



# Society. Document. Communication

Journal homepage: <https://sdc-journal.com.ua/en>  
*Society. Document. Communication*, Vol. 9, No. 4, 8-16

**Article's History:** Received: 09.08.2024 Revised: 15.11.2024 Accepted: 19.12.2024

UDC 004.75

DOI: 10.69587/sdc/4.2024.08

## Socio-communicative aspects of artificial intelligence use in information systems

**Oleksandr Vasenko\***

PhD in Historical Sciences, Associate Professor  
Hryhorii Skovoroda University in Pereiaslav  
08401, 30 Sukhomlynskyi Str., Pereiaslav, Ukraine  
<https://orcid.org/0000-0002-8895-4284>

**Olena Dudar**

PhD in Psychology, Associate Professor  
Hryhorii Skovoroda University in Pereiaslav  
08401, 30 Sukhomlynskyi Str., Pereiaslav, Ukraine  
<https://orcid.org/0000-0003-0541-5646>

**Abstract.** The study aimed to examine the use of artificial intelligence in the media and explore its ethical implications. The methodology encompassed theoretical analysis, media studies, expert evaluation, content analysis, sociological surveys, and comparative analysis. The research focused on the impact of AI on journalism, particularly in content creation, fact-checking, and the ethical considerations of integrating emerging technologies into journalistic practice. Various aspects of AI applications in the media were analysed, including using tools such as ChatGPT, Logically, and Factmata for text generation and combating fake news. One of the key findings was the determination of the frequency of AI-generated content consumption and the assessment of audience trust in such content. The analysis of the advantages and disadvantages of AI revealed that its primary benefit lies in the speed of content creation, while its main drawbacks include a lack of analytical depth and the potential for errors. Findings from the sociological survey and content analysis confirmed that AI can significantly enhance the efficiency of routine tasks, such as fact checking, but cannot fully replace traditional journalism, particularly in the production of complex analytical materials. Respondents viewed the use of AI for fact-checking positively but expressed concerns regarding potential job losses among journalists. The practical significance of the socio-communicative aspects of AI use in journalism and the media is considerable within the information landscape, as AI integration facilitates content creation, dissemination, and analysis while enabling media organisations to adapt to audience needs

**Keywords:** media companies; social interaction; access to resources; algorithms; dynamics

### Introduction

Artificial Intelligence (AI) has become an integral part of information systems, significantly altering approaches to organising social interaction and communication. The implementation of machine learning algorithms, neural networks, and natural language processing has enabled information systems to analyse vast amounts

of data, adapt to user needs, and automate information exchange processes. This creates new conditions for interaction between people, as well as between people and technology, which significantly impacts social and communication processes. The application of AI in communication systems contributes to the optimisation of

### Suggested Citation:

Vasenko O., & Dudar O. (2024). Socio-communicative aspects of artificial intelligence use in information systems. *Society. Document. Communication*, 9(4), 8-16. doi: 10.69587/sdc/4.2024.08.



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (<https://creativecommons.org/licenses/by/4.0/>)

\*Corresponding author

information processing, content personalisation, and improved interaction efficiency. Journalism has also undergone significant changes due to the introduction of AI technologies. Chatbots and virtual assistants have become important tools for automated audience service. They enable automated responses to reader queries, news delivery, and user interaction, ensuring effective customer relationship management. AI-powered platforms, in turn, analyse user behaviour, studying their interests and habits, allowing for the development of personalised engagement strategies. This enables media organisations to not only improve reader interaction but also create content tailored to their tastes and needs. Additionally, AI technologies can assist in the automated creation of news content, particularly for the rapid processing of large amounts of information, significantly increasing journalists' efficiency. However, AI also poses risks related to data ethics, privacy, and potential impacts on social relationships. Algorithms can exacerbate information inequality, foster biases, and undermine trust in communication channels.

A significant number of researchers are studying this topic and present various perspectives. For instance, O. Iaroshenko (2024), S. Domashenko (2024) examined the impact of new technologies on journalism, particularly the role of artificial intelligence in the media industry. She drew attention to the transformation of the journalist profession amid technological changes and the new challenges arising from the implementation of these innovations. Her research focuses on how artificial intelligence is changing news production and on identifying potential social and ethical implications of these changes for professionals and audiences. The research by M. Spring *et al.* (2022), F. Ioscote *et al.* (2024) covered academic publications related to artificial intelligence in journalism. The authors explored how technologies are changing the socio-economic landscape of media and investigated the technical and social challenges journalists face in the context of digital transformations. These transformations include the automation of content creation, the shift to digital platforms and social media, content personalisation, and the use of artificial intelligence algorithms for analysing and disseminating information.

Specifically, M.-F. de-Lima-Santos & W. Ceron (2021) focused on examining journalists' perceptions of artificial intelligence, analysing the opportunities and threats associated with its use in media. Their research also included assessing journalists' attitudes towards such technologies, and determining how they can aid in news production while simultaneously raising ethical and professional concerns. The research by V. Moravec *et al.* (2024) concentrated on analysing the perception of artificial intelligence in journalism from a socio-economic perspective, specifically examining how the development of this technology can impact the media landscape, and attempting to forecast potential scenarios of digital technology's influence on the future of journalism. S. Mahony

& Q. Chen (2024) focused on analysing concerns related to the use of artificial intelligence in journalism. Additionally, the aforementioned researchers identified potential media manipulation and risks arising from the automation of content creation, raising important ethical questions concerning the accuracy and impartiality of news.

H. Cools & N. Diakopoulos (2024) explored the role of generative AI in newsrooms, assessing how journalists perceive the potential of these technologies for news creation. Their research encompassed the challenges and risks arising from the adaptation of these innovations within the professional activities of journalists. The findings of A. Noain-Sánchez (2022) highlighted the impact of AI on journalism through the lens of experts, journalists, and academics, analysing how these groups perceive new technologies and how AI can transform not only journalistic practices but also its ethical norms and professional standards. S. Parratt-Fernández *et al.* (2021) investigated the application of AI in journalism, specifically how AI influences news production processes and journalistic practices. They also analysed academic literature on this topic, identifying key research areas and new trends in technology use. The authors emphasised the ethical issues and challenges arising from the integration of AI into the media environment.

Research in journalism and media studies has identified gaps in understanding the influence of social and cultural factors on the implementation of artificial intelligence in information systems, as well as the adaptation of such technologies within media organisations. Many studies have insufficiently focused on the practical aspects of AI integration in real-world settings, particularly in the context of ongoing technological changes in the media environment. Moreover, there is a lack of research on the unequal access to AI in different regions and its potential impact on education, information accessibility, and social dynamics within the media landscape. For instance, different countries may have varying levels of technological access, influencing media literacy and the ability to critically evaluate AI-generated news.

Additionally, there is a dearth of in-depth analysis of the ethical implications associated with the use of AI in journalism. Issues such as algorithm transparency, accountability for automated news, risks of content manipulation, and potential biases remain under-researched. The integration of AI into media systems requires a systematic approach to its adaptation in various fields, specifically regarding how technology impacts journalistic practices, the ethics of news creation, and information flow management. This study aimed to highlight the role of artificial intelligence in journalism and media, and the ethical challenges arising from the integration of new technologies into the media environment.

## Materials and Methods

The research combined theoretical analysis, media studies, and expert evaluation. The timeframe covered

the period from 2010 to 2024, allowing for tracking the implementation and evolution of artificial intelligence in journalism. Data collection involved analysing academic articles, media reviews, and reports on AI applications in journalism. Databases such as Scopus and digital archives of media companies, including Automated Insights, Reuters, and the Center for Journalism Innovation, were utilised. Examples of AI algorithm applications in content creation, such as ChatGPT, and systems for verifying fake news, including Logically and Factmata, were analysed. Content analysis, sociological surveys, and comparative analysis were employed during the research. Content analysis was used to examine instances of AI in text generation and news verification. Sociological surveys determined the impact of algorithms on audience perception. The sample for the sociological survey was selected using a random sampling method, ensuring the representativeness of the results

for the general media audience. The survey involved 200 respondents, evenly divided between 100 women and 100 men aged 20 to 45. Survey results were processed using statistical methods, including descriptive statistics, to determine mean values, frequency distributions, and percentage breakdowns of responses. Data was presented in tables and graphs for clarity. Assessing the level of trust in AI-generated content and identifying its advantages and disadvantages was achieved through analysing responses to closed-ended survey questions. Adhering to the ethical guidelines of sociological research, all respondents participated voluntarily, and their responses were kept confidential and anonymous. Participants were informed about the purpose of the study, and their responses were used solely for research purposes (American Sociological Association, 2018). Questions were formulated to cover key aspects of media consumption and perception (Table 1).

Table 1. Main aspects of media consumption and perception

| Category   | Question   |
|--|--|
| Frequency of content consumption                     | How often do you interact with content created using AI (news, articles, videos)?                            |
|  | Do you differentiate between AI-generated content and content created by humans?                             |
| Trust level  | How much trust do you place in information created by AI compared to traditional journalists?                |
|  | Does knowing that the content was created by an automated system affect your trust in it?                    |
| Advantages and disadvantages of AI-generated content | What positive aspects of AI-generated content do you notice (speed of creation, objectivity, accessibility)? |
|  | What negative aspects do you observe (lack of in-depth analysis, possible errors)?                           |
| Ethical aspects                                      | What is your opinion on the use of AI in creating media content?   |
|  | Do you believe that automation in journalism reduces the role of human journalists?                          |
| Future of content                                    | In your opinion, can AI-generated content completely replace traditional journalism?                         |
|  | Do you support the idea of integrating AI for factchecking or combating fake news?                           |

Source: created by the authors

The research integrated a structured approach that combined content analysis, audience impact analysis, and ethical considerations. A synthetic approach was used to compare the application of AI across different countries and media sectors.

## Results

**The role of artificial intelligence in the transformation of information systems and its impact on information accessibility for different social groups.** One of the most notable examples of the transformation of information systems is ChatGPT, used for text generation, as well as fact-checking systems like Logically and Factmata (Nesta, 2024). Research focuses on the application of AI algorithms in the context of media and journalism, and on studying their ability to enhance the efficiency of media companies and ensure the accuracy of disseminated information. ChatGPT's ability to generate high-quality text based on given prompts makes it useful for journalists who can use it to prepare articles, news reports, or even analytical materials. For instance, ChatGPT can help create a first draft, which journalists can then refine by adding their own analysis and unique

interpretations. This process significantly speeds up content creation, reducing the time spent on initial material preparation. However, while ChatGPT can be useful for creating basic texts, it is important to consider that this tool cannot always correctly interpret complex contexts or be capable of critical analysis of information. Therefore, it is essential for journalists to verify and correct the resulting texts, especially when dealing with content that requires a high level of accuracy and precision.

Another crucial aspect of AI utilisation is automated fact-checking systems, which are gaining popularity in the fight against misinformation. Systems like Logically and Factmata have been developed to detect fake news and verify the accuracy of information disseminated through social media and news platforms. Logically employs sophisticated AI algorithms to analyse vast amounts of text and identify potential manipulations or false claims. This system uses databases containing verified information to compare facts with those found in the news or articles being checked. It also analyses the context in which the information was presented to detect potential falsifications. Factmata operates on a similar principle, analysing headlines, text fragments,

and sources used in news articles. These systems are used by media companies as they allow for the automation of factchecking, which is particularly important in an environment where the volume of news is constantly increasing. However, despite the high efficiency of such systems, they cannot always guarantee 100%

accuracy in fact-checking, and therefore, in most cases, their use should be supplemented by human oversight and analysis. For a better understanding of the use of AI in journalism, particularly in content creation and fact-checking, Table 2 provides a comparison of different technologies.

| Method           | Description                                    | Example technology   | Advantages                               | Limitations                            |
|------------------|--|--|--|--|
| Content creation | Text generation based on input queries         | ChatGPT  | Speed of text creation, convenience      | Not always able to account for context |
| Fact-checking    | Automatic verification of information accuracy | Logically, Factmata  | Fast verification, convenience for media | Requires human oversight               |
| Content analysis | Analysis of audience reactions to content      | Specialised algorithms, such as Wordsmith, Media Bias/Fact Check | Understanding audience needs, accuracy   | Dependent on data, not always accurate |

Source: created by the authors

To better understand the impact of artificial intelligence on audience perception of media content, Table 3 presents the survey results and analysis of respondent answers. This allowed an assessment of how frequently

consumers interacted with AI-generated content, their level of trust in such information, and the advantages and disadvantages they noted when consuming automated content.

| Question  | Responses  | Percentage | Interpretation   |
|---|--|------------|--|
| 1. Frequency of consumption of AI-generated content | Daily or several times a week                                | 55%        | Most respondents actively engage with AI-generated content, indicating its popularity and availability   |
|   | Less frequently, a few times a month                         | 40%        | Some respondents still prefer traditional sources of information or encounter automated content less often   |
|   | Almost never   | 5%         | A small minority of respondents rarely interact with such content, possibly due to doubts about its quality or reliability                                     |
| 2. Trust in AI-generated content                    | Completely trust   | 23%        | Only a small percentage of respondents consider AI-generated content to be reliable and trustworthy, indicating some scepticism towards such technologies      |
|   | Mostly trust but with caution                                | 57%        | The majority of respondents exhibit some distrust or caution, as they believe AI may be unreliable on complex or sensitive issues                              |
|   | Do not trust   | 20%        | A relatively small portion of respondents express complete distrust towards AI-generated content due to potential errors and lack of depth                     |
| 3. Advantages of AI-generated content               | Speed of creation, objectivity, accessibility                | 62%        | The advantage of speed and accessibility is evident to most, as AI allows for the rapid generation of news and other materials without human delay             |
|   | Lack of depth, errors  | 71%        | A large number of respondents highlight the lack of in-depth analysis and the likelihood of errors, which are the main drawbacks of automated content          |
| 4. Ethical aspects of AI usage                      | Positively view the use of AI in journalism                  | 42%        | A smaller proportion of respondents consider the use of AI in journalism beneficial, seeing it as useful for automating routine tasks such as factchecking     |
|   | Do not support due to the threat of job loss for journalists | 58%        | Most respondents are concerned about the potential reduction in journalists' roles due to automation, which could lead to job losses                           |
| 5. The future of AI-generated content               | May fully replace traditional journalism                     | 21%        | Only a small proportion of respondents believe that AI could replace journalism, emphasising the importance of human involvement in complex journalistic tasks |
|   | Support the integration of AI for fact-checking              | 79%        | A large portion of respondents supports the idea of using AI for factchecking or combating fake news, indicating approval for the automation of this area      |

Source: created by the authors

The results of the sociological survey highlighted several advantages and disadvantages of automated news creation, particularly concerning the use of artificial intelligence in the media sector. One of the main

advantages of automated news creation is speed. According to the survey, most respondents noted that AI significantly accelerates the process of creating and distributing news. This is a critical factor in the fast-paced

world of news, where obtaining up-to-date information in near real-time is essential. AI algorithms can process vast amounts of data instantly, allowing them to quickly generate news in a short amount of time. As a result, media organisations are able to provide timely information to their audiences without delays.

Another advantage is objectivity, often attributed to AI-generated content. Algorithms can filter out personal biases or emotions that may influence journalists, presenting facts without subjective colouring. This can lead to more balanced and unbiased information, which is important in today's media landscape where it is often difficult to distinguish fact from opinion. On the other hand, the survey revealed several drawbacks to automated news generation. One of the biggest drawbacks is the lack of depth of analysis. Respondents noted that AI-generated news often lacks sufficient context or in-depth coverage of the topic. Algorithms can quickly process large amounts of information, but they cannot understand all the nuances and complexities of a situation. This leads to superficial coverage of events without detailed analysis (Patriak, 2024).

It was also found that automated systems can often make factual errors, increasing the risk of spreading misinformation. Since AI is incapable of critical thinking, there is a possibility that the content will contain errors or inaccuracies that may not be detected in time without human intervention. This calls into question the credibility of news generated in this way. Specifically, the survey showed that respondents have less trust in news created by AI than in material prepared by humans. This is a significant aspect, as trust is one of the key factors in the perception of media content. Many consumers feel that the absence of a human element in the news creation process reduces its credibility, as it is difficult to believe that an automated system can accurately assess a situation or provide context for a news story. Therefore, while the advantages of automated news generation include speed and objectivity, there are also significant drawbacks, such as a lack of depth of analysis and the possibility of factual errors, which reduces trust in the content. This highlights the need for a balanced approach to the use of AI in journalism, where it is important to combine the speed and efficiency of technology with the quality and accuracy of information.

**Analysis of companies using artificial intelligence in information systems and identification of common trends and divergences.** A significant aspect of this analysis was the study of the quality of generated content and the effectiveness of automated systems in fact-checking and combating fake news. One example of such research is the work of the Center for Journalism Innovation, which conducted a comparative analysis of automated news generation systems, such as Automated Insights' Wordsmith, and traditional journalism methods. Wordsmith is a tool that uses artificial intelligence

to automatically generate text based on data (Legal Tech..., 2024). This platform can be used to create news based on statistical data, which is particularly useful for topics such as finance, sports, and weather. The study showed that automated systems significantly accelerate the news creation process, providing high productivity when working with large volumes of data. At the same time, the research revealed that texts created using such tools may lose contextual connections and be less emotional and detailed, which is a significant drawback compared to human authorship.

Another example is a study conducted by the City University of London, which analysed the use of artificial intelligence for automated news generation (City University of London, 2023). This research compared texts written using the Arria NLG (2024) system and traditional media journalists. The analysis showed that automated systems are effective for creating news content based on facts (such as sports results or financial reports), but they are unable to generate deep context or cover complex social or political issues at the level of human journalism. Thus, while automated systems can reduce the time required to create news, they do not replace the need for human analysis and creativity, especially when it comes to news that requires interpretation, investigation, or coverage of emotional aspects.

Furthermore, a study by J. Granger (2019) showed that the use of automated technologies for news generation has significant advantages in a highly competitive news market. Specifically, such technologies allow media companies to respond quickly to events and publish news rapidly, which is crucial in today's information-saturated environment. However, despite the high speed of content creation, automated systems still cannot replace journalists in terms of in-depth analysis and context exploration, which are essential for comprehensive coverage of complex events. A similar study conducted by Columbia Journalism University (Automated Journalism, 2024) explored the impact of automated news generation on content quality and accuracy. This research found that automated systems can be useful for processing large volumes of data, such as financial reports, sports events, or weather forecasts. However, AI systems are unable to conduct in-depth fact-checking, making them less effective than traditional journalists in combating fake news and misinformation. Additionally, automated systems were less effective at creating texts that convey human emotions and allow for a deeper understanding of social or political issues.

According to research conducted by the MIT Comparative Media Studies (2024), the use of automated systems can be important for ensuring a fast news cycle and processing large amounts of data. However, in the context of factchecking and combating misinformation, it is necessary to combine technology with human intervention. Specifically, they recommend using AI for initial fact-checking and preliminary analysis, followed by

involving journalists for deeper verification and contextualisation of information. Based on the research conducted, several advantages of automated news generation can be identified. These include: the speed of news creation, the ability to process large amounts of data, and reduced costs for creating standard content (such as sports results or financial overviews). However, among the disadvantages, one can note the lack of human interpretation, a reduced ability to conduct in-depth analysis of social and political issues, and the risk of spreading low-quality or unverified content, which can lead to misinformation.

**Ethical aspects of ai in journalism.** One of the primary aspects to consider when implementing AI in journalism is the ethical implications related to the autonomy of technology and AI decision-making. It is clear that media companies must establish clear ethical frameworks for the use of AI, especially in the context of automated content creation and fact-checking. This will help prevent violations of fundamental journalistic principles such as accuracy, objectivity, and accountability. Based on the research, recommendations can be formulated to help companies adhere to ethical standards and balance technological advantages with the responsibility for creating reliable content.

During the automation of news creation, it is crucial to maintain human oversight to prevent manipulation and misinformation. While AI can rapidly generate large volumes of content, only humans can fully grasp the context and incorporate essential ethical and cultural nuances critical to the news environment. Utilising AI for data processing and fact-checking enables journalists to respond to events more quickly, but it's imperative not to rely solely on automated systems. Research into audience interactions with AI-generated content allows media companies to develop new approaches. By identifying patterns in audience perception, media platforms can be more precisely tailored, and journalistic practices can be adapted to meet specific audience needs. For instance, analysing user reactions to different types of content can help create news stories and articles that better align with readers' interests, thereby improving communication effectiveness. Regarding the ethical use of AI in journalism, it is particularly important to utilise these technologies for automated fact-checking. In an environment characterised by an ever-increasing volume of online information, AI can significantly reduce the time required to verify the accuracy of facts. However, AI may make mistakes when recognising complex contexts or inadequately convey certain social or cultural aspects, thus necessitating human oversight to ensure adherence to ethical standards. Therefore, to ethically use AI in journalism, clear guidelines must be developed to balance technological capabilities with the responsibility of creating accurate, objective, and ethical content. An approach to adapting journalistic practices in light of new technologies should include a quality control system for content

and proper monitoring of the use of automated systems to avoid negative social and cultural consequences.

## Discussion

This research examined the socio-communicative aspects of using artificial intelligence in information systems. Given AI's profound impact on all aspects of society, it was essential to understand how these technologies shape social processes and identify potential risks or benefits. The research demonstrated that the implementation of AI can have both positive and negative consequences for social communication. While automation can reduce task completion time, it can also lead to decreased levels of personal interaction, impacting social interaction. The research results align with those of other scholars who have also focused on the social and communicative aspects of AI implementation. For example, D. Elliott & E. Soifer (2022), J. Hohenstein *et al.* (2023) highlight the importance of integrating AI into the media sphere, which can alter the social roles and interactions of journalists in the workplace, influencing the ways news is produced and consumed. They emphasise that automation not only increases efficiency but also changes social relationships within media companies. This aligns with the results of this study, which also showed that automation of media processes leads to changes in the social relations of journalists and also changes the nature of the interaction between media and audience, contributing to the growth of news and content personalisation. In addition, M. Zdravković & H. Panetto (2022), M. Kareem & D. Ben Aissia (2024) point out that technological changes that enable the automation of content creation processes in media can increase the efficiency of management systems. However, they also emphasise the importance of considering the social aspects of access to such technologies to avoid inequalities in access to information and manipulation. These issues are also highlighted in this study, which focuses on the significance of the social and ethical aspects of integrating AI into media. It emphasises that the distribution of technologies is not always equal, which can create new forms of digital inequality in the media.

C. Van Slyke *et al.* (2023), A. Mahmudi & I. Ramadhani (2024) highlight that AI technologies can not only change the technical aspects of journalism but also social processes, particularly changes in communication processes between journalists and their audiences. They also emphasise the potential of AI in creating personalised news and information flows, enabling a shift in the format of interaction with readers. This is reflected in the research, which also notes that the implementation of AI can significantly change the role of a journalist, transforming them from a traditional content generator into a manager of automated processes that create news and information flows. R. Gangwar *et al.* (2024) noted that AI has great potential for developing media, as it can improve the quality of news through automated content

generation, which also changes social interactions. This is supported by the results, which show that automating content creation through AI not only improves efficiency in media but also reduces the time it takes to prepare news, allowing media companies to respond more quickly to audience needs. At the same time, automation also creates new forms of interaction between journalists and content consumers. D. Safaei *et al.* (2024) emphasise the importance of a sociotechnical approach to adapting AI to media. They highlight the need to consider social aspects when implementing new technologies to avoid negative societal consequences, such as reduced access to truthful and objective information. This study also underscores the importance of social factors, as it was found that the introduction of technologies without proper attention to social conditions can lead to new forms of manipulation and unequal access to information, which negatively impacts both society and journalism.

The results of the study confirm that social aspects must be considered when integrating AI into journalism, as these technologies can significantly change both technical and social processes in the media sphere. The automation of content, the use of chatbots to interact with audiences or algorithms for personalising news can improve access to information, but there are risks associated with changing social connections and relationships between media and their audiences. In particular, there is a need to balance process automation with ensuring appropriate levels of journalistic ethics and fact-checking. It is important that the development and implementation of AI in journalism not only improve access to diverse content but also preserve social connections, as technology can influence how consumers perceive news and how journalists interact with the public. I. Sarker (2022), B. Dhiman (2023) assesses whether artificial intelligence is beneficial to journalists by comparing the advantages and disadvantages of this technology. In their research, they analyse whether AI can be an effective tool that supports journalistic activities or, conversely, poses threats to the profession. Author notes that while automating news creation processes can significantly improve the efficiency of journalists' work, it also calls into question the preservation of journalistic autonomy and professional ethics, particularly in the context of potential content manipulation and technical errors in automatically generated materials. Compared to this study, where the role of AI in journalism was also analysed, it was found that while technology provides new opportunities to improve journalistic efficiency, there are also significant ethical challenges associated with its use, in addition to its potential benefits, confirming the ongoing discussion about the autonomy and independence of journalists when working with AI.

E. Seyfodin & S.J.R. Tabrizi (2024) explore the impact of artificial intelligence on the future of journalism, focusing on how technological advancements can reshape not only the methods of journalists but also the entire

media landscape. They evaluate the new opportunities that arise as well as the challenges associated with integrating AI into journalistic practices. The authors emphasise that AI can be a powerful tool for automating content creation but also highlight the significant changes it brings to professional roles, ethics, and social interactions within media. Their findings align with current research, which also indicates that technological advancements in journalism open up new possibilities for interactive work with audiences but simultaneously require attention to ensuring ethics and the proper use of these technologies to avoid manipulation and bias in information flows. Considering potential challenges, such as the risks of information manipulation or reinforcing "filter bubbles", it is crucial to take steps to preserve social structures and promote pluralism in the media. AI technologies should be implemented in a way that not only automates processes but also upholds journalistic values such as objectivity, ethics, and transparency.

## Conclusions

The research established that the application of artificial intelligence (AI) in journalism has a significant impact on the creation of media content, fact-checking, and the ethical aspects of journalistic practice. The study covered the period from 2010 to 2024 and aimed to identify key trends in its use. The findings confirm that AI is actively employed for creating news, articles, videos, and fact-checking, particularly through tools such as ChatGPT, Logically, and Factmata. Through a sociological survey conducted with 200 respondents, important quantitative data was gathered regarding the perception of AI-generated content. The majority of respondents (55%) actively engage with such content, indicating its accessibility and popularity. However, only 23% of respondents fully trust this content, while 57% express caution, emphasising the importance of the human element in journalism. The respondents most frequently cited the speed of content creation and its objectivity as advantages of AI, while the main drawbacks were the lack of depth in analysis and the potential for errors.

During the content analysis, examples of AI use for text creation and fact-checking were examined. It was established that AI algorithms can quickly generate news, allowing media companies to react promptly to events. However, the analysis showed that automated systems often cannot provide a sufficient level of depth in analysing complex topics that require a human approach and interpretation. This is confirmed by the fact that many respondents noted the shortcomings of AI content precisely due to the lack of in-depth analysis. A comparison of automated and traditional content creation methods revealed several differences. While automation can significantly reduce the time it takes to create news, it cannot fully replace the role of journalists in creating complex, analytical materials. At the same time, AI support for fact-checking and combating fake news

received a high rating among respondents, indicating a need to integrate such technologies into journalistic practices. The research also confirmed the importance of the ethical aspects of using AI in journalism. A majority of respondents (58%) expressed concern about the potential job losses for journalists due to automation, emphasising the need to develop ethical standards for AI usage in this field. However, 42% of respondents positively evaluated the use of AI for performing routine tasks, such as fact-checking or creating short news items.

Based on the findings, it is recommended that media companies actively utilise AI to automate routine tasks such as fact-checking and creating simple news

items. However, to ensure high-quality content, human oversight should be maintained for complex and analytical tasks that require a deeper understanding of the context. Future research should focus on developing ethical guidelines for using AI in journalism and finding optimal models for collaboration between humans and automated systems.

#### ■ Acknowledgements

None.

#### ■ Conflict of Interest

None.

#### ■ References

- [1] American Sociological Association. (2018). Retrieved from [https://www.asanet.org/wp-content/uploads/asa\\_code\\_of\\_ethics-june2018.pdf](https://www.asanet.org/wp-content/uploads/asa_code_of_ethics-june2018.pdf).
- [2] Arria NLG. (2024). Retrieved from <https://www.arria.com/>.
- [3] Automated Journalism. (2024). Retrieved from <https://data.journalism.columbia.edu/sites/default/files/content/guide-to-automated-journalism.pdf>.
- [4] Cools, H., & Diakopoulos, N. (2024). Uses of generative AI in the newsroom: Mapping journalists' perceptions of perils and possibilities. *Journalism Practice*, 1-19. doi: 10.1080/17512786.2024.2394558.
- [5] de-Lima-Santos, M.-F., & Ceron, W. (2021). Artificial intelligence in news media: Current perceptions and future outlook. *Journalism and Media*, 3(1), 13-26. doi: 10.3390/journalmedia3010002.
- [6] Dhiman, B. (2023). *Does artificial intelligence help journalists: A boon or bane?* Retrieved from <https://surl.li/prsmfp>.
- [7] Domashenko, S. (2024). Prospects for the use of artificial intelligence in the legislative process of Ukraine. *Democratic Governance*, 17(2), 58-66. doi: 10.56318/dg/2.2024.58.
- [8] Elliott, D., & Soifer, E. (2022). AI technologies, privacy, and security. *Frontiers in Artificial Intelligence*, 5, article number 826737. doi.org/10.3389/frai.2022.826737.
- [9] Gangwar, R., Dash, B., Nanda, A., & Ayyub, S. (2024). Impact of artificial intelligence (AI) enabled management information system (MIS) in managerial decision making: An empirical study of leading business organisations. *Journal of Information and Emerging Research*, 4(2), 1325-1331. doi: 10.52783/jier.v4i2.919.
- [10] Granger, J. (2019). *Reuters Digital News Report finds that trust in the media continues to fall*. Retrieved from <https://www.journalism.co.uk/news/reuters-digital-news-report-finds-that-trust-in-the-media-continues-to-fall/s2/a740147/>.
- [11] Hohenstein, J., Kizilcec, R.F., DiFranzo, D., Aghajari, Zh., Mieczkowski, H., Levy, K., Naaman, M., Hancock, J., & Jung, M.F. (2023). Artificial intelligence in communication impacts language and social relationships. *Scientific Reports*, 13, article number 5487. doi: 10.1038/s41598-023-30938-9.
- [12] Iaroshenko, O.I. (2024). Artificial intelligence in journalism: The future of media under the influence of new technologies. *Scientific Notes of Institute of Journalism*, 2(85), 139-156. doi: 10.17721/2522-1272.2024.85.10.
- [13] Ioscote, F., Gonçalves, A., & Quadros, C. (2024). Artificial intelligence in journalism: A ten-year retrospective of scientific articles (2014-2023). *Journalism and Media*, 5(3), 873-891. doi: 10.3390/journalmedia5030056.
- [14] Kareem, M., & Ben Aissia, D. (2024). The impact of artificial intelligence on the accounting information systems in Jordanian commercial banks. *Migration Letters*, 21(4), 1549-1560.
- [15] Legal Tech Startup Wordsmith raised \$5 million. Among the co-founders is a Ukrainian. (2024). Retrieved from <https://surl.li/tnqwvo>.
- [16] Mahmudi, A., & Ramadhani, I. (2024). Artificial intelligence (AI) and machine learning: The future of information technology and information systems. *Information Technology Studies Journal*, 1(1), 1-21. doi: 10.62207/sk039108.
- [17] Mahony, S., & Chen, Q. (2024). Concerns about the role of artificial intelligence in journalism, and media manipulation. *Journalism*, 0(0). doi: 10.1177/14648849241263293.
- [18] MIT Comparative Media Studies. (2024). Retrieved from <https://cmsw.mit.edu/>.
- [19] Moravec, V., Hynek, N., Skare, M., Gavurova, B., & Kubak, M. (2024). Human or machine? The perception of artificial intelligence in journalism, its socio-economic conditions, and technological developments toward the digital future. *Technological Forecasting and Social Change*, 200, article number 123162. doi: 10.1016/j.techfore.2023.123162.
- [20] Nesta. (2024). Retrieved from <https://www.nesta.org.uk/feature/ai-and-collective-intelligence-case-studies/factmata/>.

- [21] Noain-Sánchez, A. (2022). Addressing the impact of artificial intelligence on journalism: The perception of experts, journalists, and academics. *Communication & Society*, 35(3), 105-121. doi: 10.15581/003.35.3.105-121.
- [22] Parratt-Fernández, S., Mayoral-Sánchez, J., & Mera-Fernández, M. (2021). The application of artificial intelligence to journalism: An analysis of academic production. *Profesional de la Información*, 30(3), article number e300317. doi: 10.3145/epi.2021.may.17.
- [23] Patriak, O. (2024). Digital society: State and development prospects. *Library Science. Record Studies. Informology*, 20(2), 60-67. doi: 10.63009/lrsi/2.2024.60.
- [24] Safaei, D., Haki, K., & Morin, J.-H. (2024). Artificial intelligence in information systems research: A socio-technical perspective. In *Technologies for digital transformation* (pp. 65-81). Cham: Springer. doi:10.1007/978-3-031-52120-1\_5.
- [25] Sarker, I.H. (2022). AI-based modeling: Techniques, applications and research issues towards automation, intelligent and smart systems. *SN Computer Science*, 3, article number 158. doi: 10.1007/s42979-022-01043-x.
- [26] Seyfodin, E., & Tabrizi, S.J.R. (2024). Effects of artificial intelligence on the future of journalism. *Canadian Journal of Educational and Social Studies*, 4(2), 54-72. doi: 10.53103/cjess.v4i2.221.
- [27] Spring, M., Faulconbridge, J., & Sarwar, A. (2022). How information technology automates and augments processes: Insights from artificial-intelligence-based systems in professional service operations. *Journal of Operations Management*, 68(6-7), 592-618. doi: 10.1002/joom.1215.
- [28] Van Slyke, C., Johnson, R.D., & Sarabadani, J. (2023). Generative artificial intelligence in information systems education: Challenges, consequences, and responses. *Communications of the Association for Information Systems*, 53, 1-21. doi: 10.17705/1CAIS.05301.
- [29] Zdravković, M., & Panetto, H. (2022). Artificial intelligence-enabled enterprise information systems. *Enterprise Information Systems*, 16(5), article number 1973570. doi: 10.1080/17517575.2021.1973570.

## Соціально-комунікаційні аспекти використання штучного інтелекту в інформаційних системах

Олександр Васенко

Кандидат історичних наук, доцент  
Університет Григорія Сковороди в Переяславі  
08401, вул. Сухомлинського, 30, м. Переяслав, Україна  
<https://orcid.org/0000-0002-8895-4284>

Олена Дудар

Кандидат психологічних наук, доцент  
Університет Григорія Сковороди в Переяславі  
08401, вул. Сухомлинського, 30, м. Переяслав, Україна  
<https://orcid.org/0000-0003-0541-5646>

**Анотація.** Метою було дослідити використання штучного інтелекту в медіа та дослідити етичну складову. Методологія включала теоретичний аналіз, вивчення медіа, експертне оцінювання, контент-аналіз, соціологічне опитування та компаративний аналіз. Дослідження присвячене вивченню впливу штучного інтелекту на журналістику, зокрема на створення медійного контенту, перевірку фактів та етичні аспекти використання новітніх технологій у журналістській практиці. В роботі були проаналізовані різні аспекти застосування ШІ у медіа, зокрема використання таких інструментів, як ChatGPT, Logically і Factmata для створення текстів та боротьби з фейковими новинами. Одним із основних результатів дослідження стало визначення частоти споживання контенту, створеного ШІ, та оцінка рівня довіри до такого контенту з боку аудиторії. Аналіз переваг і недоліків ШІ показав, що основною перевагою є швидкість створення контенту, тоді як головними недоліками є відсутність глибини аналізу та ймовірність помилок. В результаті соціологічного опитування та контент-аналізу було підтверджено, що використання ШІ може значно підвищити ефективність рутинних завдань, таких як перевірка фактів, але не може повністю замінити традиційну журналістику, зокрема в складних аналітичних матеріалах. Респонденти позитивно оцінили використання ШІ для перевірки фактів, але висловили занепокоєння щодо потенційного скорочення робочих місць для журналістів. Практична цінність соціально-комунікаційних аспектів використання штучного інтелекту (ШІ) в журналістиці та медіа є важливою в інформаційному середовищі, а саме інтеграція ШІ сприяє створенню, поширенню та аналізу медіаконтенту, а також адаптації медіа до потреб аудиторії

**Ключові слова:** медіакомпанії; соціальна взаємодія; доступ до ресурсів; алгоритми; динаміка