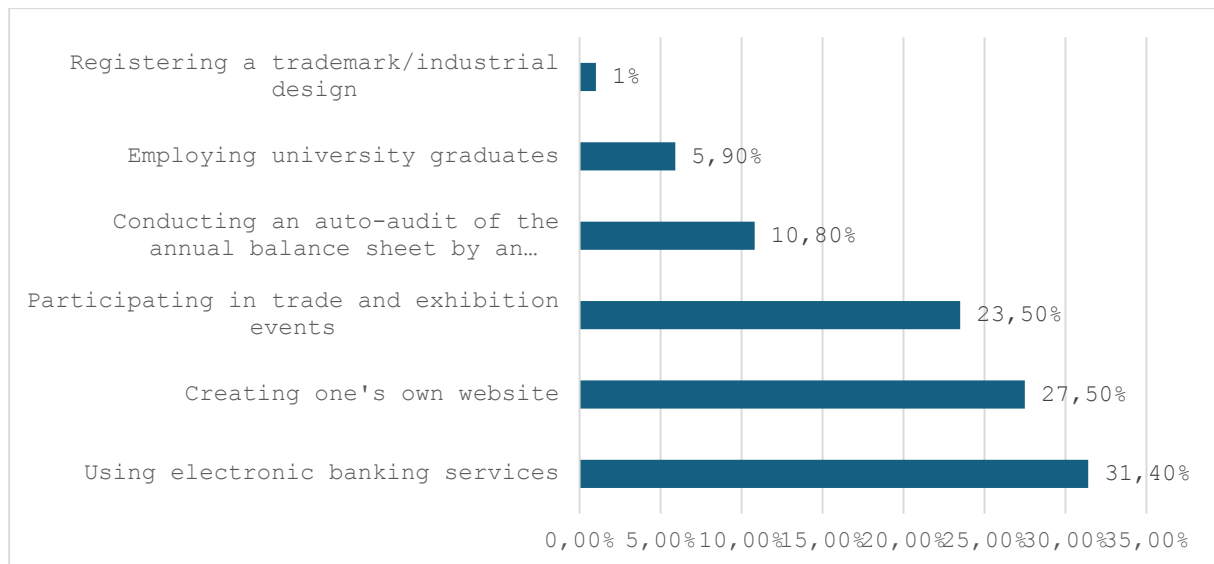


Figure 6. Solutions used by the company over the last 5 years of its activity.

Source: own study.

Conclusions

In a dynamically changing market environment, small and medium-sized enterprises have to take into account many factors affecting their competitiveness, and innovation plays a key role in their development and market success. Research has confirmed that important factors for SME competitiveness are the ability to adapt to customer expectations, effective advertising and marketing and innovation. The availability of products and services and the quality of production are also key to customer satisfaction and building customer loyalty.

Key factors for improving competitiveness included the introduction of new products and services, a reduction in the tax burden and social security contributions, improvements in the quality of products and services, and support from public institutions. Innovative products and services allowed companies to attract new customers and retain existing ones, while the reduction of the tax burden contributed to the reduction of operating costs, increasing companies' profitability. Improving product quality was key to building a positive brand image and gaining customer loyalty. Support from public institutions, including subsidies, training and regulatory facilitation, had a significant impact on companies' ability to achieve their business goals.

The introduction of new products and services as well as market and marketing research were the most frequently practised innovative activities, allowing enterprises to better adapt to market needs and increase competitiveness. These activities resulted in an improvement in production flexibility and an increase in the number of products or services offered, demonstrating the ability of enterprises to develop and differentiate their portfolio.

Innovation as a key competitiveness factor is essential for small and medium-sized enterprises. The introduction of new products and services as well as the improvement of their quality have a significant impact on the competitiveness of companies. Reducing the tax burden and social security contributions, coupled with support from public institutions, contribute to the profitability of firms. The education level of employees and the degree of mastery of technology have a significant impact on the companies' ability to innovate and maintain high quality standards. Investing in training and modern technologies is key to increasing the competitiveness of SMEs. Companies using the services of support institutions, such as training centres, technology parks or consultancy and advisory points, show a greater capacity to innovate. The benefits of cooperation with support institutions should be promoted and barriers to such cooperation should be eliminated. Authorities should consider introducing tax concessions and exemptions for SMEs to reduce their burden and support innovative development. Changes in the tax system can significantly contribute to the competitiveness of companies. Companies should continue and develop various forms of innovative activities, such as market research, changes in organisational structure and the implementation of new production and logistics processes. These activities contribute to optimising costs, better management of resources and maintenance of a competitive advantage in the market. Investment in new products, technology, quality and cooperation with support institutions can significantly affect the success of these companies on the market.

These activities should be a priority for companies seeking to maintain and increase their competitiveness in a rapidly changing market environment. Enterprises need to continuously monitor the needs of their customers, invest in technological development and cooperate with support institutions in order to effectively implement innovations and maintain their position on the market. The integration of various innovative activities and the adaptation of tax policy to the needs of SMEs are crucial for the long-term development and competitiveness of small and medium-sized enterprises.

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