

CONFLICT WITH AI: REVOLUTION IN BUSINESS CONFLICT MANAGEMENT

Radosław Ronowicz^{1*}

¹ University of Gdańsk, Department of Organization and Management, Poland

Abstract: The article focuses on the role of language models and use of artificial intelligence-based argumentation, such as ChatGPT, in managing business conflicts. The aim of the article is to demonstrate how modern AI systems, using natural language processing, can help managers and teams diagnose, analyze and resolve conflicts within an organization. Practical applications of technology, such as automatic mediation, the generation of negotiation strategies in addition to the analysis of emotions and intentions in communication between employees, were discussed. The article also explores how AI can help reduce cognitive errors that often complicate conflicts, and how models like ChatGPT can act as virtual assistants supporting conversations between parties in real time. Particular emphasis was placed on ethical challenges such as trust in autonomous systems, data privacy and the impact of algorithms on management decisions. In traditional ways of resolving conflicts, such as mediation or negotiation, an important role is played by humans and the ability to build relationships, trust and space to express one's own needs. Such a space promotes communication and argumentation in conflict, which may be difficult to ensure in the face of automation and digitization. The article ends with a discussion on the future of applications of such tools in business, their impact on traditional managerial roles and the potential risks associated with excessive dependence on artificial intelligence in conflict processes.

Keywords: AI, business activity, ChatGPT, conflict management, human resource management

JEL Classification: A13, H12, O15, O32

¹Radosław Ronowicz, PhD student, University of Gdańsk, Armii Krajowej 101, 81-824 Sopot, Poland, r.ronowicz@outlook.com, <https://orcid.org/0000-0002-3859-0080>

* Corresponding author: Radosław Ronowicz, r.ronowicz@outlook.com

Introduction

We are experiencing the rapid development of artificial intelligence (AI) technology and its growing role in various aspects of life. Using ChatGPT is no longer treated as it was at the beginning in terms of fun and learning about the possibilities of the technological novelty. We are increasingly testing this system to search for information and possible solutions. There is growing social awareness that AI technologies are advancing much further and their capabilities are much greater. The mere availability in almost every operating system on our computers and mobile phones brings us closer to the fact that artificial intelligence takes part in our daily lives. Conflicts in everyday life, and therefore also in professional life, are an inevitable element of business dynamics, often resulting from competition for resources, differences in strategies or diverse interests of the parties involved. Traditional conflict management methods such as mediation, negotiation, and interpersonal training, while effective, can be time-consuming and costly in complex corporate environments. The possibilities of using online platforms as tools for detecting conflicts, but also preventing and resolving them are already being used. Conflicts from real life not long ago moved into the Internet space in the form of discussions and disputes on Internet forums and they have a real impact on people's lives and cannot be underestimated (Greco & Jermini, 2024). In this context, new opportunities are emerging in terms of the automation and optimization of conflict management processes thanks to intelligent algorithms, including language models such as ChatGPT. The possibilities of using AI in managing business conflicts are attracting increasingly more attention.

The most innovative research in the field of conflict management points to the growing potential of AI to transform business models. Research conducted by McKinsey (2023) and Deloitte (2022) shows that companies which implement artificial intelligence in decision-making processes, including conflict management, achieve greater operational efficiency and a higher level of employee satisfaction. In business, artificial intelligence is seen as an application that enables effective problem solving and can be used to optimize work in accounting, robotics, neural networks and expert systems (Taha, 2021). Language models such as ChatGPT-4 can analyze data in real time, identifying early signs of conflict and providing personalized recommendations for dispute resolution strategies. Thanks to this, they can be included in various business models, from traditional companies based on hierarchical structures to modern, agile organizations operating in the “network-based” model. In addition, the implementation of AI opens the way to new business models, such as Conflict Management as a Service (CMaaS). In this approach, companies can use external, automated AI tools to monitor and solve problems, integrating them into their HR, CRM or project management systems (Zhao et al., 2020). These models can be particularly attractive for large, multicultural organizations, where conflicts can be global in scale, requiring rapid and accurate interventions.

The aim of the article is to analyze the role of artificial intelligence, with particular emphasis on models such as ChatGPT, in revolutionizing business conflict management. In addition to reviewing the latest research and technologies, the publication

explores the potential of new AI-supported business models, examining both the benefits and challenges of implementing them in diverse organizational environments.

Material and methods

The article is based on a review and analysis of selected literature on the subject. Several studies on the discussed issues were helpful in writing it. The main research method was a critical literature review, which was used to identify what has been studied in the given scientific issue.

The result of the literature review, along with a specialist assessment by the author, is a comprehensive understanding of the state of knowledge in the given research issue, in addition to the author's analysis of the resulting research and the possibilities of its application in practice. Due to the very large number of scientific publications describing this issue, the selection of literature items was carried out according to subjective intentional criteria.

Conflicts are common phenomena that occur in every space of people's lives. The most important tasks of conflict managers are to quickly and accurately assess the dispute and adjust the response. The rapid development of artificial intelligence can be a great ally to support this process. The aim of this study is to present the results of research on this topic and to propose a direction for artificial intelligence support in conflict management for both further scientific research and practical application.

When discussing the role and tasks of artificial intelligence, it must be recognized that all these issues considered together determine the wide range of its application, which on the one hand, fascinates with its capabilities, and on the other hand, causes concern about losing control over it or simply losing humanity. Depending on the perspective of research interests, attention can be focused on a narrower or broader scope of the presented issues. In accordance with the author's interests, the article focuses on the essence of conflict management and the possibility of its support by artificial intelligence. The author also intends to demonstrate the relationship between conflict management and the abilities of modern technology.

The role of artificial intelligence in modern management: the evolution of Peter Drucker's concept

Peter Drucker, repeatedly recognized as an authority in the field of management, constantly emphasized that people are the most important in an organization. It is the ability to cooperate and build relationships between employees and leaders that makes the strength and competitive advantage in the market. In the light of digitalization and the increasing dependence of the organization on information management, the role of skillfully combining the human factor with information systems is growing (Drucker, 1988). Drucker drew attention to the fact that conflicts in organizations are inevitable, but they do not have to mean something negative. On the contrary, skillfully managed, they can bring many benefits. It is not enough for the management to establish a solid framework of the organizational structure but to be

flexible and able to adapt to changes (Drucker, 2020). Modern organizations face many challenges such as constantly changing conditions, increasingly aggressive competition, rapidly changing trends and galloping technological progress (Kłoczko, 2024). In the face of so many challenges, conflict is only one of the many aspects that managers struggle with, but it is an aspect that is becoming ever more important. The new reality forces management not only to manage traditional conflicts between employees, but also problems arising from multiculturalism, remote work and globalization. In this context, AI can become an ally on the new battlefield and play a significant role in facilitating conflict analysis and management, especially in large and complex organizations where human analysis capabilities may prove insufficient.

AI has the potential to significantly change the way conflicts are managed in organizations, providing tools to analyze employee interactions and identify potential sources of conflict at an early stage. Modern machine learning algorithms are able to analyze team communication and social media interactions. Such algorithms are already used and can bring many benefits. For example, they were used by President Barack Obama's election staff in 2012. Following the example of predictive analysis used by companies such as Netflix, Amazon and Google, the behavior of voters in managing election campaigns and better targeting potential undecided voters has been analyzed for many years. With success (Perry, 2013), AI systems can analyze communication patterns in a team, identifying areas where there are misunderstandings or a lack of effective collaboration. AI can also help neutrally monitor employee feedback and suggest conflict resolution strategies based on historical data and current trends in the organization. It is possible to use the OpenAI platform, ChatGPT on which the performance of The Project Pal can be improved using the TDCR module. The author of the publication, *Team dynamics and conflict resolution: Integrating Gen AI in project-based learning to support students' performance*, used Project Pal to plan a project, assign tasks to team members, effectively manage time, promote team dynamics and help resolve conflicts (Aref, 2024). AI not only helps identify conflicts, but also allows one to recommend specific actions for managers, which is in line with Drucker's idea of the famous "goal-by-goal management". According to Drucker, the goal of leaders should be to set clear goals for teams and help them achieve them, and AI can support these processes by providing accurate data on team performance and how conflicts affect their achievements.

Drucker always emphasized the importance of people in an organization and believed that technology should be used to support, not replace, human work (Drucker, 2012). In the AI era, its concepts are evolving, including new technological tools as support for human decision-making and management. AI can help leaders make more informed decisions based on accurate data, which is consistent with Drucker's approach to knowledge-based management. On the other hand, AI technology raises a number of doubts and is considered as a tool for dehumanizing work. Drucker pointed out that one of the main tasks of the leader is to build trust and commitment in the team. What if the importance of AI systems begins to dominate? We are already observing a change in the way we communicate. Previous face-to-face conversations or phone calls are being replaced by Internet messages and chats.

Their importance increased after the COVID-19 pandemic, popularizing meetings and business conferences on online platforms. Currently, not only conferences have moved to the Internet but also training, consultations and even mediation as well as psychological advice. Therefore, managers must strike a balance between the use of technology and the human approach to management. Examples of the practical applications of AI in conflict management include managerial decision support systems that analyze teamwork and communication data, suggesting corrective actions. In addition, AI-based systems can support conflict mediation processes through automated recommendations for solutions based on the analysis of similar cases. Thanks to this, leaders can use the best practices developed on the basis of thousands of previous solutions, which increases the effectiveness of managerial activities (Aydogan et al., 2021). Artificial intelligence has the potential to revolutionize conflict management by providing leaders with advanced tools to analyze, monitor and solve problems within the organization. Nevertheless, it is crucial that this technology supports rather than substitutes human leadership and intuition. The evolution of Peter Drucker's concept in the AI era shows that despite technological advances, the basic principles of management, such as management by objectives, building trust and cooperation, remain valid. AI can only strengthen these rules if it is applied wisely.

Conflict management with artificial intelligence: from theory to practice

Conflict management is a key aspect of effective organization management. Traditional conflict resolution methods were based on the interpersonal skills of conflict managers or facilitators. Nonetheless, the development of technology, especially artificial intelligence, introduces new dynamics for conflict resolution. Using artificial intelligence to analyze data on human interactions, anticipate conflicts, and offer automated recommendations for managers, is a very helpful tool. This section aims to explore the role of AI in conflict management in organizations, look at the practical implementations of these solutions and compare them with classic conflict management theories.

Conflict management has been based on theories of interpersonal relationships for years. One of the concepts of conflict resolution styles is the analysis of interactions between individuals and their ways of responding to tensions in teams. According to these theories, the key to resolving a conflict is to understand the needs and expectations of the parties and to apply an appropriate style of conflict management, e.g. avoidance, cooperation or compromise (Rahim, 2003). However, as organizations become more complex and culturally diverse, and remote work as well as distributed teams become the norm, traditional conflict management methods become less effective. In this context, AI offers new opportunities to support conflict management processes by analyzing data in real time, identifying problems at an early stage and suggesting appropriate interventions. Artificial intelligence in the context of conflict management uses machine learning techniques in addition to natural language processing to monitor human interactions and detect potential tensions. The possibilities of using artificial intelligence for conflict management are shown in Figure 1.

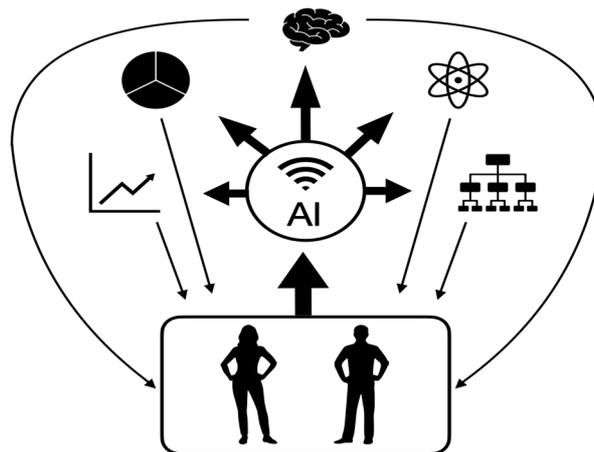


Figure 1. Using artificial intelligence for conflict management

Source: Author's own elaboration based on conducted research

Figure 1 shows an illustrative, theoretical scheme in which managers query AI on topics such as data analysis, human interactions, machine language processing components, learning ability, potential tensions, or human interactions in teamwork. The query is analyzed by the selected application, which, depending on the topic, may concern a different specialization. Then the prepared report returns to the managers, who analyze it and make appropriate decisions based on it. The scheme is, of course, very simplified, but it fits into Peter Drucker's philosophy in which the manager looks for new opportunities for development, learning and new tools to support management. Nonetheless, the result of this search returns to man so that he can finally decide how and to what extent he will use the content of this report. One of the artificial intelligence tools used to monitor communication and conflict management is the AI-driven Conflict Management model.

The AI-driven Conflict Management (AI-DCM) model is based on several key components: communication monitoring – AI monitors ongoing communication within teams by analyzing the tone, language, and frequency of interactions to identify changes that may indicate upcoming conflicts. Based on data from HR systems, AI can identify changes in employee engagement, productivity or job satisfaction, which is often a signal of tension and dissatisfaction. Examples of implementing AI for conflict management appear in many modern organizations. For example, Google and Microsoft have introduced team dynamics monitoring tools that use sentiment analysis to monitor employee sentiment and predict potential problems. Such tools are particularly useful for managing remote teams, where the lack of a manager's physical presence can make it difficult to recognize team tensions (Cooper, 2020). Another example is IBM Watson, which was designed to analyze internal communications and recognize early signs of conflict while suggesting possible solutions to leaders. Watson can analyze both formal and informal communication channels, such as chats, emails and team meetings, offering insight into which

areas require attention. It is also worth noting that artificial intelligence systems could be used outside the business environment, such as for conflict management in diplomacy or even for early warnings of armed conflicts (Hossain et al., 2024). Artificial intelligence brings new possibilities to conflict management, enabling the real-time monitoring of human interactions and providing objective recommendations based on data analysis. Nevertheless, its use is associated with ethical challenges and the need to maintain a balance between technology and the human aspect of management. In the future, organizations that successfully introduce AI into conflict management will have an advantage in creating more harmonious and productive work environments.

The main advantage of using AI in conflict management is the ability to analyze huge amounts of data in real time, which allows managers to respond faster to potential problems. AI algorithms can also provide more objective, data-based recommendations, which minimizes the risk of subjectivity or bias that may occur when decisions are made solely by people, making it a valuable tool for creating value in an organization.

Business model transformation: artificial intelligence as a value creation tool

The dynamic development of technology, especially artificial intelligence, is changing the way organizations function and decisions are made. In conflict management, AI becomes not only a supporting tool, but also a fundamental element in the transformation of business models, affecting the way companies create and deliver value. The purpose of this section is to analyze how AI can create value through effective conflict management, supporting leaders in building more cohesive and efficient teams in addition to better allocation of resources. Business models are fundamental tools to describe the way an organization works, integrating various aspects of strategy, structure and processes (Czarnacka-Chrobot, 2018). For decades, traditional models based on hierarchies and established decision-making paths dominated, but the development of digitalization and AI has forced revolutionary changes in this field (Teece, 2018). In today's globalized world, value is no longer generated only by material resources, but also by the organization's ability to effectively manage information and interpersonal relationships, including conflict management. Conflicts are inevitable in any organization, especially in environments where teamwork and innovation are crucial to success. Of course, it is difficult to define one business model. In general, such a model could be presented as a tool containing a set of elements and relationships between them depicting the way the organization acts and behaves in relation to changing environmental conditions (Brzóska, 2009). Based on such assumptions, a general drawing can be prepared illustrating the systemic business continuity. To construct the general model, the employed assumptions were that the business model is a system and the system is the relationships of components that occur as a platform for network development (Jabłoński, 2014). Figure 2 shows the business model based on the model according to A. Afuah.

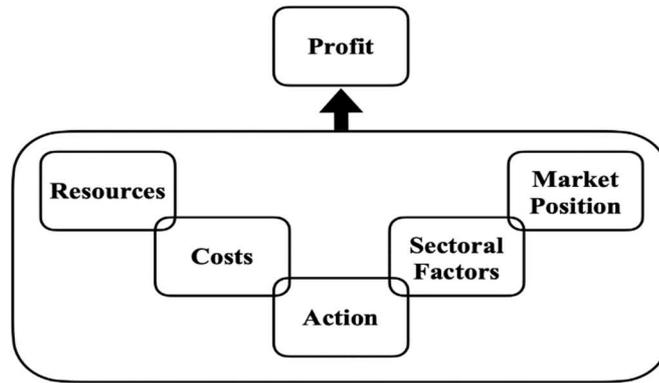


Figure 2. Business model according to A. Afuah

Source: (Wierziński, 2016)

Figure 2 above shows the business model according to A. Afuah presenting the company's actions in relation to the choices made, which in turn are the result of answering the questions: What actions does the company intend to perform? How are the selected activities to be performed? When are the selected actions to be performed? The analysis of answers can help create above-average value for customers and gain such a position on the market that will help generate high profit (Wierziński, 2016). The way value for customers is generated is influenced by many factors, including various changes taking place in the company's business environment. These changes take place within the platform and the result of the correlation of the components included in it is profit. A conflict should be added to the above model, but not as another relationship, i.e. a single component, but as a system platform that can be a background for the functioning of other components. Then the model would look like Figure 3.

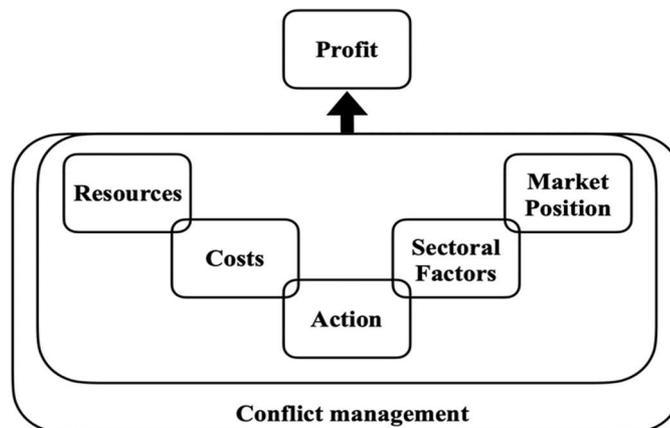


Figure 3. Business model according to A. Afuah taking into account environment in which conflict management takes place

Source: Author's own elaboration based on (Wierziński, 2016)

Figure 3 shows two platforms, the first of which is the sum of the relationships of individual components, and the second takes into account the possibility of conflicts at each stage of these relationships. Conflict management takes place on an ongoing basis and sometimes in the background of the company's operating processes. However, taking into account conflict management guarantees the optimization of decisions in the event of conflicts and making decisions that will maintain an unwavering process chain resulting in the undisturbed functioning of the organization. The above scheme is a traditional model that does not take into account artificial intelligence. Artificial intelligence is entering conflict management as a tool that allows more precise monitoring, analysis and prediction of potential problems. The use of artificial intelligence for conflict management was presented in Figure 1. It is worth adding that the term artificial intelligence is defined as a machine capable of perception, logic and learning. In addition, machine learning can develop without explicit programming, and its abilities can be used to solve complex problems. There is therefore a strong link between artificial intelligence and innovations implemented by organizations (Jabłoński & Jabłoński, 2023). The inclusion of managers' consultation with artificial intelligence applications could be included through the transformation of the traditional business model and would be like in Figure 4.

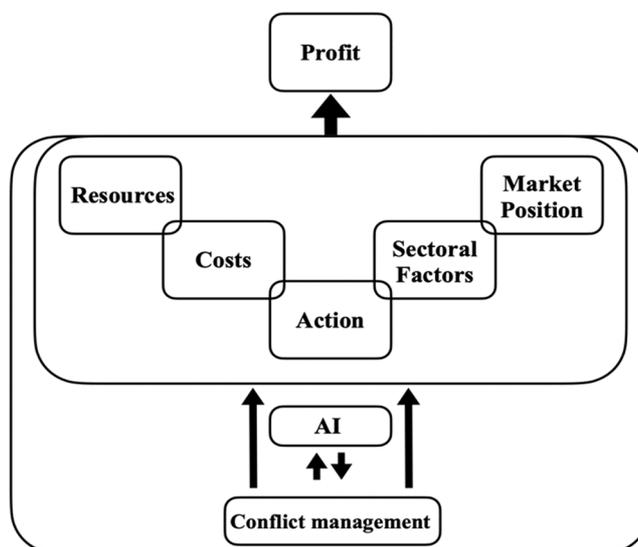


Figure 4. Business model according to A. Afuah after transformation taking into account the environment in which conflict management occurs, and artificial intelligence systems

Source: Author's own elaboration based on (Wierzbński, 2016)

Figure 4 includes traditional conflict management, but a decision consultation or data collection component from artificial intelligence has been added. Thanks to precise data analysis, organizations are able to better allocate resources by optimizing

team structure and decision-making processes. With its ability to monitor and analyze real-time interactions, AI can improve the efficiency of teams, which directly translates into the organization's financial results.

The introduction of AI into conflict management can bring many values, such as increasing operational efficiency but also accelerating the process of identifying and resolving conflicts. Some companies such as Amazon, Apple, Facebook, Google and Microsoft create digital systems by combining multiple business models and use them by mobilizing the appropriate resources, and most importantly, transforming their organizations by adding the possibilities that platforms represent, in particular for managing complementarities in the ecosystem (Kawalec, 2021). Data analysis based on artificial intelligence algorithms is very fast. Of course, the final decision to use this data and to verify it rests with the manager who handles the conflict. Another value is the analysis of large amounts of data as well as an objective assessment of conflict situations without subjective human prejudices. Algorithms can suggest data-based solutions, without the influence of emotions or subjective beliefs, which leads to the fairer treatment of parties. The use of artificial intelligence to resolve conflicts and problems in an organization therefore provides many benefits and may represent a competitive advantage in the future. Nevertheless, the mere integration of current systems with artificial intelligence and knowing how to use them can be a major challenge for the organization.

Conflict with artificial intelligence: selected challenges and opportunities

The use of artificial intelligence in conflict management in an organization is becoming an increasingly popular solution, offering new tools for identifying, diagnosing and resolving conflicts. Nonetheless, like any new technology, it brings both opportunities and challenges. One of the main advantages of AI is its ability to analyze large data sets that can be difficult to process by humans in real time. AI algorithms can analyze employee interactions, such as email communication or messages in CRM systems, and pick up signs of potential conflicts. Research shows that the early detection of conflicts allows more effective intervention and prevents escalation of the problem.

The results of one of the recent scientific studies on the use of artificial intelligence for conflict management is the development and testing of the AI4PCR application, which, using machine learning and natural language processing, can suggest to analyze data, and on their basis, suggest to the user whether a given problem can cause conflict. In the absence of such a threat, the application will respond that the described situation looks good. The basis of the algorithm is skillful communication based on cooperation without judging, blaming or negative emotions (Hsu & Chaudhary, 2023). According to the authors of the aforementioned publication, research on the application was promising, which shows that the use of artificial intelligence to support conflict resolution is not only possible, but also that the market for this type of solutions will grow. A solution such as this can be successfully used both among novice team managers in the IT industry and among experienced managers in other sectors who feel the need for support in developing soft skills.

However, using artificial intelligence in an organization is not only connected with the benefits arising directly from aspects related to conflicts. The development of new technologies can bring opportunities in many other areas of the organization. They can be the possibility to adjust the offer to the customer's expectations more precisely, to reduce the level of costs, increase the speed of data analysis, improve decision-making processes and to improve internal controls. The use of digital tools utilizing artificial intelligence also affects the reputation of the organization in the eyes of customers and builds the image of a modern company. One example of a company that has opted for such solutions and used the opportunity to reduce costs as well as increase the speed and efficiency of work is the American bank JP Morgan Chase & Co, whose technology based on artificial intelligence is able to review about 12,000 documents in just a few seconds (Ziółkowska, 2023). The opportunities offered by the possibility of employing artificial intelligence are therefore obvious. With the development of these systems, there may be progressively more benefits. One of the aspects that organizations are increasingly paying attention to in addition to technological development is environmental issues. It turns out that artificial intelligence systems can also be used for ecological purposes (Knosala, 2023). Among the many opportunities for development and benefits from the implementation of artificial intelligence into management systems in an organization, the question of ethics arises. Is it moral and honest to make decisions on the basis of which people and their relationships and conflicts will be guided? This question is already known from other fields of new technologies and is asked whenever the subject of robotics, automation and digitalization replaces the work done by people. This topic is already being dealt with by the AI ethics industry, which is growing as fast as the artificial intelligence resources themselves (Gasparski, 2019). Taking into account the benefits to date from what progress has brought to people's lives, the more important question seems to regard what challenges people face to properly use artificial intelligence.

In the light of rapid development and the benefits of artificial intelligence, the challenges associated with it can be divided into two groups. The first, technical, is the capabilities of current systems and the skills of programmers to implement AI for current work. The second is mental in nature and aims to convince managers that using artificial intelligence in decision-making is possible and that it brings many benefits. While the first challenge seems to be solved by its own environment, the second may take longer. Artificial intelligence is a part of computer science that refers to the way of simulating the intelligence characteristics of the human brain, which allows the provision of a variety of methods, techniques and tools for modeling and solving problems by simulating the behavior of cognitive subjects (Różanowski, 2007). Knowledge on this subject can be fascinating on the one hand, but on the other hand it can raise numerous questions about the dangers of working with artificial intelligence. In fact, from the moment ChatGPT was released and the first discussions about artificial intelligence, we can talk about great enthusiasm and high expectations for AI. However, each time there are also doubts about the benefits of AI. Potential problems and threats include: the possibility of manipulating people by creating false, distorted audio and video content, taking actions that interfere with

civil rights and obligations, the threat of technological attacks and the continuous control of users of various systems, and again, issues of legal and ethical responsibility (Siuta-Tokarska, 2021). The thesis about the seriousness of the situation related to AI threats is clearly confirmed by the report commissioned to a group of experts by the US Department of Foreign Affairs, which is based on substantive conversations conducted with over 200 experts – heads of leading AI developing companies and renowned researchers of cybersecurity problems. Among the interlocutors were, bosses and main persons responsible for the development of technology in such companies as OpenAI, Google DeepMind, Meta or Anthropic and the situation presented in the report is alarming. According to the report, AI is a real threat to all of humanity and the seriousness of this thesis was added by Geoffrey Hinton himself, considered the “father” of AI, who stated in a recent interview that the possible criminal use of AI in the next three decades has at least a 10% chance of the total annihilation of humanity (Kleiber, 2024). These threats seem to be real since they already occur in the indicated areas, i.e. audio-video processing, searching for legal gaps in the provisions of laws as well as gaps in the security of technological systems. Some of the aspects concerning digital competences related to AI were raised some time ago by the European Commission, which assumes that digital competence should be understood as necessary for lifelong learning (Charchuła, 2024).

Taking into account the above doubts, it is worth noting that this problem is also the subject of the latest research. Many publications point out that with the increase in the use of artificial intelligence for conflict management, the discrepancy between human and artificial intelligence may increase, and thus differences in the assessment of the risk of conflict. Therefore, there may be a conflict with artificial intelligence itself. In one of the articles, an approach to modeling a strategy for resolving conflicts between humans and artificial intelligence through a platform supporting this cooperation and a mechanism that increases intelligence was presented (Wen & Khan, 2024, p. 1). The search for innovative models developing human-aid interactions with artificial intelligence can effectively combine traditional methods of conflict resolution with innovative technologies. The use of such technologies and their further testing can increase the security of these systems.

The importance of cooperation between man and artificial intelligence seems to be growing, and with it more doubts and the search for new solutions. This vastness of questions leads to augmented activity on increasing attention and scientific research in this direction.

Conclusions

Artificial intelligence is gaining progressively more importance in the business world, transforming not only the operational aspects of management, but also the approach to key challenges such as conflict management. The publication presents how modern algorithms, including language models such as ChatGPT, are revolutionizing traditional management models, enabling a more effective, data-driven approach to dispute resolution in organizations. Referring to Peter Drucker's theory, it was emphasized that artificial intelligence fits into his vision of the enterprise as

a results-oriented and process-oriented organism. The use of AI for conflict management not only enables a faster and more precise diagnosis of problems, but also supports leaders in making better decisions and promoting innovation through a constructive approach to disputes. The article also explores new business models such as Conflict Management as a Service (CMaaS), which can become the future of management in complex, global organizations. At the same time, attention was drawn to the challenges posed by the implementation of AI, including ethical issues, the adaptation of organizational culture and change management. In the face of the technological revolution, leaders must face not only the technological aspects of transformation, but also the social and operational consequences of integrating artificial intelligence into management processes. Human relationships are complex phenomena, especially in the context of conflicts. To better understand these phenomena, experts also focus on non-verbal communication and argumentation (Kjeldsen & Gelang, 2023).

In conclusion, AI has the potential to revolutionize conflict management in business, introducing new opportunities for organizations that strive for greater efficiency and a better understanding of their internal processes. Nevertheless, the success of this transformation will depend on the ability of leaders in the sustainable and ethical implementation of new technologies in addition to the adaptation of organizational structures to the upcoming changes.

References

- Aref, E. (2024). *Team dynamics and conflict resolution: Integrating Gen AI in project-based learning to support students' performance*. Western Michigan University.
- Aydogan, R., Baarslag, T., & Gerding, E. (2021). Artificial intelligence techniques for conflict resolution. *Group Decision and Negotiation*, 30(4), 879-883. DOI: 10.1007/s10726-021-09738-x
- Brzóska, J. (2009). Model biznesowy – współczesna forma modelu organizacyjnego zarządzania przedsiębiorstwem. *Organizacja i Zarządzanie*, 2(6), 12-17.
- Cooper, R. G. (2020). *The AI transformation or product innovation*. Institute for the Study of Business Markets, Pennsylvania State University, Smeal College of Business Administration, USA & DeGroote School of Business, McMaster University.
- Charchuła, J. (2024). Uniwersytet w dobie sztucznej inteligencji – szanse i zagrożenia. *Horyzonty Wychowania*, 23(65), 79-87. DOI: 10.35765/hw.2024.2365.09
- Czarnačka-Chrobot, B. (2018). Sztuczna inteligencja w ekonomicznych systemach diagnostycznych. *Roczniki Kolegium Analiz Ekonomicznych / Szkoła Główna Handlowa*, 50, 79-106.
- Drucker, P. F. (1988). The coming of the new organization. *Harvard Business Review*, 66.1988(1), 45-53.
- Drucker, P. F. (2012). *Management challenges for the 21st century*. Routledge.
- Drucker, P. F. (2020). *The essential Drucker*. Routledge.
- Gasparski, W. W. (2019). AI przedsiębiorczość: sztuczna inteligencja jako wyzwanie dla prakseologii i etyki biznesu. *Prakseologia*, 161, 253-270. DOI: 10.7206/prak.0079-4872_2015_160_26
- Greco, S., & Jermini, Ch. (2024). Integrating conflict prevention tools into deliberative democracy online platforms. In: A. Hautli-Janisz, G. Lapesa, L. Anastasiou, V. Gold, A. De Liddo, Ch. Reed (Eds.), *Proceedings of the First Workshop on Language-driven Deliberation Technology (DELITE)@LREC-COLING 2024* (p. 39-44).
- Hossain, M. A., Azim, K. S., Jafor, A. H. M., Shayed, A. U., Nikita, N. A., & Khan, O. U. (2024). AI and machine learning in international diplomacy and conflict resolution. *Advanced International Journal of Multidisciplinary Research*, 2(5). DOI: 10.62127/aijmr.2024.v02i05.1095

- Hsu, A., & Chaudhary, D. (2023). AI4PCR: Artificial intelligence for practicing conflict resolution. *Computers in Human Behavior: Artificial Humans, 1*, 100002. DOI: 10.1016/j.chbah.2023.100002
- Jabłoński, A. (2014). Myślenie systemowe i sieciowe w konstruowaniu modeli biznesu. *Kwartalnik Nauk o Przedsiębiorstwie, 31*(2), 43-49.
- Jabłoński, A., & Jabłoński, M. (2023). Sztuczna inteligencja (AI) w kształtowaniu cyfrowych modeli biznesu pozytywnie wpływających na zmiany klimatyczne. In: L. Kieltyka (Red.), *Wykorzystanie technik informacyjnych w zarządzaniu* (p. 201-211), Wydawnictwo Politechniki Częstochowskiej.
- Kawalec, P. (2021). Transformacja cyfrowa: szanse i wyzwania dla przedsiębiorstw. *Nowe Tendencje w Zarządzaniu, 1*, 45-69. DOI: 10.31743/NTZ.13191
- Kjeldsen, J. E., & Gelang, M. (2023). Nonverbal communication as argumentation: The case of political television debates. *Argumentation and Advocacy, 60*(1), 18-37. DOI: 10.1080/10511431.2023.2294236
- Kleiber, M. (2024). Niekontrolowany rozwój AI jest zagrożeniem dla ludzkości. *Kwartalnik Nauka, 2*, 91-94. DOI: 10.24425/nauka.2024.151207
- Kłoczko, A. (2024). Wykorzystanie sztucznej inteligencji w zarządzaniu organizacją jako potencjał obniżenia kosztów. *Zeszyty Naukowe Politechniki Częstochowskiej. Zarządzanie, 55*, 61-77. DOI: 10.17512/znpocz.2024.3.05
- Knosala, B. (2023). Zarządzanie środowiskiem naturalnym przez sztuczną inteligencję. Ograniczenia i wyzwania narracji postnatury. *Ethos, 36*(4(144)), 127-145. DOI: 10.12887/36-2023-4-144-1036(144)
- Perry, C. (2013). Machine learning and conflict prediction: A use case. *Stability: International Journal of Security & Development, 2*(3):56, 1-18. DOI: 10.5334/sta.cr
- Rahim, M. A. (2003). Managing conflict in organizations. In: *Construction conflict management and resolution* (p. 370-379). Routledge.
- Różanowski, K. (2007). Sztuczna inteligencja: rozwój, szanse i zagrożenia. *Zeszyty Naukowe Warszawskiej Wyższej Szkoły Informatyki, 2*, 1090-135.
- Siuta-Tokarska, B. (2021). Przemysł 4.0 i sztuczna inteligencja: Szansa czy zagrożenie dla realizacji koncepcji zrównoważonego i trwałego rozwoju?. *Nierówności Społeczne a Wzrost Gospodarczy, 65*, 7-26. DOI: 10.15584/nsawg.2021.1.1
- Taha, S. (2021). *The effect of automation on employment within the accounting industry: A case study in Deloitte San Francisco* (doctoral thesis). Alliant International University.
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning, 51*(1), 40-49. DOI: 10.1016/j.lrp.2017.06.007
- Wen, H., & Khan, F., (2024). A risk-based model for human-artificial intelligence conflict resolution in process systems. *Digital Chemical Engineering, 13*, 100194. DOI: 10.1016/j.dche.2024.100194
- Wierziński, M. (2016). System zarządzania dokonaniem a model biznesowy. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, 442*, 533-551.
- Zhao, X., Vaddadi, B., Sjöman, M., Hesselgren, M., & Pernestål, A. (2020). Key barriers in MaaS development and implementation: Lessons learned from testing Corporate MaaS (CMaaS). *Transportation Research Interdisciplinary Perspectives, 8*, 100227. DOI: 10.1016/j.trip.2020.100227

Authors Contribution: Radosław Ronowicz – 100%.

Conflict of Interest: No conflict of interest.

Acknowledgements and Financial Disclosure: The lack of funding.

KONFLIKT ZE SZTUCZNĄ INTELIGENCJĄ: REWOLUCJA W ZARZĄDZANIU KONFLIKTAMI BIZNESOWYMI

Streszczenie: W artykule skoncentrowano się na roli modeli językowych oraz wykorzystaniu argumentacji w oparciu o sztuczną inteligencję, jak ChatGPT, w zarządzaniu konfliktami biznesowymi. Celem artykułu jest pokazanie, jak nowoczesne systemy AI wykorzystujące przetwarzanie języka naturalnego mogą wspomagać menedżerów i zespoły w diagnozowaniu, analizowaniu i rozwiązywaniu konfliktów wewnątrz organizacji. Omówiono praktyczne zastosowania technologii, takie jak automatyczne mediacje, generowanie strategii negocjacyjnych oraz analiza emocji i intencji w komunikacji między pracownikami. Zbadano również, jak AI może przyczynić się do zmniejszenia błędów poznawczych, które często generują konflikty, a także jak modele takie jak ChatGPT mogą działać jako wirtualni asystenci wspierający rozmowy między stronami w czasie rzeczywistym. Szczególny nacisk położono na wyzwania etyczne, takie jak zaufanie do autonomicznych systemów, prywatność danych i wpływ algorytmów na decyzje zarządcze. W tradycyjnych sposobach rozwiązywania konfliktów, takich jak na przykład mediacje lub negocjacje, ważną rolę odgrywa człowiek oraz umiejętność budowania relacji, zaufania i przestrzeni do wyrażania własnych potrzeb. Taka przestrzeń sprzyja komunikacji i argumentacji w konflikcie, o którą być może trudno jest zadbać w obliczu automatyzacji i cyfryzacji. Artykuł kończy dyskusja na temat przyszłości zastosowań takich narzędzi w biznesie, ich wpływu na tradycyjne role menedżerów oraz potencjalnych zagrożeń związanych z nadmiernym uzależnieniem od sztucznej inteligencji w procesach konfliktowych.

Słowa kluczowe: sztuczna inteligencja, działalność gospodarcza, ChatGPT, zarządzanie konfliktem, zarządzanie zasobami ludzkimi

Articles published in the journal are made available under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International Public License. Certain rights reserved for the Czestochowa University of Technology.

