

AREAS OF USE OF ARTIFICIAL INTELLIGENCE IN ENTERPRISE STRATEGY. SELECTED ISSUES

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Purpose: The aim of the article is to attempt to analyze the current status of using artificial intelligence tools and new technologies in the development of enterprises, taking into account internationalization processes.

Design/methodology/approach: Systematic literature review (SPL).

Findings: By analyzing the literature, it is possible to confirm or deny the developing technological trends, in particular the use of artificial intelligence tools, and try to determine the research gap in this area, indicating the necessary further scientific research.

Research limitations/implications: The limitation is the access to source materials and the need to monitor constant, new research in this rapidly changing scientific area.

Originality/value: research paper.

Keywords: AI, development management, industry, brand strategy, internationalization of enterprises, artificial intelligence tools.

1. Introduction

Internationalization in management sciences is the so-called process of expansion into various markets, which is one of the most important and key factors for companies that want to develop, grow and remain in global markets. The strategy of building a competitive advantage in foreign markets opens up opportunities for companies, but also shows that there are still many challenges and dilemmas. One of the barriers may be technological progress, which is not always quickly implemented in the organization's activities. With the rapid technological development and the growing importance of artificial intelligence, companies can use AI tools that serve in the process of internationalization and efficient communication with international customers. Internationalization can be understood as the expansion of the firm's activities to international markets. It takes place between countries, regardless of whether the activities involve countries as a whole, branches, sectors, regions, companies, entrepreneurs or consumers (Gorynia, 2021). Companies internationalise for different reasons including

corporate growth, new market opportunities, internalisation as well as vertical integration (Törnroos, 2002). Many factors drive the internationalization process of companies, shaping their strategies and goals in global markets. Understanding these factors is crucial for companies that want to expand their operations beyond their domestic market. Companies start internationalization for a variety of reasons. Hollensen (2014) emphasizes the importance of two sets of motives: proactive and reactive. Proactive motives occur when a company decides to change its strategy because it wants to leverage its particular skills or take advantage of new opportunities in the market. Reactive motives, on the other hand, occur when a company reacts to pressures or problems in its home or foreign market and passively adapts its actions over time. In proactive motives, one of the most important is the desire to grow. The more a company is motivated to grow, the more it will do to grow, including actively seeking new opportunities to meet its growth and profit goals.

The presented article reviews the literature related to the use of AI tools in building strategic activities of the company, primarily with regard to communication with international customers. The choice of this specific research method allows for a broader view of research on artificial intelligence, especially in an international perspective, and drawing conclusions in predicting trends in new technologies and their development in the future. In this context, the research questions remain important:

1. How does artificial intelligence affect the building of communication with international customers?
2. What limitations and deficiencies may occur in the implementation of artificial intelligence tools in enterprises?

The dynamic impact of the internationalization process in today's conditions determines the revival of the economic, socio-political and cultural development of all countries (Nowakowski, 2005). At the same time, the main forms of internationalization ensuring further unification of the world are: increased international and investment trade, activation of transnational corporations and an increase in their influence on economic processes in the world economy, diversification of global financial and labor markets and increased competition. For over 200 years, internationalization has occurred in many sectors of the world economy, both production and non-production. The field of internationalization includes productive forces, production, exchange (in the development of international trade relations), transportation (in the system of international transportation systems), fuel and energy complexes, distribution (of capital, migration of labor), consumption (rational consumption of manufactured products by partner countries), information systems and management (combining the efforts of international economic entities in order to widely use experience in managing economic processes at the national and international levels) (Schumpeter, 1960, p. 348).

Strategic management involves developing and implementing plans that are consistent with the organization's goals and objectives. This process is continuous and evolves as the organization's goals and objectives change. An important aspect here is the implementation of

new technologies to maximize profits in the short term. Organizations practice strategic management to remain responsive to international trends and external changes, such as economic growth. Dess, Taylor, and Lumpkin (2004) indicate that it involves three continuous processes: analysis, decisions, and actions (Fig. 1). This includes analyzing strategic goals along with the organization's internal and external environment.



Figure 1. Key Concepts for Strategic Management Process according to Stevens.

Source: (Stevens, 2014, p.14).

Digital transformation and the use of artificial intelligence (AI)-based tools in communicating with international customers are topics intensively researched in scientific and industry literature. In this aspect, the new Uppsala model, which was developed due to rapidly changing market conditions, is not without significance. The model explains that due to increasing globalization and technological development, the form in which companies develop in new markets and build competitive advantages will also change (Vahlne, Johanson, 2020).

Success is not only experience and competences, but also the speed and ability to adapt to changing global conditions and the use and implementation of available technological tools in the company's operations.

2. Digital transformation and tools

Using modern digital tools like ChatGPT can significantly impact the quality of communication between companies and customers, both positively and negatively. Here are some aspects to consider:

Possibilities

1. Speed and availability

Tools like ChatGPT allow companies to respond to customer inquiries in real time, which significantly reduces the waiting time for an answer. AI automates many routine marketing tasks, like customer segmentation, email campaign management, and analyzing campaign results, saving time and resources.

2. Personalization

Thanks to advanced algorithms, these tools can analyze the history of customer interactions and adapt responses to individual needs and preferences, which builds more personalized relationships. AI helps create more personalized marketing campaigns by analyzing customer data. This allows companies to deliver content that matches individual preferences and behaviors.

3. Scalability

ChatGPT and similar technologies can handle many inquiries from different customers at the same time, allowing companies to effectively manage a large number of interactions without the need to hire additional staff. AI helps improve advertising campaigns in real time by adjusting strategies based on the analysis of results and user reactions.

4. Quality of answers

These tools can use a huge database, which allows them to provide precise and comprehensive answers to customer questions, even in complex matters. AI analyzes customer journeys, identifying key touchpoints and improving customer experiences at different stages of the buying journey

There are also barriers and challenges that are difficult for companies to implement AI tools.

Challenges and barriers

1. Lack of human touch

Automated responses can sometimes seem impersonal or unempathetic, which can lead to customer frustration, especially in more complicated or emotional situations.

2. Errors and imprecision

Despite the advanced technology, ChatGPT can sometimes provide incorrect or inadequate answers, which can affect customer trust in the company.

3. Dependence on technology

Too much reliance on digital tools can lead to the atrophy of interpersonal skills among employees and a weakening of the relationship between the company and the customer.

4. Data security issues

Storing and processing customer data by such tools is associated with the risk of violating privacy, which can lead to legal and reputational problems for the company.

The use of modern digital tools has the potential to significantly improve the quality of communication between companies and customers, offering fast, accessible and personalized support. However, to fully realize these opportunities, companies must also be aware of the challenges of automation and ensure that these technologies are used in a way that supports, rather than replaces, human connection and empathy. Digital transformation refers to the integration of digital technologies in all areas of a company's activity, which leads to fundamental changes in the way an organization operates and in delivering value to customers. The literature indicates that AI is one of the key elements of digital transformation, especially

in the context of communication with customers (Vial, 2019). Artificial intelligence in communication with customers is mainly used in the form of chatbots, virtual assistants and analytical tools that enable personalization and automation of interactions (Adamopoulou, Moussiades, 2020). Studies show that these tools can significantly improve the efficiency of communication, reducing response times and enabling customer service in different time zones (Kumar et al., 2019). AI-based tools can analyze large amounts of data, which allows for a better understanding of customer needs and adapting communication to their expectations (Davenport, Ronanki, 2018). On the other hand, the literature also highlights the challenges related to the lack of empathy and limited ability to deal with unusual situations (Huang, Rust, 2018). Communication with international customers brings challenges related to cultural and linguistic diversity. AI can help overcome language barriers, for example through automatic translations (Luo, Wiseman, 2021). However, the literature indicates that fully understanding the cultural context and linguistic subtleties is still a challenge for AI algorithms, which can lead to misunderstandings and reduced communication quality (Cui, Wu, 2017). Automation of communication with customers is a key factor, as AI brings many benefits, including reduced operating costs, increased service availability, and the ability to scale operations to international markets (Brynjolfsson, McAfee, 2017). AI tools also allow for better management of customer data, which leads to more precise market segmentation and better message targeting (Sharma, Sharma, 2020). Communication with customers, especially in global processes, is a significant factor for companies in the process of internationalization. The importance of AI activities is particularly visible in the advertising industry, where contact with the customer is direct and indispensable. The implementation of AI in companies, especially in the advertising industry, was driven by several key factors emphasized by industry professionals in Europe. The fact that AI can quickly generate new ideas and creative content, allowing agencies to explore more creative paths without the limitations of human capabilities alone, turned out to be important. Maintaining a competitive advantage, better efficiency, reducing costs and minimizing risk are also important (Fig. 2).

The advertising industry in Europe sees Gen AI as a transformative technology that enhances creativity, efficiency, personalization, and data-driven decision-making. As research continues to evolve, the benefits of Gen AI are likely to become even more pronounced, shaping the future of advertising strategies.

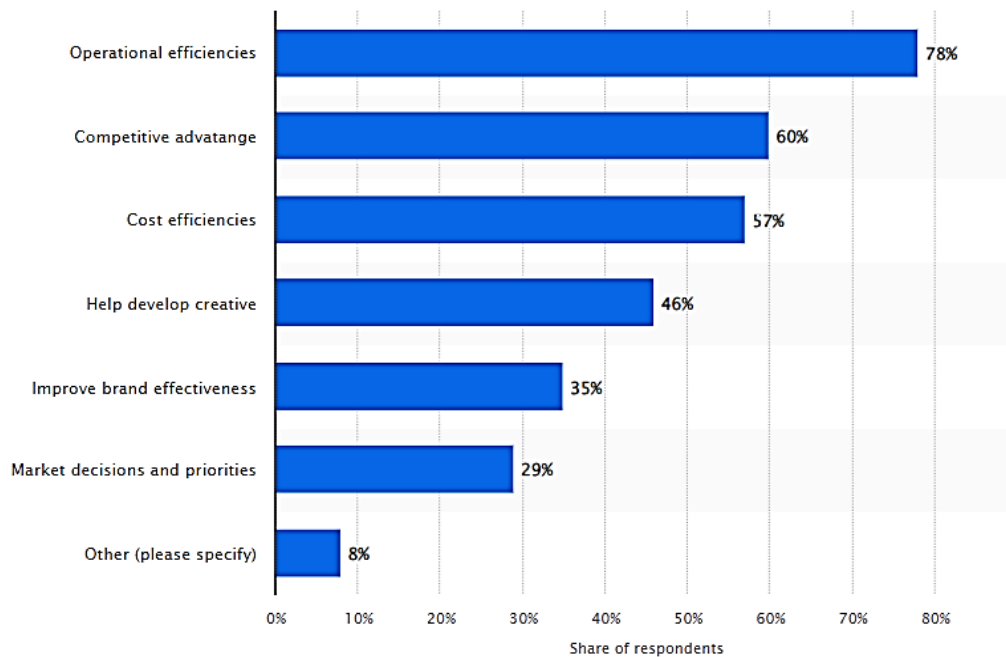


Figure 2. Reasons for generative artificial intelligence (gen AI) adoption by businesses according to advertising industry professionals in Europe as of February 2024.

Source: Statista, 2024.

While AI encompasses all technologies that simulate human intelligence, such as machine learning, pattern recognition, planning, and natural language processing, Generative AI focuses on creating new data (e.g. text, images, sounds) based on patterns learned from existing data. AI uses a variety of algorithms and models, such as regression, decision trees, neural networks, and Generative AI specifically uses generative models, such as GANs (Generative Adversarial Networks) and transformation models (e.g. GPT, BERT) (Russell, Norvig, 2016). In terms of applications, AI can be used for data analysis, process automation, classification, prediction, while Generative AI focuses on creating new content, such as generating text, images, music, and simulations (Bostrom, 2014). Generative AI is a specialized form of AI that focuses on creating new data and content, which has great importance in many fields. Considering the rapid technological growth, the implementation of individual tools is significant especially in such socio-economic areas as Sales of goods and services, Marketing, Finance, Supply chain management (process automation issues) and many others (Fig. 3).

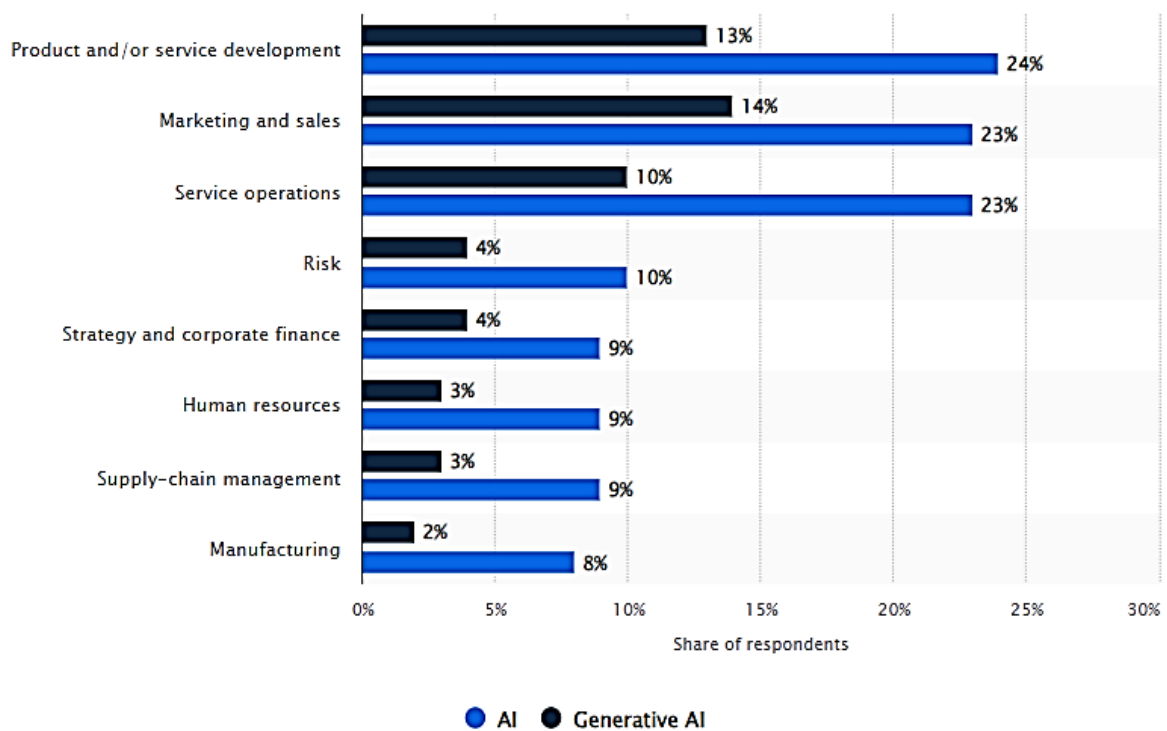


Figure 3. Artificial intelligence (AI) and generative AI adoption in businesses globally in 2023, by function.

Source: Statista, 2023.

3. Conclusion and discussion

The literature predicts further development and improvement of AI tools in the context of communication with customers. It is expected that future solutions will be even more integrated with everyday business processes, which will allow for even greater personalization and automation of communication (Wilson, Daugherty, 2018). Companies benefit from optimizing collaboration between humans and artificial intelligence. A survey of 1075 companies in 12 industries found that the more of these principles companies adopted, the better their AI initiatives performed in terms of speed, cost savings, revenues, or other operational measures (Fig. 4).

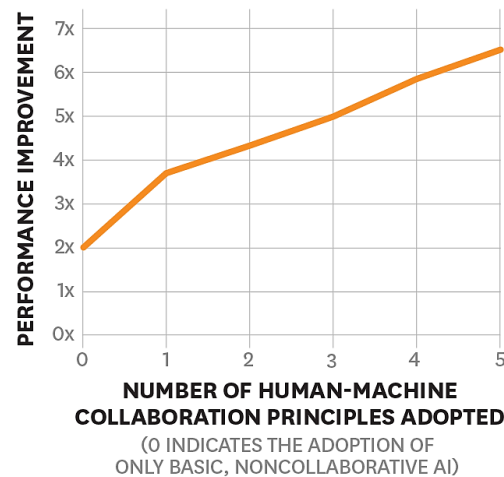


Figure 4. The Value of Collaboration.

Source: Wilson, Daugherty, 2018.

The presented literature review does not exhaust the topic of strategic challenges that companies implementing artificial intelligence face. After analyzing the presented research, it can be stated that artificial intelligence is one of the fastest growing trends in digital transformation, and the tools it offers allow for efficient, fast, effective and personalized communication with customers, especially in the international dimension. Additionally, it should be emphasized that barriers and limitations are an indispensable element of every transformation. In this aspect, opportunities should be sought to minimize risk, equipping especially management and employees with competences, knowledge and skills related to the use of new tools.

Integrating AI with internationalization processes is an extensive topic that shows both rapid technological progress (inevitable) as well as challenges and barriers that modern companies face. Companies themselves are looking for motivation and reasons to implement modern solutions related to artificial intelligence in their development strategies. However, it should be remembered that “Artificial intelligence can help scientists from various fields, from astronomy to genomics, analyze complex data, discover patterns, and conduct new research” (Kenchakkanavar, 2023, p. 223). However, the key aspect remains the topic of relationships and interactions with customers, because “there is a positive relationship between AI and customer experience” (Abu Daqar, 2019, p. 30). In terms of challenges and barriers, one of the main challenges when using AI-based tools in market research is confirming the quality of data. Data that is inaccurate, incomplete, or biased can lead to erroneous conclusions, negatively affecting business decisions. This is also mentioned by Soswa (2023), who states that data collected and provided by AI is not always accurate and reliable. The competences of managers and employees of the organization, which are related to the skills of managing and processing data obtained thanks to modern AI tools, are also important. Knowledge about the status of Polish companies in this area is still being updated and in further research will require a broader perspective not only related to the adaptation of entrepreneurs to new technological conditions, but also to the ability to manage these processes and their development in the long term.

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