# ORGANISATIONAL COMMUNICATION IN THE AGE OF ARTIFICIAL INTELLIGENCE DEVELOPMENT.

# OPPORTUNITIES AND THREATS

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**Abstract**

*Organisational communication in the age of artificial intelligence (AI) development is an opportunity but also a challenge. Thanks to the changing media space and the development of technology, it is possible to automate work, increase the effectiveness and power of influence and distribution of content. However, they also raise questions concerning risks, ranging from those associated with the social area (reducing the number of jobs) to the ethics of communication and the ethics of the professional profession of public relations (still PR ethics or the AI ethics in PR). The article will outline the opportunities and concerns resulting from the use of AI in communication of an organisation.*

**Introduction**

Organisational communication is subject to constant change. Its professional and strategic understanding implies a number of decisions in different areas, such as organisational (Who does this? Why? Who is the communication with?), financial (An organisation's own activities or outsourcing?) or evaluation (How to define the objectives of communication and how to evaluate the activities). Hence, processes understood in this way are treated as a communication strategy of an organisation, which is part of its management strategy. [Kaczmarek-Śliwińska, 2013, p. 56].

We are witnessing transformations of communication processes caused not only by socio-organisational changes, but also by technological ones. Since the 1990s we have been observing a changing communication space as a result of the emergence of the Internet and its use in the functioning of organisations [Kaczmarek-Śliwińska, 2010, p. 30]. The beginning of the 21st century brought about a transformation of media relations, both in the internal and external perspective of organisations. Dueto new ways of communicating, the recipients of messages from organisations have been given the

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opportunity to switch to the role of the recipient-sender. This change, in turn, has significantly changed media space (the possibility of creating multi-level relations), an organisation's activities towards its recipients (increasing the importance of the so-called online opinion leaders), as well as towards institutional media (the role of gatekeeping is less significant and the importance of an organisation's own media is growing). [Kaczmarek-Śliwińska, 2015, p. 175-176].

In recent years, artificial intelligence (AI) has been observable in communication strategies of organisations. On the one hand, we can see the appreciation of opportunities created by AI; on the other hand, there are doubts related to impact on human resources as well as ethical doubts caused by the effects of AI activities.

The article will discuss the impact of artificial intelligence on the communication processes of organisations and the mediatisation of social and political discourse, as well as the benefits and risks associated with it. The disquisition will be carried out using the desk research technique, which involves the analysis of already available data from various sources (the press, the Internet, analytical reports) and their cross-verification, as well as finding possible convergent or divergent points.

### Organisational communication and artificial intelligence

According to Oxford Dictionary, artificial intelligence is "the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages" [Oxford Dictionary, 2019].

Artificial Intelligence (AI) is systems or machines which imitate human intelligence while performing tasks and can interactively improve on the basis of information gathered. Describing the benefits of AI, Oracle points out that it is more about the process

and the potential for supported thinking and data analysis rather than a specific format or function. What is indicated as the purpose of the use of artificial intelligence is a significant increase in human capabilities, not a replacement for them. The importance and value of the use of artificial intelligence in organisational activities is presented in such important categories that, according to Oracle, it is increasingly qualified as one of the most valuable assets of an enterprise [Oracle, 2019, What is artificial intelligence?]

The issue raised by Oracle - replacing people by artificial intelligence instead of indicating the opportunities of use to increase the potential or effectiveness of actions - can create barriers to obtaining information about AI and implementing it in particular areas of activity. For this reason, it is so important to educate the youngest, for whom AI will be a natural tool for work, and to build awareness among people currently active in the labour market. P. Łaszczyca writes: "It is obvious that civilisation is now shifting from the stage of manual control of machines and supporting body and brain functions with specialized prostheses to the stage of replacing human activities with activities of artificial intelligence. The coexistence of biological, self-aware intelligence with hard artificial intelligence, equipped with consciousness and motivation, is an object of concern as a field of dramatic competition and the imminent Armageddon. However, the status of a cybernetic competitor of man requires a separate characterisation of the foundations of biological and electronic intelligence. [2017, p. 63].

The McKinsley report provides a similar perspective: "In the future, the development of artificial intelligence is likely to focus on cognitivism, a set of technologies that mimic the way information is processed in the human brain and improve the quality of human decision-making." [2018, p. 10].

The above considerations may indicate that there is no competition between biological and electronic intelligence, yet there is a need to define a role for each of them.

It should also be mentioned that only a few years ago, the anti-AI voices strongly

emphasized the problem of people losing their jobs due to the involvement of artificial intelligence. In an article published in Harvard Business Review in 2017 ("How Companies Are Already Using AI"), Satya Ramaswamy quoted a study done at Oxford University in 2013. It predicted that 47% of jobs could be automated by 2033. S. Ramaswamy observed that short-term forecasts were also quite negative: the 2016 Organisation for Economic Co-operation and Development (OECD) report found that 9% of jobs in the 21 member countries could be automated, while in January 2017, the McKinsey study team estimated the loss of jobs caused by artificial intelligence at 5%. On the other hand, in the same article Ramaswamy presented the results of research carried out by his company on 835 companies, which at that time already showed a significant (at the level of 34-44%) use of AI in the area of IT and data security, but also in areas related to organisational communication, more specifically public relations activities and its extremely important part - crisis prevention (e.g. brand monitoring in the social media space - 16% of respondents) [Ramaswamy, 2017]. The issue of education and the need to take actions towards present learners was raised, amongst others, by authors of the "*Kompetencje przyszłości w czasach cyfrowej dysrupcji. Studium wyzwań dla Polski w perspektywie roku 2030*" monograph. On its cover, the authors placed a quote by Jack Ma (Ma Yún, a Chinese businessman and philanthropist, founder and former Executive Chairman of the Alibaba Group): "Education is a big challenge today. If we don't change it, we'll be in trouble in thirty years' time because the way we teach is the same as it was 200 years ago: it's knowledge-based. We cannot teach our children to compete with machines; they will be smarter than people. We must teach children unique things that machines will never be able to catch up with. Only in this way will our children have a chance in thirty years' time." [Głomb et al. 2019]. The authors, referring to the development of competences in digital times, pointed to artificial intelligence as one of the factors influencing business processes and the labour market: "Starting from the forecasts of technology development (e.g. Internet of Things, 5G, big data, blockchain, artificial intelligence) and the phenomena already observed in the world economy (globalisation, robotisation), the authors of the study assess their impact on business processes, and thus on the labour market. Using the terminology developed in the European Union and American taxonomic studies, they formulate the principles of civilisational competences necessary in the 21st century." [Głomb et al., 2019, p. 7] and later: "In the opinion of the authors of the study, the main factors strongly stimulating the emergence of a new disruptive economic and cultural reality of this century, changing business models and processes, affecting labour supply, labour market and demand for competences will be: globalization, robotization, artificial intelligence, digital transformation technologies (e.g. Internet of Things, 5G, blockchain, big data)" [Głomb et al., 2019, p. 31].

**Artificial intelligence in forecasts and practice**

Consulting companies point to the significant potential of AI. According to Deloitte's estimates, by 2021 expenditures on artificial intelligence and machine self-learning will amount to $57.6 billion - almost five times more than in 2017. McKinsey Global Institute, on the other hand, indicates that the potential annual business value of artificial intelligence in 19 industries could grow from $3.5 billion to $5.8 billion. [Oracle, 2019].

While looking for answers to the practical applications of AI, it is most often pointed out that the main purpose of research on artificial intelligence is to reconstruct human perception of reality and to react to it, which in turn will enable it to go beyond its limitations. An undeniable advantage of such formatted processes should be, on the one hand, to facilitate a broader understanding of the enormous amount of available data and, on the other hand, to provide forecasts allowing the automation of excessively complicated or routine and simple tasks.

Artificial intelligence also provides opportunities for use in situations where the scale of complexity of tasks goes beyond the possibilities of human interpretation.

Hence, data analytics becomes one of the most important directions. Gartner's research results, conducted on a sample of more than 3000 IT executives, showed that respondents considered business analytics and analysis to be the most outstanding technologies in their organisations [Gartner 2018]. They have been recognized as the most strategic for their companies, which also involves the greatest investment expenses. [Oracle, 2019].

The results of the latest research on AI implementation show that organisations are aware of the fact that there is no turning back on artificial intelligence, and even more: the implementation of AI in an organisation's operations is already a competitive advantage of the organisation (implementation statistics indicate a growing trend). According to the Global Industry Vision report, 97% of the largest international companies are planning to implement solutions based on artificial intelligence by 2025. The authors of the report predict that the dynamic development of artificial intelligence in consumer devices will improve the ability to automatically search for information without the involvement of its users. Forecasts assume that by 2025 as many as 90% of device owners will be using smart assistants. [Żebruń, 2019].

The authors of the report also expect that artificial intelligence and Big Data analytical systems will make it possible to communicate freely between companies and customers, as well as eliminate the problem of language barriers.

In the Global Industry Vision report, there is also a comment on the issue of 'the communication of tomorrow'. On the basis of the research results obtained, the authors consider accuracy, understanding and trust to be the fundamental principles of 'the communication of tomorrow'. The authors of the report also indicated that by 2025 companies will have fully utilised as much as 86% of the data they generate [Żebruń 2019]. This last remark may be very important in the area of constructing an organisation's communication strategy, as well as crisis management programmes/plans, because at the moment it is not the lack of data that is the problem, but its adequate processing.

This type of situation can be illustrated by the experience of the Associated Press information agency. In 2013, this 170-year-old news service had to deal with the problem of not being able to prepare news and dispatches about the situation of American public companies. The lack of journalists was a barrier as AP had a 65-person team compared to 5300 companies, which meant that only 6% of needs could be covered. It was then that Associated Press started using AI to write short news. By 2015, AI systems had created 3,700 quarterly earnings reports, which was 12 times more than the work of AP's business reporters. Interestingly, according to Harvard Business Review, none of the business journalists lost their jobs as they were assigned to writing more advanced materials. [Ramaswamy, 2017].

**Artificial intelligence in communication management**

Very interesting research results were obtained by the study "Powered by AI. Communications and Marketing in the Algorithm Age" carried out in 2018 by MSL in cooperation with Publicis Sapient, concerning the influence of AI in the area of communication and marketing. The study covered 1846 marketing and communication leaders from ten countries: Brazil, France, China, Germany, India, Italy, Poland, the United Kingdom and the USA. [MSL & Publicis Sapient, 2018].

As many as 40% of the surveyed communication and PR executives admitted a low level of knowledge about the use of artificial intelligence in their work. At the same time, nearly half of the organisations in Poland declared investments in solutions using artificial intelligence.

However, the results of the research show a combination of optimism and anxiety. Most communicators believe that the impact of AI on the future of brand communication will be positive (55% for all respondents; 57% for Polish respondents); 7% of the respon-

dents notice negative aspects, while 38% see both negative and positive implications. Although there is general optimism about what artificial intelligence can do, 20% of the respondents think that their companies have concerns about artificial intelligence and are not particularly interested in 'experimenting' with it.

For communication leaders, artificial intelligence is more than just a short-lived interest: many of them, in their opinion, have overtaken others in their companies in terms of learning about AI opportunities in order to prepare for the future in the workplace. A very high percentage of respondents (83%) stated that the priority is to get acquainted with AI (for 39% of respondents this is a very high priority; for 44% quite a high priority). Only for 12% does this issue constitute a low priority, and for another 5% it is not a priority at all.

The surveyed leaders placed their competences in the AI area at a fairly high level. As many as 28% of respondents strongly agreed and another 43% slightly agreed with the statement "I consider myself an expert in understanding artificial intelligence and its application in business."  This means that more than 2 out of 3 leaders already consider themselves experts in the field. However, 1/3 of respondents disagreed (20% - slightly disagree; 10% - strongly disagree).

If the respondents' statements are true, the level of awareness of technological innovation can be considered to be high.

Interesting answers were obtained when asking the leaders about potential areas of communication in which their organisations would like to include more AI-based activities. The largest field for the use of artificial intelligence was indicated by the leaders in the following areas: marketing (47%), creativity (42%), employee training (42%), insight and strategy (41%). Significantly more limited field of application of AI was indicated in the following areas: crisis management (26%), measurements (25%) and agency relations (25%). When analysing the results, it is worth noting that the areas indicated by the respondents as having a lower AI potential usually include activities requiring the use of individually tailored solutions, non-standard approaches or appropriate relationship building competencies. Therefore, if AI is to be used in these areas, it will be at the level of managing large data sets and their analysis, but the final decisions concerning the solutions will probably be made by an expert.

These results correlate with the data included in the McKinsley report, where, among other things, the potential for automation in relation to education was determined. It was 57% for primary and secondary education and 22% for higher education [2018, p. 14]. This may be one of the factors indicating a higher potential of artificial intelligence in relation to simpler, routine activities, giving a significant potential to define them as routine and predictable on the basis of collected and analysed data.

In addition, the MSL and Publicis Sapient report indicate that 63% of respondents believe that their organisations are trying to redefine their branding and position to reflect the changes that AI is making in the workplace.

### AI in organisational communication practice

Although the use of artificial intelligence in areas related to communication of an organisation, including PR activities, has not become a standard yet, there have been attempts to apply it.

AI-based solutions are now applied in the following areas:

- in the activities of spokespeople - automation of communication - creation of typical information of a repetitive nature and which can be defined as predictable,
- communication with customers (standard information packages delivered in a short period of time),
- customer surveys (AI in communication makes it possible to quickly verify the market

reaction to an organisation's activities),

- AI helps to customise messages and tailor them in order to meet the needs of a specific group of recipients,

- basic media relations (press releases) save time in order to spend it on advanced relations with journalists,

- internal communication within an organisation,

- communication and image analysis - providing real-time synthesis of data from multiple sources: traditional media, news websites, social media - determining viral or crisis potential, as well as tendencies in these areas (temporary or permanent phenomenon),

- texts on any subject (news, articles, essays, novels), perfectly reproducing the style of the original authors,

- targeting the content displayed at individual recipients,

- content conversion,

- maintaining relations with customers and increasing brand loyalty through lead nurturing.

On the other hand, the use of artificial intelligence in the communication activities of an organization is a challenge and should trigger thoughts.

Certainly, it is worth observing whether the space of message distribution created with the use of AI does not violate the ethics of communication, as well as the law. Is the created content not manipulative? Does it not contain fake news or deep fake video content? It may be tempting to seek the attention of the audience by means of technical opportunities offered by AI. If this happens, what form can this struggle take and what impact will it have on social discourse?

**Summary**

The development of technology and technological processes has been a cause for concern and fear over the human situation for decades. It is natural to wonder how technology will change the way we live. Today, artificial intelligence has a significant impact on data processing, analysis and forecasting. Experts in communication and PR use automation and algorithmisation of processes as a support for their PR activities, thus shifting human involvement to areas where activities are more difficult to automate and where human work brings more value to the organization [cf. McKinsley, p. 15]. Therefore, being aware of the dynamic development of AI, we should still talk about supporting PR specialists, rather than replacing them.

Experts at the Chartered Institute of Public Relations (CIPR) estimated in 2018 that currently only 12% of PR specialists' qualities and skills can be replaced or supplemented by artificial intelligence technologies, and in the following years this number may increase to about 38% [Valin, 2018]. It is evident, therefore, that opportunities and threats should be assessed, and when using AI, activities should be rigorously evaluated not only from the point of view of target realisation effectiveness, but also from the perspective of professional ethics. The difficulty is heightened by the fact that when one bases one's communication activities on artificial intelligence mechanisms, it becomes complicated, if not impossible, to define ethical limits. Currently, there are situations in which specialists (even with considerable professional experience), as well as authorities ruling on disputable issues on the grounds of professional ethics, face the dilemma of judging specific actions. It is worth considering how AI mechanisms would cope with such dilemmas.

In conclusion, relationship creation skills, showing empathy, the ability to construct a dialogue leading to consensus as well as the aforementioned professional ethics, which are sometimes so difficult for PR experts, may turn out to be advantages over artificial intelligence.

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