
The Use of Artificial Intelligence in the Process of Marketing Management in Small and Medium-Sized Enterprises

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Abstract:

Purpose: The primary objective of this study was to determine how the use of artificial intelligence tools affects the efficiency of marketing management in small and medium-sized enterprises (SMEs) in Poland, based on original research. To achieve this objective, the study identified the marketing areas where artificial intelligence (AI) is most frequently employed, assessed entrepreneurs' awareness and knowledge regarding AI, analyzed the benefits, barriers, and limitations associated with its implementation, evaluated the impact of AI usage on operational efficiency, and outlined prospects for future development.

Design/Methodology/Approach: This study employs a survey-based research method using a questionnaire. The questionnaire was designed to gather information on the extent to which enterprises use artificial intelligence tools in their marketing activities, the assessment of their effectiveness, the marketing areas supported by AI technologies, and the barriers and challenges associated with implementing these solutions in practice.

Findings: The results clearly indicate that AI is no longer merely an experimental technology but has become one of the most common optimization tools. High levels of awareness and implementation of AI tools within enterprises were also observed. SME managers view AI as a key element in building a competitive advantage, enabling them to bridge the resource gap vis-à-vis large corporations. The dominant model of AI adoption is task automation. The popularity of using AI for content creation, managing marketing campaigns, and data analysis suggests that the technology is viewed primarily as a tool for automating tasks. The main benefit for organizations is not a direct reduction in financial costs—in this regard, the gains for the enterprise are usually negligible or minor. However, the radical optimization of working time is the primary driver behind the popularity of AI tools. Current trends in how these tools are implemented within enterprises suggest that the approach to human resource utilization may undergo a significant shift in the coming years, with a growing trend of moving personnel away from routine tasks toward conceptual or strategic activities.

Practical Implications: Leveraging AI in marketing management within SMEs significantly boosts effectiveness and improves overall business performance. However, success in this area will increasingly depend not merely on the technology itself, but on the organization's ability to adapt and educate itself in order to avoid falling behind in the digital landscape.

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Originality/Value: *The study provides significant findings regarding the variables influencing the future development and application of artificial intelligence in the market and marketing activities of small and medium-sized enterprises in Poland.*

Keywords: *Marketing, AI, Artificial Intelligence, SMEs.*

JEL Classification: *M31, L11.*

Paper type: *Research paper.*

1. Introduction

The dynamic development of digital technologies and the growing availability of advanced analytical tools make artificial intelligence one of the most important factors changing modern marketing. In recent years, there has been an increasing intensity of implementation of AI solutions both in large corporations and in the sector of Small and Medium-sized Enterprises (SMEs), for which these technologies are often the only economically acceptable automation option. Thanks to it, these companies have a chance to reduce the effects of having relatively small resources, while increasing their competitive capabilities.

The topicality of the chosen topic is due to the fact that organizations are looking for more and more effective ways of managing communication, data analysis or customer relations, and a tool such as artificial intelligence offers exactly what entrepreneurs are looking for, namely improving the effectiveness of marketing activities while optimizing costs.

In addition, modern marketing strategies and the approach to marketing itself are increasingly based on personalization, targeting, and automation, which are some of the most common ways to use the capabilities of artificial intelligence. If it weren't for it, these strategies would be much more difficult or even impossible to implement, which may suggest a certain dependence of modern marketing on AI technology.

2. Research Objectives and Methodology

This study uses the method of survey research, using a questionnaire. It has been developed in such a way as to enable the acquisition of information on the level of use of artificial intelligence tools in the marketing activities of enterprises, the assessment of their effectiveness, the areas of marketing supported by AI technologies, and the barriers and challenges related to the implementation of these solutions in practice.

The survey was quantitative in nature. The survey was conducted on a sample of N=423 respondents representing small and medium-sized enterprises in Poland, of which N=398 indicated the use of artificial intelligence in their company, moving on to the next part of the survey on issues related to the actual use of this tool.

The respondents were mainly business owners, company managers and employees responsible for marketing activities in the organization. One of the criteria for selecting the sample was the size of the company. The survey was attended by representatives of micro, small and medium-sized enterprises. This allowed to obtain a more comprehensive picture of the use of artificial intelligence tools in the marketing activities of SMEs. The survey was attended by representatives of enterprises representing various sectors of the economy.

3. Artificial Intelligence and its Practical Application in the Marketing Activities of Enterprises

Artificial Intelligence (AI) is probably one of the most important achievements of modern technological development. Currently, it is difficult to point to a sector of the economy in which AI does not find potential application

The first use of the term artificial intelligence took place over 100 years ago, in 1921 to be exact. It was then that the Czech playwright Karel Čapek introduced the concept of "artificial people" called robots in one of his publications. The birth of the purely technical definition of AI, in turn, falls on the year 1950 and is related to the published work "Computer Machinery and Intelligence" by Alan Turing, which eventually evolved into the Turing Test, a tool used to measure computer intelligence (Negnevicky, 2026).

The breakthrough in the popularization of AI tools came primarily after the popularization of the ChatGPT model at the end of 2022. For many, this was the first contact with artificial intelligence as a simple communication system based on text messages. It made it possible for people who did not have specialist competences to get acquainted with the capabilities of the tool.

The business potential of AI was noticed almost immediately. The possibilities of support both in management processes and in the functioning of the company itself could constitute a potential market advantage, which stimulated the desire to implement the tool in the ranks of many organizations (<https://ai.usz.edu.pl/historia/>).

Currently, AI tools are most often used to help in data analysis, decision-making, and automation of monotonous and repetitive tasks, but with the further development of artificial intelligence, it has a chance to significantly increase the range of its capabilities. AI is beginning to occupy an increasingly important place both in the business sphere and in the literature on management and economics.

This is due to both the current capabilities offered by AI tools and the fact that their potential and direction of development in the future still remains a great unknown (Moschovakis, 2025).

The basis for the operation of artificial intelligence is advanced information technologies, among which machine learning plays the most important role (Colliot, 2023). Machine learning is also complemented by deep learning, which enables the analysis of data with a high degree of complexity and natural language processing, which enables uninterrupted communication between the artificial intelligence tool and humans.

Models that enable such handy communication, most often using text messages in the form of chat, belong to the group of so-called LLMs (Large Language Model). LLMs are by far the most popular type of AI among ordinary users, mainly due to their simplicity of use (Elon University, 2025).

In the context of business management, AI most often plays a role supporting the implementation of basic management functions, i.e. planning, organizing, directing and controlling, contributing to increased operational efficiency, better decision-making and the creation of new AI business models, which allows for quick analysis of market data, allows for the evaluation of the effectiveness of activities and helps identify potential threats and opportunities (Reddy, 2025)

The business application of AI tools goes beyond the management division of the organization and covers many important areas of enterprise activity. The main purpose of using AI may vary depending on the size of the company. In the case of small and medium-sized enterprises, AI can be used much more often as a tool to compensate for limited human and financial resources, making its use itself a modern element of organizational strategy, increasing competitive opportunities.

Dynamic technological development and a high frequency of changes in market trends have made artificial intelligence a widely used tool in marketing. Regular use of AI enables organizations to manage information more effectively, automate processes and create a more personalized offer according to customer needs (Glimore, 2001).

The literature indicates that data analysis is one of the pillars on which the current use of AI in marketing is based (Davenport et al., 2019). With its help, companies can predict consumer behavior more accurately and quickly than has been possible so far. Algorithms allow for the processing of huge data sets from multiple sources, such as CRM systems, social media, or collected transactional data.

Based on them, artificial intelligence is able to forecast demand, identify shopping patterns, and predict customer behavior, facilitating the creation of marketing plans and strategies. In many small and medium-sized enterprises, such activities would

require additional financial or human resources, which would often involve the abandonment of advanced analytics (Davenport *et al.*, 2019).

Another important application of AI in marketing is the personalization of marketing communication between the organization and the consumer. By analyzing data on preferences and behaviors in the entire consumer group, AI is able to adjust advertising content, product offer, or even personalize promotion directly to individual recipients. Such activities have an impact not only on increasing expected sales or engaging recipients, but also on creating an image of a "listening" company that both sends information to the customer and receives it from them (Edvissonm *et al.*, 1997). This allows for the creation of a long-term, individual relationship between the organization and the customer.

Artificial intelligence is also used in the automation of marketing activities. It allows you to manage the conduct of automated advertising campaigns, send personalized email messages and plan the publication of content. The use of AI in this type of activity can bring results in the form of significant savings in time and resources, while affecting better image consistency of the company and the effectiveness of its activities (Borach, 2022).

Another area of using AI in marketing is customer service. Currently, the most common solution available for this branch of marketing are the so-called chatbots and voicebots, which allow you to communicate with the customer in real time. The main benefits of using these tools for the company is to increase the time zone in which the customer can contact the organization.

An important element is also increasing the availability of information and "sifting out" consumers with simple problems that can be solved by AI instead of a consultant, which in turn contributes to shortening the time of the company's market reaction to the customer, which consequently improves the company's image.

The use of artificial intelligence can also include the management of advertising campaigns, helping to optimize budgets, target ads and analyze their effectiveness. AI algorithms allow you to adjust campaign parameters in real time, which allows you to increase their effectiveness, affecting better use of the organization's available financial resources.

In recent years, generative artificial intelligence (Generative AI) has become increasingly important. It is a type of artificial intelligence system capable of creating new content based on the patterns and data on which it has been trained (OpenAI, 2024). Generative AI has found its place mainly in content marketing, offering the ability to create texts, graphics, and audio and video materials, without requiring specialist IT knowledge from the user (Sengar, 2025). Commands can be issued using various types of instructions, e.g. text, verbal or pictorial. From the perspective of marketing management, generative AI is a tool with great potential.

It allows you to create interesting and valuable content in a quick and simple way, which can become the basis for building a new brand. The use of generative systems in marketing activities supports the communication process and helps reduce operating costs, which may prove to be particularly useful for small and medium-sized enterprises, which often face the problem of limited resources and need more support in promotional activities (Banch, 2023).

An important direction of development is also the integration of AI tools with multi-channel marketing communication, which allows for consistent management of customer relationships. Constant control of the coherence of the organization's activities has a noticeable impact on customer experience, increasing customer satisfaction and trust in the brand (Darłak, 2025). Proper customer contact management is important, especially in a situation of high market competition, as it can have a direct impact on the consumer's choice of a given brand.

In addition to the presented trends regarding the direction of development of the use of AI in marketing, there is another important relationship emerging in the public space, namely the attitude of buyers and enterprises to the use of AI tools in practice (Hari *et al.*, 2025).

Despite the various features and opportunities offered by AI systems, the importance of ethical, legal or organizational aspects is becoming increasingly important. Consumers demand information on whether an organization uses AI, and if so, how it uses it and who is responsible for it.

The controversy surrounding the use of artificial intelligence is the reason why companies are increasingly facing challenges such as improving the digital competences of employees, maintaining the transparency of algorithms, and ensuring adequate protection of personal data (Jain, 2024). As a result, AI systems are increasingly presented to the public mainly as tools supporting the activities of the most important productive element, which is humans (Basha, 2023).

Nowadays, artificial intelligence functions as an important support for the marketing management process, enabling them to increase the effectiveness of individual activities, optimize costs and improve the quality of customer relations. It is of particular importance, among others, for small and medium-sized enterprises, for which such technologies not only improve the market situation, but also enable them to compete more evenly despite resource asymmetry (Gabelaia, 2024).

4. The Level of Digitization and the Possibilities of Using AI Tools in the SME Sector in Poland and other EU Countries

The small and medium-sized enterprises sector is the foundation of today's market economies. Structurally, the SME sector currently comprises the vast majority of enterprises operated both in the European Union and in Poland.

Statistics show that this sector is responsible for generating about 45.3% of gross value added at the national level (PARP, 2025). Despite the fact that individual entities in this sector operate on a relatively smaller scale than large enterprises, their total economic potential remains a key element of the structure of the economy.

The small and medium-sized enterprises sector is also distinguished by a significant impact on the labour market. As statistics show, this sector is responsible for over 68% of total employment in non-financial enterprises in Poland (PARP, 2025), while in the European Union it is about 67% (European Commission, 2025). The generation of a significant part of jobs by SMEs contributes both to reducing unemployment and to the professional activation of the population.

A flexible organisational structure is conducive to a dynamic response to changes in demand, enabling the creation of employment also in regions with a lower level of industrialisation, which makes this sector an important stabilising function in the socio-economic context, supporting sustainable development at the local and regional level (World Bank, 2022).

According to data published by the OECD (2025), SMEs accounted for as much as 99.8% of all non-financial enterprises in Poland. This proves the dominant position of the sector in the subjective structure of the Polish economy.

The specificity of the functioning of small and medium-sized enterprises has a clear impact on the way they conduct marketing activities. It determines both their nature and the scope of implementation of individual tasks. Unlike larger enterprises, SMEs often operate in conditions of limited financial, human resources or organizational resources, which has a significant impact on the planning and implementation of various marketing activities (Garcia-Martinez *et al.*, 2023). Identification of conditions and an appropriate approach to the use of available resources is crucial for effective marketing management in the SME sector.

The progressive digitization of the economy is one of the most important factors determining the development of modern enterprises. Digital technologies are responsible for introducing automation, improving the flow of information or increasing the effectiveness of organizational activities. The development of information and communication technologies is also an important element of productivity and competitiveness growth, especially in the SME sector.

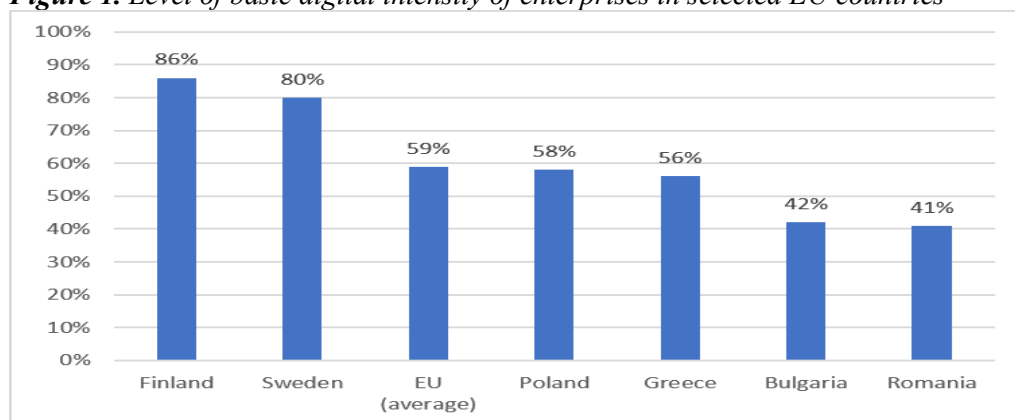
Digitization is a process involving the implementation of digital technologies in various areas of an organization's operations, such as management, production, marketing or customer service (Verhoef *et al.*, 2021). Its goal is primarily to increase the efficiency of the company's operations, improve decision-making processes and create new business models based on the use of data and information technology (Vial, 2019).

Digitization is also referred to as digital transformation, which also involves the implementation of new technologies, but it concerns more fundamental changes in the way a company operates, which include activities such as m.in changes in business models, operational processes, or ways of creating value for the customer (Vial, 2019).

There are many different indicators or analytical tools that can be used to measure and determine the level of digitization of a company. One of the most popular ways is the *Digital Intensity Index* (DII), which measures the degree of use of digital technologies in enterprises, taking into account, m.in, the use of the Internet, IT systems, cloud services and AI tools (Zhank, 2023).

The DII index classifies enterprises according to the level of intensity of digital technology use, distinguishing, m.in, low, basic and high levels of digitization (Eurostat, 2025). Analyzing the level of digitalization of enterprises in the EU, it can be noted that Poland is below the average and belongs to the group of less digitized countries, which is presented in the chart below.

Figure 1. *Level of basic digital intensity of enterprises in selected EU countries*



Source: *Own study based on: Digital intensity of enterprises and use of digital technologies in businesses, Eurostat, 2024.*

According to reports, only about 60% of Polish enterprises reach the basic level of digital intensity, while one of the strategic goals of the EU Digital Decade is to reach the level of 90% of enterprises using digital technologies by 2030 (European Commission, 2024). Particularly visible differences in the level of digitization are also noticeable between large enterprises and the SME sector.

According to the data, in 2023 about 58% of small and medium-sized enterprises in the EU reached the basic level of digital intensity, while in the case of large enterprises this indicator was as high as 91% (European commission, 2024). This indicates a significant disproportion in the digital development of enterprises and the technological competitiveness of the SME sector. In recent years, there has been a

slow but gradual increase in the use of modern technologies in this type of enterprises.

Cloud solutions, analytical tools, CRM systems, and e-commerce platforms are gaining in importance. Despite the growing interest in digital transformation, the level of use of the most advanced tools such as AI remains at a relatively low level. Statistical data indicate that in 2025, about 8.7% of all enterprises in Poland used AI-based technologies. In addition, the data indicate a clear variation in the dependence of the size of the enterprise, namely 42% of large enterprises regularly used artificial intelligence, in the case of medium-sized enterprises it was 15.6%, and in small ones only 6% (Institute of Economics, 2025).

The relatively low level of digitization of enterprises, especially in the SME sector, is influenced by numerous economic, organizational and competence barriers. In the literature on the subject and in empirical research, m.in example, the lack of sufficient financing and high investment costs are indicated, which limits the possibility of purchasing and implementing modern technological solutions, especially for small enterprises.

In addition, the lack of appropriate digital competencies and specialists has a significant impact on the problems related to both the implementation and maintenance of technological innovations (Szedlak, 2020). The lack of a formal strategy for the digitization of an enterprise or an appropriate organizational structure results in the introduction of only fragmentary solutions and the failure to use the full potential offered by modern digital technologies (Vial, 2019).

The level of digitalisation of enterprises and the development of technological competences are important for the possibility of implementing more advanced digital tools, including solutions based on artificial intelligence, which can prove to be an important factor stimulating the development of enterprises in the context of m.in marketing activities.

The issue of human capital also remains a significant challenge today. According to the resource approach, the sustainable competitive advantage of an organization results from having valuable, scarce and difficult to imitate resources, including the competencies of employees (<https://www.pwc.pl/pl/artykuly/rozumienie-i-wykorzystanie-trendow-zrodlo-przewagi-konkurencyjnej.html>, 2025).

Most often, it comes down to the issue of specialists, especially in the area of digital technologies and data analysis, the shortage of which significantly limits the ability to implement innovations in the company. What is more, limited financial resources have a direct impact on the problems of competing for highly qualified staff with larger entities, which can also significantly delay the development and modernization processes of small enterprises (Vial, 2019).

Small and medium-sized enterprises are increasingly competing with much larger entities, sometimes even at the global level. The modern customer expects personalization of the offer, fast communication and multi-channel availability, which forces companies to implement advanced analytical or automation tools. Unlike large enterprises, the implementation of such tools in SMEs is not only an adaptation to technological developments, but a serious challenge that, if left unnoticed, can lead to market marginalization (European Commission, 2024).

In the financial dimension, modern AI solutions allow for the automation of processes, which translates into reduced costs of operating a company and more efficient use of resources. In terms of human resources, AI technologies are able to compensate for the shortage of qualified staff of specialists through analytical support, data processing, or content generation – increasing the productivity of the current team.

From a competitive perspective, AI allows for marketing activities based on data analysis, personalization and targeting, which until recently remained available only to large enterprises with adequate resources (Kshetri, 2024). In terms of technology, affordability and the growing availability of AI technologies are slowly reducing the disproportion between entities of different sizes, while supporting the digital transformation process and increasing the competitiveness of the SME sector. As a result, artificial intelligence can be an important factor responsible for the development and strengthening of the market position of small and medium-sized enterprises.

5. Research Results and Discussion

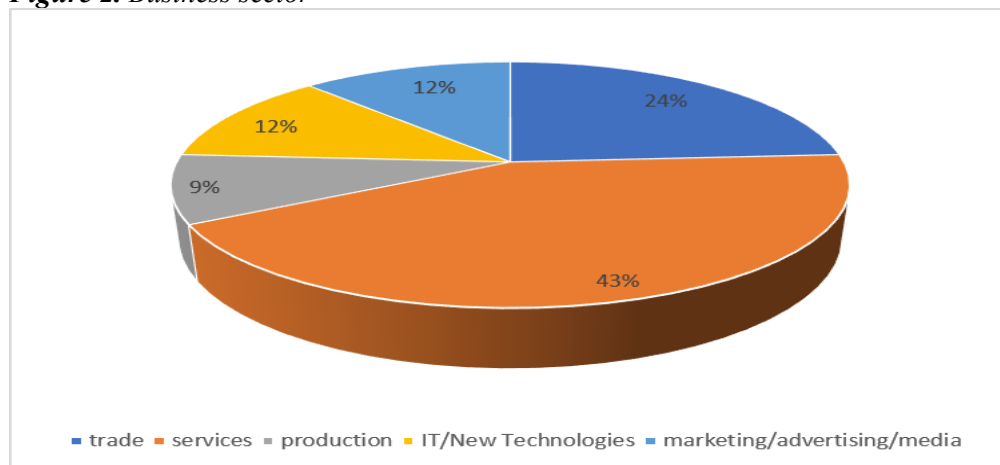
The main objective of the study conducted for the purposes of this study was to determine the degree of use of artificial intelligence tools in marketing management in the SME sector and to assess the impact of these technologies on the effectiveness of the organization's functioning. The study was conducted on a sample of N=423 respondents representing small and medium-sized enterprises in Poland, of which N=398 indicated the use of artificial intelligence in their company, moving on to the next part of the survey on issues related to the actual use of this tool.

The structure of the surveyed sample indicates the dominance of representatives of small (39%) and micro-enterprises (32%), which together constitute over 71% of respondents. Medium-sized enterprises accounted for 29% of the surveyed group. These data allowed for the analysis of the use of AI in entities with particularly limited human and financial resources.

The most represented industries are services (43%), followed by the retail sector (24%), marketing and media and the IT/new technologies sector (24% in total). The smallest share in the survey was recorded in the case of companies from the manufacturing category (9%). The presented distribution may be due to the fact that

companies conducting their main business in cyberspace have a much easier opportunity to implement solutions based on artificial intelligence. AI solutions are often implemented as part of system updates or programs that these companies use on a daily basis.

Figure 2. Business sector



Source: Own study based on the study.

The largest group of respondents with whom the research was conducted were decision-makers, i.e., business owners and managers, whose joint share in the survey was 57%. This may be due to the fact that in micro-enterprises it is the managers who are most often responsible for marketing activities, which in turn is the result of the lack of adequate financial resources for a dedicated marketing department. A significant share was also shown by marketing specialists (22%) and employees of marketing departments (20%).

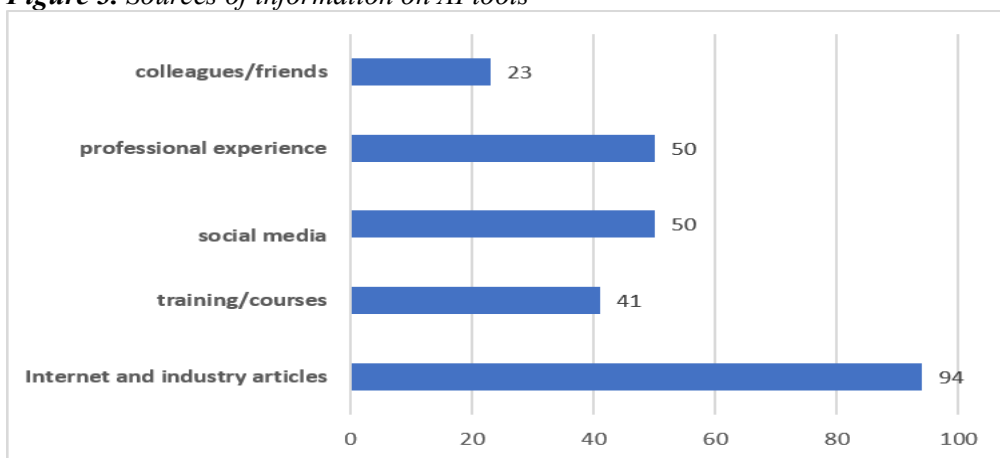
It is worth noting that over 65% of the surveyed entities have been operating on the market for more than 6 years, which proves the stable position of the surveyed companies. A significant share in the survey was also shown by companies with 2-5 years of service (30%), while young entities (less than 2 years) starting their operations showed the smallest share in the conducted survey. This state of affairs may indicate a correlation between organizational maturity and the need to implement AI tools.

In the surveyed group, one hundred percent recognition of the term artificial intelligence (IA) in the context of marketing activities was recorded, which clearly indicates an extremely high level of awareness of respondents. However, respondents most often rated the level of their knowledge as medium (50%) or high (36%). About 12% declared a low level, while a very low and very high level was indicated by individual respondents. These results suggest that the majority of respondents perceive their knowledge as at least sufficient, which in turn may

translate into, m.in, a lack of motivation to further develop their knowledge and skills in the field of AI.

The key sources of information about AI tools for respondents turned out to be the Internet, industry articles (94%), as well as social media (50%) and industry experience (50%). Slightly less important were formalized training and courses, as well as professional experience, the share of which significantly differed from the most dominant category, which is the Internet. These results may indicate the theoretical rather than practical nature of knowledge related to the subject of artificial intelligence.

Figure 3. *Sources of information on AI tools*

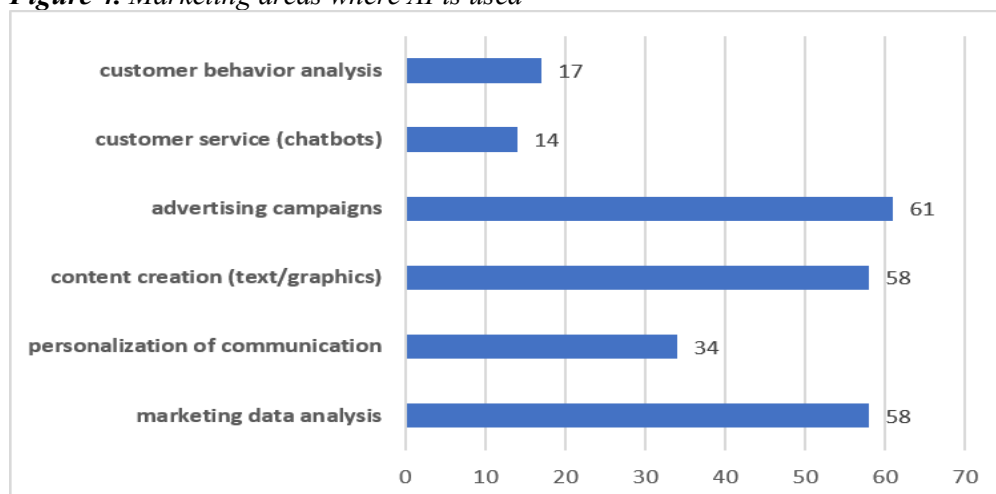


Source: *Own study based on the study.*

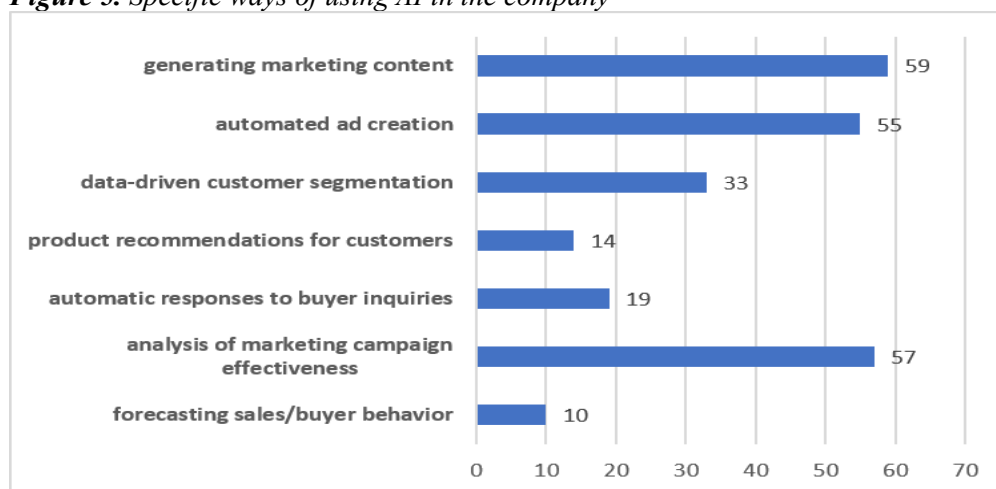
The absolute leader in the field of AI applications turned out to be three categories of marketing functioning of enterprises, namely: content creation, marketing data analysis and implementation of advertising campaigns. Each of these categories achieved more than 50% of indications.

A slightly less popular area was the personalization of communication (34%). Artificial intelligence is least often used in the analysis of customer behavior (17%) and customer service (14%). These results indicate a tendency to use AI for repetitive, tedious or complex tasks, which in turn may suggest that the main purpose of using artificial intelligence is to save time.

Among the detailed functionalities, three main categories also dominate, namely: marketing content generation (59%), automatic ad creation (57%) and analysis of the effectiveness of marketing campaigns (55%). Companies use AI for customer segmentation, product recommendation, automation of responding to inquiries or sales forecasting a little less often. These results again indicate the use of artificial intelligence mainly for time-consuming or complex tasks.

Figure 4. Marketing areas where AI is used

Source: Own study based on the study.

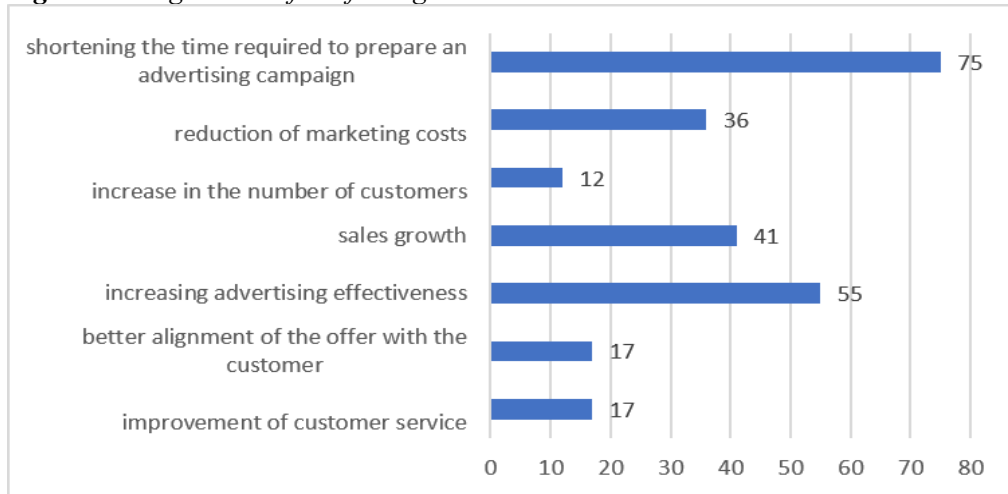
Figure 5. Specific ways of using AI in the company

Source: Own study based on the study.

AI tools are used in the surveyed companies with high intensity. About 66% of respondents use them often, and 26% very often, which proves the high demand for such tools in the context of marketing. The group that uses them occasionally is only 8% of indications.

The most frequently indicated benefit resulting from the use of AI tools in enterprises is the shortening of the time of campaign preparation (75%), as well as the increase in the effectiveness of broadcast ads (55%). Nearly half of the respondents (41%) reported a direct increase in sales, and 36% indicated a reduction in marketing costs.

Figure 6. *Tangible benefits of using AI*



Source: *Own study based on the study.*

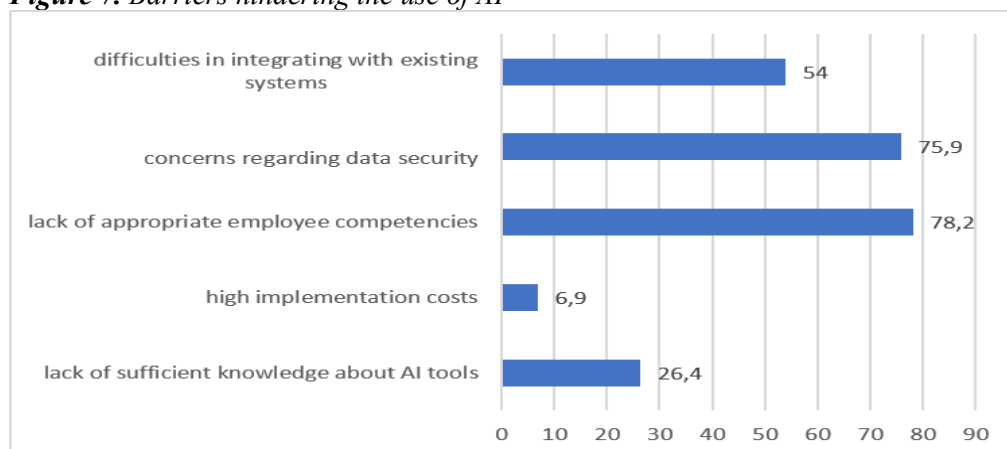
As many as 97% of respondents confirmed that the use of AI contributed to the improvement of marketing results (the sum of the answers "definitely yes" and "rather yes"). Only 3% showed that it is difficult to unequivocally indicate an improvement in results thanks to the use of AI.

None of the respondents, however, showed a negative effect of using AI. This proves the extremely high effectiveness of the technology in question and the real measurable benefits associated with its implementation.

According to the survey, the main obstacle to the wider implementation of AI in enterprises is the lack of appropriate employee competencies (78%) and concerns about data security (75%), which is related to the informal nature of the available knowledge in the field of artificial intelligence and the need to ensure appropriate security systems.

A slightly smaller, but equally important problem is the difficulty in integrating systems (54%). Lack of sufficient knowledge about the tools themselves was indicated by 26% of respondents. Interestingly, high implementation costs are a problem for only 6.9% of companies, and none of the respondents indicated the lack of need to use AI tools.

Despite many declared difficulties, representatives of the surveyed small and medium-sized enterprises almost unequivocally declared (97%) to increase or continue the use of AI in their activities in the future, which proves a sustained growth trend in this area as well as a further intensification of the digitization of marketing in small and medium-sized enterprises.

Figure 7. *Barriers hindering the use of AI*

Source: *Own study based on the study.*

6. Conclusions

The conducted study allows for the formulation of several conclusions regarding the role of artificial intelligence in marketing management in the sector of small and medium-sized enterprises. The results clearly indicate that AI has ceased to be an experimental technology and has become one of the most common optimization tools. It has also shown a high level of awareness and level of implementation of AI tools in enterprises.

Managers of small enterprises perceive AI as an important element of building a competitive advantage, which allows them to eliminate resource disparities in relation to large corporations.

The dominant model of using AI is task automation. The popularity of using AI to create content, support marketing campaigns or data analysis indicates that this technology is treated primarily as a task automator. The main benefit for the organization is not the direct reduction of financial costs – in this matter, the profits for the company are usually either not noticeable or small.

However, it is the radical optimization of working time that is the main factor in the popularity of the use of AI tools. Current trends in the way such tools are implemented in companies may indicate that there may be a significant change in the approach to human resources in the coming years. More and more often, they are being transferred from routine tasks to conceptual or strategic activities.

The study also identified a change in the nature of barriers limiting the development of organizations, debunking the common myth that the cost of implementing AI tools is the main obstacle to the digitization of the SME sector. It is the lack of appropriate competencies among employees and the informal nature of knowledge

acquisition that turn out to be the main barriers faced by organizations wishing to introduce AI solutions.

In addition, the high level of concern about data security suggests that enterprises need not only tools or knowledge, but also a clear legal framework and internal procedures governing the ethical and safe use of new technologies.

The prospects for the development of AI in SME marketing are clearly upwards. The declaration of the respondents regarding the willingness to continue investing in AI technologies allows us to assume that in the coming years we can expect an increase in the role of artificial intelligence in the marketing of SMEs. Thanks to this, it also seems likely that the current trends will gradually reverse by moving from the simplest generative or analytical functions to slightly more advanced ones, such as predictive analytics or deep personalization of the offer.

To sum up, the use of AI in the marketing management process in the SME sector really increases the effectiveness of campaigns and improves the overall results of the company. However, success in this area will increasingly depend not on technology alone, but on the ability of organizations to adapt and educate in the face of the ongoing digital transformation.

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