
OPPORTUNITIES FOR APPLICATION OF ARTIFICIAL INTELLIGENCE IN BUSINESS – PROBLEMS AND PROSPECTS

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Abstract. Artificial intelligence is rapidly changing the business landscape, opening up new opportunities and creating challenges for companies. AI is most widely represented in customer service, sales, marketing, human resources and information technology. Effective integration of AI into business processes requires not only technological investments, but also changes in management and corporate culture. For successful implementation, the most important success factors are the degree of innovation, flexibility and strategic planning, as well as qualified employees capable of working with advanced algorithms. "Neural networks" are actively introduced in various areas of business, although the degree of their penetration is uneven. This, on the other hand, increases competitiveness, opportunities for innovation and easier adaptation of business to various market changes, such as inflation and deflation, new epidemiological crises, new competitors, etc. The main objective of this report is to highlight the benefits and prospects for business from the application of artificial intelligence, as well as what problems may arise from its implementation. The main research methods used in the development are content analysis, method of analysis and synthesis, intuitive and systematic approach, survey research.

Keywords: artificial intelligence; strategy; innovation; competitiveness; business prospects; challenges.

JEL: M2, O3, Q55

Introduction

The dynamics of modern business development, related this the search for ways for future growth and innovation opportunities, improvement of the economic condition of enterprises and their competitiveness, determines the need for its digital transformation. (Filipova, Yaneva & Mierlus-Mazilu, 2023). According to Atanasova (2022, p. 11-12), communication between these entities become more flexible and independent of time and space. Along with the unilateral transfer of information from companies this customers, suppliers and other participants in business processes, there is also an opportunity for network connectivity, in which communication is multi-faceted. The internet and corporate websites are no longer enough this provide information. (Atanasova, 2022, p. 11-12) With the advent of artificial intelligence and the gradual entry of society into the era of the fifth industrial revolution, the horizons and opportunities of companies are expanding even

more. However, this, in turn, impose the need for business this be transformed in in such a way that it can even more skillfully take advantage of the benefits that digital technologies provide for the acquisition of a new type of competitive advantages and higher competitiveness. (Atanasova, 2024, p. 102) In their quest to be innovative, modern companies are increasingly using artificial intelligence. (Boyanov & Filipova, 2023; Filipova & Tancheva, 2023) Artificial intelligence has established itself as one of the most influential technologies of the 21st century, offering unprecedented opportunities for automation, data analysis, and business process improvement. Companies from various industries – from finance and healthcare to manufacturing and trade – are increasingly integrating AI solutions to increase their efficiency and achieve competitive advantage. Despite the obvious benefits, the implementation of AI is not without challenges. Companies face problems such as high initial costs, the need for qualified specialists, and ethical dilemmas related to the automation of jobs and the use of personal data. In strategic planning, AI-powered analytics help identify patterns and predict future outcomes so that business leaders can make more informed decisions based on accurate predictions. This improved capability allows companies to allocate resources, manage risks, and plan investments more effectively, as well as proactively address challenges and seize opportunities that may arise. Integrating AI with executive intuition is essential to maximizing strategic impact. While this technology offers data analysis and model-based predictions, it cannot replace human judgment, especially in contexts of high uncertainty or decisions that require creativity and understanding of the sociocultural environment.

Artificial Intelligence – an assistant for business strategy

The term AI, coined in the 1950s, encompasses an evolving and wide range of technologies that aim to simulate human intelligence, including machine learning and deep learning. Machine learning enables software to autonomously learn patterns and predict outcomes by using historical data as input. This approach became more effective with the availability of large training data sets. Deep learning, a subset of machine learning, aims to mimic the brain's structure using layered neural networks. It underpins many major breakthroughs and recent advances in AI, including autonomous vehicles and ChatGPT. (Craig, Laskowski & Tucci, 2024). Today, technology and artificial intelligence provide the greatest benefits in the business design phase, i.e. organizations assess their starting point in the context of the industry and market dynamics - potential markets are determined, competitors' moves can be determined with great accuracy, strategic business initiatives can be analyzed and evaluated, exemplary development scenarios can be created, etc. Artificial intelligence is more than a technological

breakthrough, it is a transformative force that changes the competitive landscape. The most visible factor is that companies that adopt artificial intelligence strategically position themselves for long-term success, while those that lag behind in adopting new technologies risk becoming obsolete. Thus, the impact of AI on business strategy is multifaceted and profound:

- Automation at scale: Artificial intelligence has the ability to automate routine, data-driven tasks in functions such as customer service, finance, operations, etc. This frees up workers to focus on higher-value tasks, increasing productivity and opening up new levels of efficiency. Automation at scale is the future of efficient business – it combines speed, accuracy, and scalability, giving companies a strong competitive advantage.

- Hyper-personalization: Artificial intelligence analyzes vast amounts of data to understand customer preferences, behaviors, or individual needs. This gives companies the tools to offer product recommendations, marketing campaigns, and personalized experiences, increasing loyalty and engagement. Hyper-personalization improves the user experience, increases loyalty, and leads to higher sales. In the age of artificial intelligence, it is becoming a must-have for a successful business.

- Predictive information: thanks to its ability to analyze complex data sets and identify patterns, companies can forecast demand, anticipate market trends, identify potential risks, and optimize resource allocation with greater accuracy. Thanks to predictive information based on artificial intelligence, businesses can react faster, reduce losses and increase profits, always being one step ahead. In practice, artificial intelligence is often related these robots that have their drive system for moving and also sensors that system use for the scanning of the environment. Besides, with development of science and technology, artificial intelligence finds new opportunities and possibilities in different kinds of software that are mostly used for analyzing data and also as the base for the decision making i.e. for the scenario analysis, different kind of the simulations, etc. (Tourki, Keisler, & Linkov, 2013)

- New business models: Artificial intelligence opens up new ways to create and deliver value, as data itself becomes a key asset that enables the creation of data-driven products and services. Companies can then monetize this knowledge and gain significant strategic advantage. On the other hand, according to the PwC 2025 Report, AI will accelerate energy transition and the improvement of sustainable business models. In addition, this will help on the companies yes achieved the goals you for sustainability – especially those in sectors with intensive emissions as production, construction and transport – if perceive the right one approach.

- Redefining the workforce: As artificial intelligence expands and augments human capabilities, the nature of work is evolving. Organizations therefore need updated strategies to upskill their workforce or foster human-

machine collaboration. This can help to increase employee awareness and avoid unnecessary escalation of the “replacement of labor with robots and machines.” According to the PwC 2025 Report, by 2025, “AI agents” will be on the job market. Agents can easily double a business’s workforce with knowledge of cloud sales and support, transforming speed to market, customer interactions, product design, and more. An AI agent can autonomously perform many tasks, such as handling routine customer inquiries, creating “first drafts” of software code, or turning human-provided design ideas into prototypes. Workflows will fundamentally change, but people will continue to play an important role, as game-changing value comes from a human-led, technology-based approach.

Of interest is a study by McKinsey (2025) related to the roles of artificial intelligence in creating the strategic vision of the business. (See Table 1) They examine the degree of impact and participation of artificial intelligence in the work of strategic teams. Artificial intelligence is presented in the roles of researcher, translator (interpreter), consultant, simulator and communicator.

Table 1. Participation of artificial intelligence in the process of developing a business strategy

		Researcher	Translator (interpreter)	Consultant	Simulator	Communicator
Strategy design	Meeting the strategic challenge	●	●	●		
	Evaluation through multiple lenses	●	●	●		
	Analyzing the big value-creating moves	●	●	●	●	
	Engaging with a bold strategy			●	●	●
Mobilizing the organization	Degree of commitment					●
	Adapting the strategy into specific initiatives			●	●	●
	Prioritization and reallocation of resources			●	●	
	Managing and adjusting plans and budgets			●	●	
Implementation, monitoring and review	Inertia of enforcement					●
	Maintaining productivity	●	●	●	●	●
	Assumption testing and adaptation	●	●	●	●	●
	Starting the next S-curve			●		●
 - main use  - Secondary use		Legend				

Source: McKinsey research. (2025). How AI is transforming strategy development, free at: <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/how-ai-is-transforming-strategy-development>

As a brief analysis based on the table, it can be said that the participation of artificial intelligence in the creation and maintenance of business strategies is large, but this does not exclude human intelligence. The point with a “light blue” color means that artificial intelligence can fully fulfill the role of a consultant in strategic challenge and evaluation of the strategy through multiple “lenses”, i.e. points of view, as well as in adapting the strategy to specific initiatives, prioritizing and **reallocating** resources, managing and readjusting plans and budgets. As a “communicator”, artificial intelligence can fully carry out actions on the inertia of forced execution, maintaining productivity, testing assumptions and adapting the strategy. Artificial intelligence in the role of “Researcher”, “Interpreter” and “Stimulator” can only support the actions of natural intelligence, i.e. participate in data analysis and systematization, but not be completely independent. While artificial intelligence is deeper and faster than humans, strategists still need to ask the right questions to generate the distinctive insights they seek. The resulting perspective can help strategists narrow down opportunities, find precedents or indicators for the actions under consideration, and uncover fresh ideas. As technology advances, strategists who build skills to develop unique applications for artificial intelligence models will gain a critical advantage over their competitors. Once the role of artificial intelligence in creating and sustaining business strategy is established, it is necessary to take a look at the business opportunities and prospects of applying artificial intelligence, i.e. where it can adapt, where it can completely replace human resources, and what benefits the enterprise gains from artificial intelligence.

Opportunities and risks of applying artificial intelligence in business.

According to Kaplan and Haenlein, broadly speaking, there are three reasons why it is so difficult to define AI. (Kaplan & Haenlein, 2020) First, it is already difficult to define what human intelligence is and, hence, applying this fuzzy concept to machines is a complicated endeavor. Second, once we grow used to a machine performing a complex task, we stop considering the ability to do this task a sign of intelligence. This is generally referred to as the AI effect (Haenlein & Kaplan, 2019, McCorduck, 2004). The AI effect makes the definition of AI a moving target in the sense that AI always seems to be out of reach. Third, AI has different evolutionary stages—from narrow to general to superintelligence—and can be classified into analytical, human-inspired, and humanized AI depending on its cognitive, emotional, and social competences (Kaplan & Haenlein, 2019b). It is easy to mix up those different stages and types leading to confusion over the term itself.

Companies that embrace AI technologies gain efficiencies, reduce costs, and unlock new growth opportunities that were once unimaginable. However, along with these benefits come important questions about scalability, ethics, data privacy, and workforce adaptation. As AI continues to evolve, businesses must carefully address these challenges to harness its full potential. The development of artificial intelligence in business points to even deeper integration and expansion of applications. New trends include the development of AI platforms aimed at specific needs of enterprises, focused on optimization, profit and security. Companies are increasingly building partnerships with chip manufacturers, cloud service providers and software developers to create complete AI solutions. Artificial intelligence has several key capabilities related to its application in business, for example:

a) Research and Development (R&D) Development. Artificial intelligence is accelerating product development through advanced simulations and predictive modeling. One example is San Francisco startup Rescale (<https://rescale.com/>), which offers cloud-based simulation software using AI-powered physical models. Such solutions allow companies in the automotive and aerospace sectors to reduce costs and time to market by replacing traditional trial and error with virtual testing.

b) Personalized customer engagement. Businesses are using artificial intelligence to create a more personalized customer experience. Customer data analytics enable targeted marketing messages, product recommendations, and personalized support, which increases satisfaction and loyalty. Online platforms like Amazon, Netflix, and Spotify use artificial intelligence to recommend products or content based on individual preferences, increasing engagement, satisfaction, and the likelihood of purchase.

c) Operational efficiency through automation. Artificial intelligence automates routine tasks, freeing up time for employees to focus on more complex and creative activities. This improves both productivity and job satisfaction. For example, artificial intelligence can act as an assistant for analyzing resumes in recruitment and selection of employees, conducting online interviews and analyzing the reliability of information. On the other hand, for example, artificial intelligence is also used for communication with customers – “Chabots” that operate around the clock, voice assistants that process thousands of inquiries simultaneously, automatic resolution of frequently asked questions, etc.

d) Data-driven decision-making. The ability of artificial intelligence to process large amounts of data helps businesses make informed decisions. Predictive analytics and machine learning algorithms reveal trends, assess risks, and identify new market opportunities. The role of artificial intelligence can be in predicting raw material shortages, optimizing inventory and

logistics, reducing costs, and more. Decisions can only be made by the organization's management, but with the help of artificial intelligence, the decisions made have higher accuracy and objectivity, lower risk, faster implementation and adaptation.

The application of artificial intelligence in business is now a reality, not a future possibility. Companies that adopt this technology with a vision and strategic approach can unlock significant potential – from operational savings to market leadership. At the same time, it is important to consider the need for an ethical approach, protection of personal data and development of human capital, which will work in close cooperation with intelligent systems. In addition to the advantages that the application of artificial intelligence in business has, several challenges or problems can be described when implementing AI in the activities of organizations. One of the challenges identified in AI-based systems is the lack of the ability to connect emotional intelligence with all the different types of intelligence, such as cognitive intelligence, etc. This challenge leads to the inability of the AI system to respond to the specific stimulus that comes from the environment, which can lead to problems related to problems that have an emotional component in it. (Buntak, Kovacic & Kovacic, 2021) The following table 2 systematizes the main risks posed by artificial intelligence, their description and proposals for resolution.

Table 2. Risks and solutions when applying artificial intelligence in business

Risk / Problem	Description	Possible solution
1. Ethical issues and algorithmic bias	Artificial intelligence can reproduce stereotypes and inequalities.	<i>Artificial intelligence can self-learn and be trained with more diverse and verified data; algorithm audits</i>
2. Violation of personal privacy	Collection and processing of sensitive information of employees in the enterprise	<i>Strict GDPR compliance; transparent data protection policies to be implemented in the AI algorithm</i>
3. Job replacement	Automation is pushing people out of certain professions	<i>Retraining and training of employees for new professions and roles</i>
4. Complexity of implementation and management	The implementation of artificial intelligence is accompanied by high costs and a lack of expertise.	<i>Phased introduction of artificial intelligence into the organization's activities; internal and external training of employees; selection of the right technologies</i>

5. Security and misuse of technology	Using artificial intelligence for fraud, forgery or attacks.	<i>Development of ethical standards and legislative frameworks for control, as well as their implementation in the artificial intelligence algorithm at the very beginning of its operation in the organization.</i>
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Source: author's systematization

To summarize, firstly, the lack of transparency in AI solutions raises questions about responsibility and trust, which is why it creates ethical problems and biases in algorithms. AI systems can reproduce or even reinforce biases from the data they are trained on. This leads to unequal treatment of certain groups of people – e.g. in personnel selection, lending, etc. Second, sometimes there can be violations of personal privacy, as artificial intelligence often relies on large volumes of personal data to provide personalized services. This raises the risk of unauthorized collection, use or leakage of sensitive information. Accordingly, it raises serious concerns about GDPR (General Data Protection Regulation). Regulation, security and user trust. Third, as mentioned earlier in the article, the main concerns of people in the organization are that artificial intelligence can replace jobs and thus create social tension. Automation based on artificial intelligence leads to the elimination of a number of job positions, especially those related to repetitive tasks. This can increase social inequality if the affected personnel are not retrained. The fear of "dehumanization" of work can affect morale and motivation in organizations. Fourth, the integration of artificial intelligence into business processes requires serious investments, technological preparation and a change in culture, this means that it contains complexity in its implementation. Also, errors in implementation or misunderstanding of the technology can lead to inefficiency and business losses. Fifth, artificial intelligence can be used maliciously, for example to create deep fakes (deepfakes), hacker attacks or fake news. Regulations are needed to prevent its use for destructive purposes, etc.

Artificial intelligence is changing the shape of today's business paradigm. With the implementation of artificial intelligence, organizations can increase their effectiveness and efficiency, but at the cost of investing significant financial resources to provide all the infrastructure necessary for the normal functioning of such a system. According to Kalaydzhieva, companies that implement digital computing technologies perform better in terms of revenue, profitability and market capitalization. In addition, technology has become an integral part of everyone's daily life and companies

have strong relationship with customers and many customer touch-points. (Kalaydzhieva, 2024, p.154) In addition, in order to implement artificial intelligence, each organization must carry out a digital transformation, which is associated with changes in the functioning of some organizational departments. In addition, digital transformation means transferring the traditional way of doing business to the virtual system, i.e. cloud space required for storing all documents, word processing and calculation systems, data analysis systems, etc. Kalaydzhieva also adds, that digital transformation is essentially an innovative organizational process and as such requires a systematic approach and represents a continuous cycle over time. Artificial intelligence can have a significant impact on organizational indicators due to the fact that the AI system can be used to conduct various types of analysis, and also as an aid in the decision-making process.

Application of artificial intelligence in Bulgarian business.

Artificial intelligence will play an increasingly important role in Bulgarian businesses in 2025, although its implementation is still at an early stage compared to other EU countries. According to Eurostat data, only 6.5% of Bulgarian enterprises with 10 or more employees use AI, which is below the EU average of 13%. (BSC SME, 2024) Bulgarian companies are often hesitant to invest in AI due to difficulties in measuring return on investment.

For the purposes of the study, a survey was conducted to examine the extent of use of artificial intelligence in business, its impact on innovation and competitiveness, as well as the perceived challenges. The survey is aimed at enterprises in Bulgaria for the period 01.03 - 01.04.2025, completely anonymous and containing 9 questions, divided into three sectors. The first part is basic information, the second part contains questions related to the application of artificial intelligence by enterprises and the third part - challenges and attitudes from the application of artificial intelligence in business activities. The registered responses in the survey for 76 enterprises.

I. Basic information.

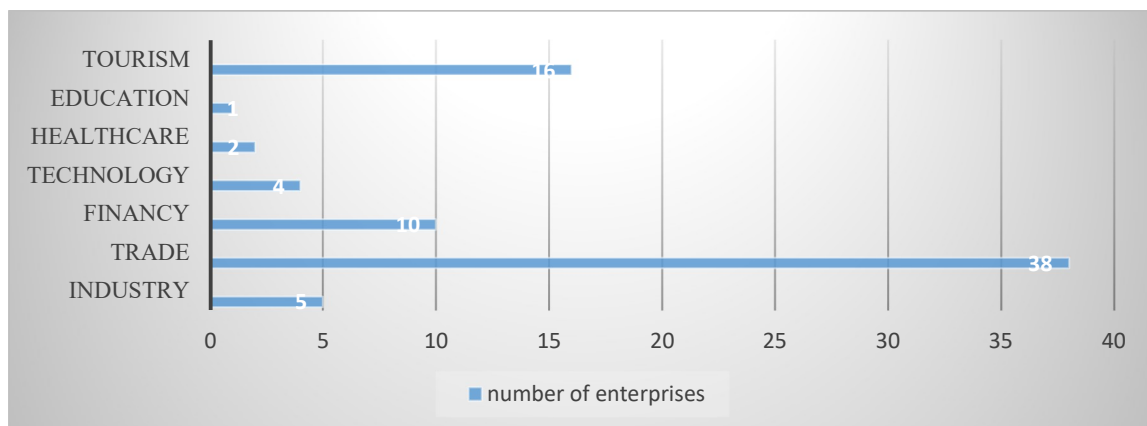


Chart 1. Sector of activity of the surveyed enterprises (in number of enterprises)

Source: author's research

Chart 1 shows the sector of activity of the respondents, i.e. the largest number of enterprises are from the "trade" sector - 38, followed by tourism businesses with 16 respondents, in third place are enterprises from financial services - 10 persons. There are registered responses for the industry sector - 5, technologies - 4 respondents, enterprises in the healthcare sector participated in the survey are 2 and at a glance there is a position of 1 respondent in the education sector.

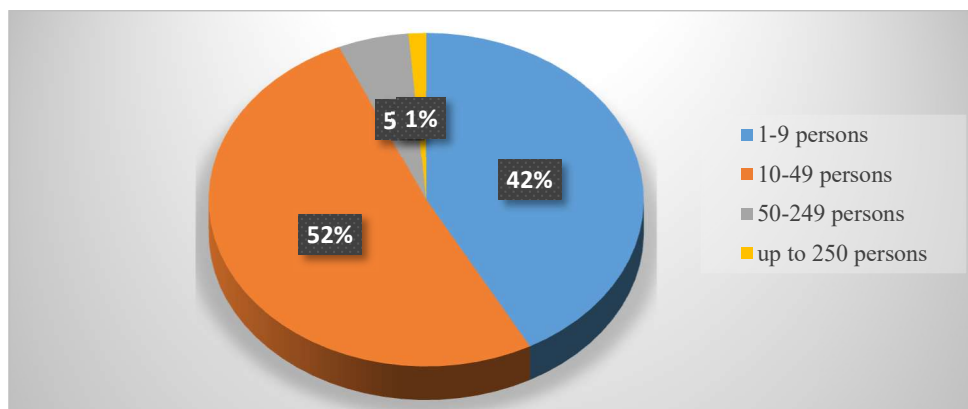


Chart 2. Number of employees in the surveyed enterprises (in %)

Source: author's research

Chart 2 shows the number of employees working in the surveyed enterprises, which gives a clear idea of the size of the business. The largest number of respondents were small enterprises with a number of employees from 10 to 49 people – 51%. In second place are micro-businesses with

employees between 1 and 9 people – 42%. Medium-sized enterprises with a number of personnel between 50-249 participating in the survey are 5%, and the remaining 2% are large enterprises with employees up to 250 people.

II. Application of artificial intelligence.

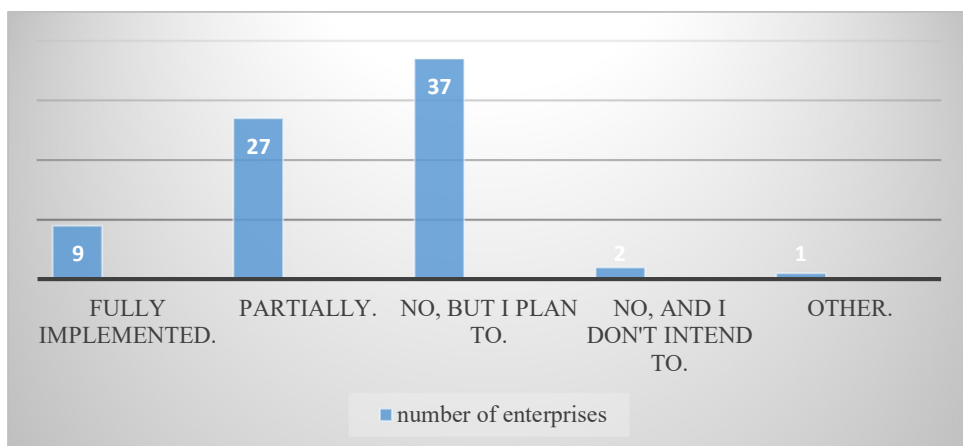


Chart 3. Degree of application of artificial intelligence in the surveyed enterprises (in number of enterprises)

Source: author's research

From chart 3 it can be analyzed that only a small part of the respondents, about 9 companies, have fully implemented artificial intelligence in their processes. Then comes [the partial approach](#), in which artificial intelligence is applied in individual functions – e.g. marketing, customer service or automation – about 27 of the respondents. With the highest results, nearly 37 of the surveyed companies do not yet use artificial intelligence, but have clearly expressed intentions to implement it in the short term. A relatively small share of businesses [remains reserved](#), [only 3 of the surveyed companies](#), towards the use of artificial intelligence, most often due to lack of resources or misunderstanding of the technology.

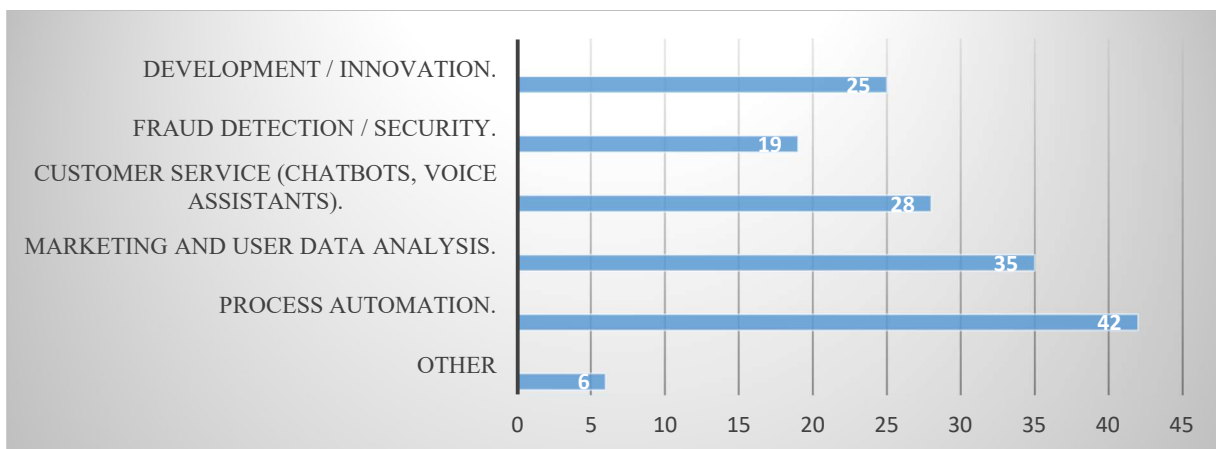


Chart 4. Area of application/or planning for application/ of artificial intelligence in business activities. (in number of enterprises)

Source: author's research

Notes: possibility to indicate more answers

The results obtained on the question, shown in chart 4, show that businesses perceive artificial intelligence as a multifunctional tool applicable in a wide range of activities. Automation is a leading area of interest – over three quarters (42 in number) of the participants are already implementing or planning to implement artificial intelligence to optimize internal processes. This includes automatic data entry, document processing, robotic systems and predictive support. Marketing and user data analysis are also strongly represented – 35 registered responses. Companies are using artificial intelligence to personalize communication, predict demand and increase customer engagement. Customer service with artificial intelligence is indicated as a response in 28 enterprises. Security and fraud detection appear to be a priority mainly for financial and technology companies that work with sensitive data and transactions – 19 respondents. Development and innovation are in focus in organizations with a higher level of digital maturity. Artificial intelligence is used to develop new products, services and optimize existing solutions in 25 companies. The "Other" column lists applications such as logistics, resource management and staff training through adaptive AI systems.

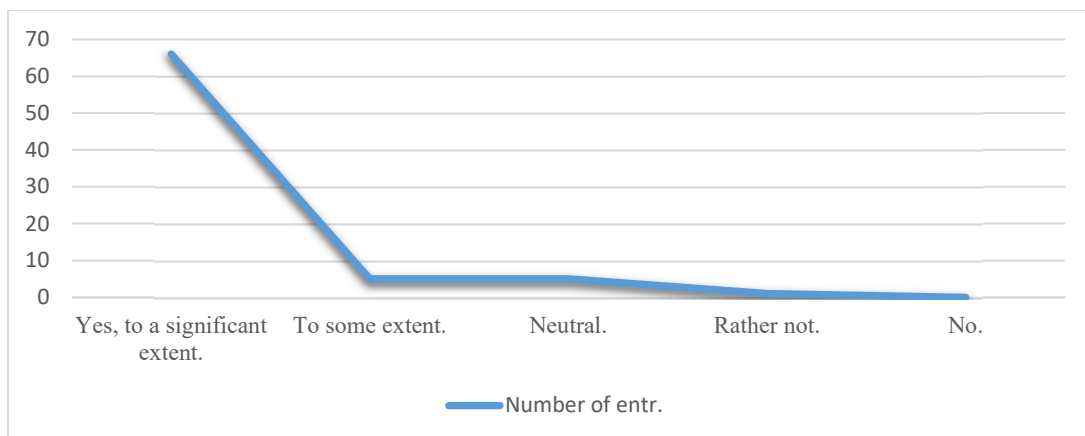


Chart 5. Importance of the application of artificial intelligence for stimulating innovation in business (in number of enterprises)

Source: author's research

The data in chart 5 shows that the importance of applying artificial intelligence in business is extremely high. There are 66 registered answers for “yes, to a significant extent”. Only 5 respondents indicated the answer “to some extent”, and 5 also indicated “neutral”. There is only 1 registered answer for “rather not” and 0 answers for “no”. As a short conclusion, it can be made that the application of artificial intelligence is of essential importance for modern business, as it encompasses not only operational efficiency, but also strategic development, competitiveness and innovation.

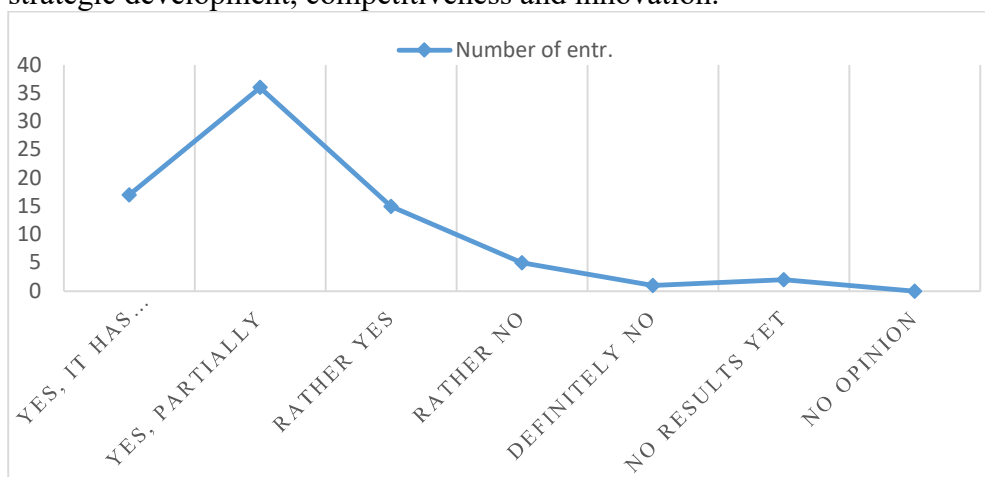


Chart 6. Degree of increase in the competitiveness of the surveyed enterprises after the introduction of artificial intelligence in their activities. (in number of enterprises)

Source: author's research

The study in chart 6, on the impact of artificial intelligence on the competitiveness of the surveyed enterprises, is a key indicator of the real effectiveness of its implementation. The question aims to assess the extent to which businesses feel a positive impact on their market position after the implementation of artificial intelligent technologies. According to the data, the largest number of enterprises are those whose competitiveness has partially increased – about 36. Then they are followed by enterprises with a strong increase and “rather yes” – with 17 respondents each. The indices of respondents indicating that they have a very low degree of increased competitiveness or none at all – about 1-4 respondents are extremely low.

III. Challenges and attitudes.

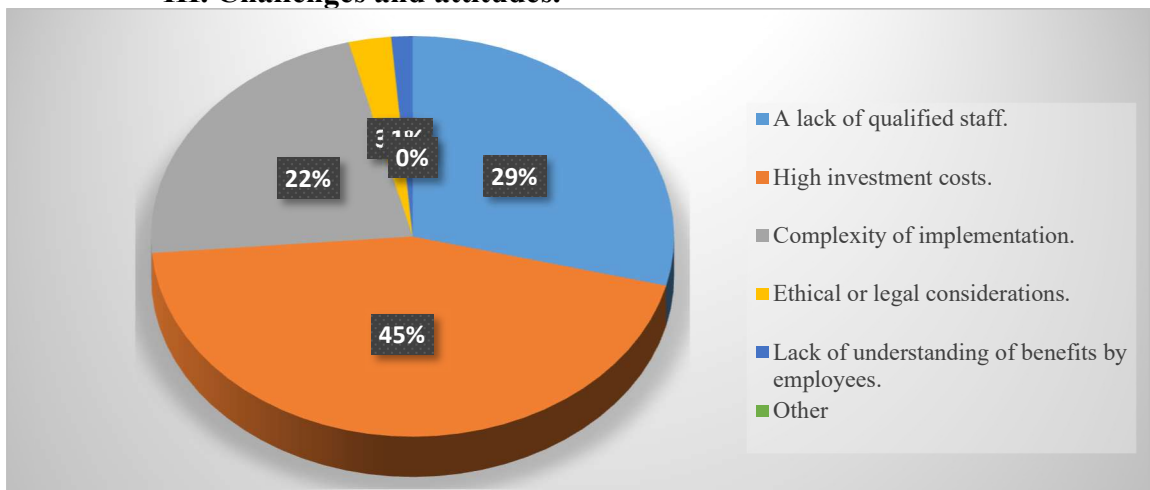


Chart 7. Challenges facing the implementation of artificial intelligence in the surveyed enterprises (in %)

Source: author's research

The data presented in chart 7 shows that the most frequently cited challenge is the high cost of investment (45%). This can include costs for technology, infrastructure, licenses, external consulting and staff training. Small and medium-sized businesses are most sensitive to this factor. Almost 1/3 of organizations (29%) indicate the lack of qualified specialists as a serious obstacle. 22% of respondents find the process of integrating artificial intelligence into existing systems and processes to be technically and organizationally complex, which slows down or limits implementation. Only 3% indicated ethical or legal considerations, which can be interpreted as a lack of awareness of the topic or low applicability to the specific business. Only 1% of respondents said that they do not understand the benefits of artificial intelligent – a sign of increasing awareness and maturity on the topic. The results show that the main challenges to the implementation of artificial

intelligent in business are economic and personnel in nature. Implementing artificial intelligent requires not only financial resources, but also the availability of well-trained specialists to manage and maintain the systems. The response to these challenges requires targeted policies to stimulate innovation, support for training, and cooperation between business, educational institutions, and the state.

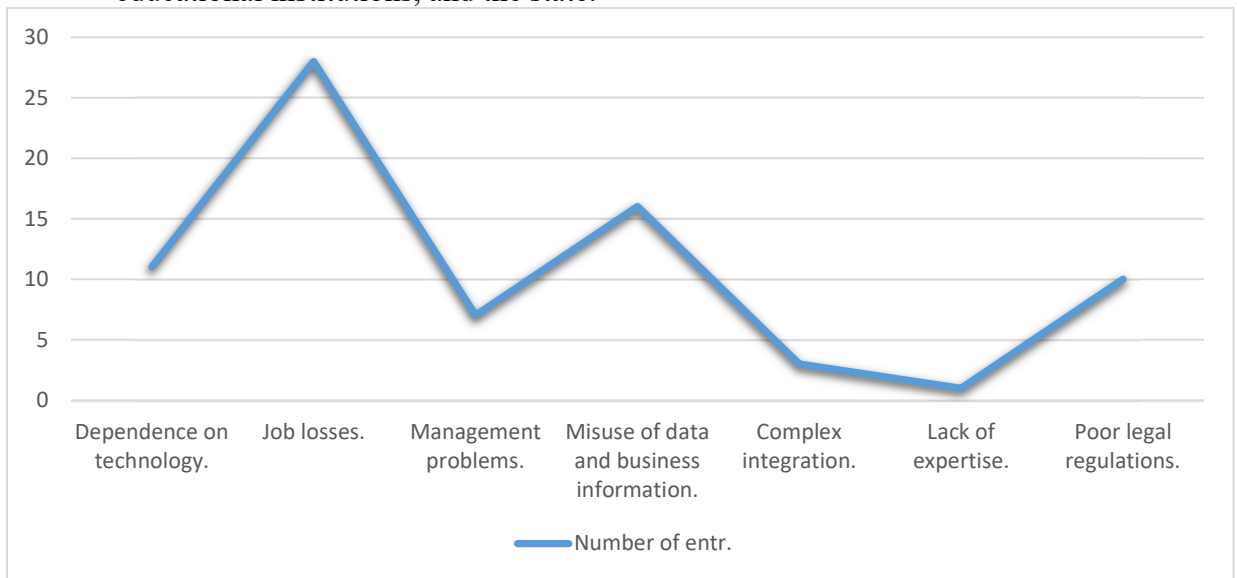


Chart 8. Risks in implementing artificial intelligence in the activities of the surveyed enterprises (in number of enterprises)

Source: author's research

Based on the results presented in chart 8, the following conclusions can be drawn about the perceived risks associated with the integration of artificial intelligence in enterprises. The most serious risk is job loss (28 enterprises), highlighting the strong concern among businesses that automation and artificial intelligence may lead to layoffs and workforce restructuring, especially in routine and low-skilled activities. Data misuse and dependence on technology are also significant risks. 16 and 12 enterprises, respectively, indicate that there is a risk of unauthorized access or misuse of sensitive business information, companies may become too dependent on external technologies and suppliers, which increases their vulnerability. Management problems (7 responses) and poor regulations (10 responses) indicate that part of the business feels a lack of clear guidelines, frameworks and management expertise for the effective implementation of artificial intelligence. The least reported risk is lack of expertise and complex integration. Although these issues are often cited as an obstacle to implementation, here only 2 and 4 enterprises perceive them as a real risk – a possible sign of better preparation or a different assessment of priorities.

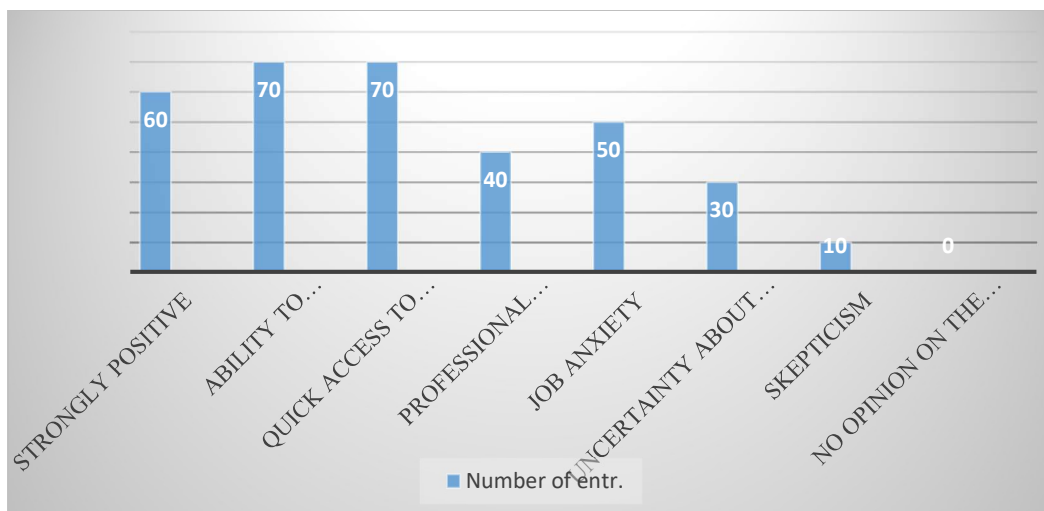


Chart 9. Attitudes of employees in the surveyed companies regarding the introduction of artificial intelligence (in number of companies)

Source: author's research

Note: possibility to indicate more answers

The results recorded in chart 9 show that attitudes among employees towards the introduction of artificial intelligence are diverse, but generally moderately positive, especially in companies where the effect of technological innovations is already being observed. A large part of the surveyed employees (about 70%) see artificial intelligence as an opportunity to facilitate daily tasks and reduce routine work. Many employees believe that artificial intelligence can improve the quality of work by providing quick access to information and support in decision-making – 70 in number. Some employees – 40 respondents, view artificial intelligence as a chance for professional development, through participation in new projects and training related to new technologies. Some employees express concern about the security of their jobs (about 50 respondents), especially in sectors with a high degree of automation. There is also some uncertainty from 30 respondents about personal skills – some employees fear that they will not be able to adapt to new technologies without additional training. In more conservative circles, skepticism and doubt about the reliability of artificial intelligence is observed - 10 registered responses.

Conclusion

Artificial intelligence is emerging as a strategic business asset that significantly increases efficiency, reduces operating costs, and unlocks new growth opportunities. Companies that integrate [artificial intelligence](#) into their operations gain a competitive advantage through personalized customer

service, automation of routine processes, improved analytics, and innovative approaches to development. Despite these benefits, the implementation of artificial intelligence is not without challenges – the need for workforce adaptation, ethical dilemmas, scalability, and protection of personal and company data. In order to use the full potential of artificial intelligence, businesses must approach it strategically by investing in training, technical infrastructure, and ethical standards. Trends point to an increasingly deeper integration of artificial intelligence through partnerships and the development of specialized platforms focused on optimization and security. This makes artificial intelligence not just a technological tool, but a leading factor for transformation and sustainable development of businesses in the modern economy.

The study of the main barriers to the implementation of artificial intelligence in business reveals important aspects of the attitudes, readiness and capabilities of businesses for digital transformation. The results of the survey and the systematization of the literature highlight both technical and resource challenges, as well as human and organizational factors that hinder the faster and larger-scale implementation of artificial intelligence. Based on the study, the following conclusions can be drawn:

First, the results reflect the growing versatility of artificial intelligence in business. More and more enterprises are considering artificial intelligence not as a one-time technology solution, but as an integral part of a digital transformation strategy covering key business areas. The implementation of artificial intelligence has a measurable contribution to strengthening the market position of organizations. Companies that invest purposefully in technology and training derive concrete benefits that lead to better results, more agile processes and an innovative image. At the same time, for artificial intelligence to be a real driver of competitiveness, it must be integrated with vision, planning and management support.

Second, employee attitudes are strongly tied to the level of awareness and actual experience with artificial intelligence. Where the introduction is accompanied by training, transparent communication, and a gradual rollout, attitudes are more positive. This highlights the need for internal change management strategies if businesses are to realize the full potential of AI in the long term.

Third, artificial intelligence offers many opportunities, but its implementation is not without risks. The main concerns center around the social impact on employment, data security, and technological dependency. To minimize these risks, a clear regulatory approach, an ethical framework, qualified management resources, and strategic planning are needed.

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