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The transformative role of artificial intelligence technologies in modern journalism

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Abstract. Journalism constitutes a complex communicative system that facilitates the effective dissemination of multilayered and dynamic information flows to audiences. The rapid advancement of artificial intelligence technologies has led to the emergence of a new domain commonly referred to as "robot journalism." Artificial intelligence not only accelerates the distribution of news but also significantly enhances the efficiency of large-scale data processing and analysis. However, these developments raise critical ethical concerns and challenges related to public trust. This study aims to provide a comprehensive examination of both theoretical and practical aspects of artificial intelligence applications in journalism. Furthermore, contemporary technological innovations are analyzed as foundational mechanisms for ensuring the integrity of news content. The research adopts a qualitative descriptive methodology, enabling a systematic analysis of relevant technological phenomena. The findings indicate that artificial intelligence demonstrates substantial effectiveness in tasks such as automated interview transcription, advanced data analytics, and large-scale content generation, thereby significantly improving operational efficiency within editorial workflows. Additionally, it facilitates high-speed information dissemination, which is essential in the digital age. Nevertheless, the study identifies potential risks associated with algorithmic bias and the overreliance on artificial intelligence, which may lead to a decline in news quality. Moreover, the absence of well-established ethical standards governing AI usage in journalism remains a pressing issue. Therefore, enhanced collaboration among media organizations, policymakers, and technology developers is crucial. While artificial intelligence offers transformative potential for journalism, its implementation necessitates accountability, continuous human oversight, and robust regulatory frameworks to ensure alignment with core journalistic principles.

Keywords: artificial intelligence, robot journalism, algorithmic bias, news credibility, information flow.

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Introduction

Journalism is simply defined as the process of collecting, verifying, analyzing, and presenting information and news to the public. The primary task of journalism is to convey current, accurate, and factual information to the public through the media. Its primary goal is to inform and empower the public to understand events and issues, and to serve their interests. Therefore, journalism can be described as a platform that facilitates access to information while simultaneously limiting the information that can be accessed. Individuals responsible for or tasked with carrying out journalistic work are called journalists. The basic nature of journalism is to report or inform, or more popularly, to inform. Therefore, special expertise and skills are required in the process. Workers in the field of journalism are called journalists or reporters. One of the products of journalism is news. News is information that is worthy of being presented to the public. News is worthy if it meets at least four elements: actuality or timeliness, factual or real, accurate, objective, important, and attracting the attention of the audience (Effendy & Hasugian, 2023; Suryawati, 2011). News is delivered through mass media such as television, radio, newspapers, magazines, and also cyber media. The development of mass media is in line with the development of journalism. The world of journalism is increasingly evolving thanks to technological advances. Beginning with the advent of computers, which facilitated the access and processing of information and large amounts of data, the ever-increasing computing power facilitated the development of increasingly sophisticated Artificial Intelligence (AI) technology. Artificial Intelligence (hereinafter referred to as AI) is a branch of computer science that focuses on creating intelligent machines that function and react like humans. AI-powered computers encompass several aspects such as speech recognition, learning, planning, and problem-solving (Kulkarni & Satapathy, 2020). The development of artificial intelligence (AI) has penetrated various sectors, including medicine, finance, and mass media. In the editorial realm, the use of AI is being applied in the practice of digital journalism, which the Press Council calls cyber journalism. Digital journalism encompasses all forms of journalistic practice that utilize digital technology in the reporting, production, and distribution of news (Listiyoningsih et al., 2025). The emergence and development of modern journalism have always been influenced by constantly evolving information dissemination technologies. Since the second half of the 20th century, the development and rapid popularization of new information dissemination technologies, characterized by networking, mobility, digitalization, and intelligence, have sparked a wave of technological convergence and media transformation globally. Mass news media, primarily newspapers and radio and television, have faced immense pressure to transform due to the increasingly convergent and intelligent nature of these new media technologies. In this process, the journalism industry, supported by traditional media formats, has been most affected. The rise of big data and artificial intelligence algorithms under networked conditions has challenged traditional news concepts and the manual-based industry model of news production, triggering a "quantitative transformation" in the journalism industry characterized by intelligence, automation, and precision. This is mainly manifested in the emergence of precise quantitative news products such as big data journalism and visualized data journalism, as well as the rapid popularization of intelligent news information distribution mechanisms based on algorithmic prediction. The main characteristic of these data journalism production technologies is the ability to mine and analyze massive amounts of data related to specific topics from the internet and other available channels, thereby summarizing, inductively classifying, and comparatively

analyzing quantifiable characteristics such as basic facts, development trends, and differences. The resulting news algorithms, or so-called news writing robots, can rapidly analyze and process news information using artificial intelligence and big data analytics, achieving higher production efficiency than human journalists. They can also intelligently filter and push subsequent news topics based on users' news consumption behavior. The entry of new technologies into the news industry, continuously increasing the automation of the news production process, will inevitably impact the traditional values, production mechanisms, consumption patterns, industrial structure, and functions of journalism, thus triggering "automation anxiety" among journalists and other news practitioners. It is against this backdrop that the emergence of so-called news writing robots may gradually...

Methodology and research methods

The field of Journalism shows optimal ways to find, process, and convey information to a large number of audiences. Journalists use text, audio, and visual materials to provide readers, listeners, and viewers with a variety of information. This problem has a significant impact on the formation of public opinion and the creation of new thoughts. The peculiarity of Journalism from other areas lies in its versatility. This area requires professional knowledge, qualifications, as well as other services. However, the creative abilities and psychological characteristics of a journalist are also important. Journalists do editorial work and serve as publicists. In addition, bank managers perform their duties. We will analyze the opinions of journalists about the impact of the introduction of Smart intelligence programs on journalism. The main method of research was discursive analysis; the object of study was electronic publications published between January and April 2024. The research was based on the methodology proposed by T. van Dijk. Van Dijk's discourse analysis units were referred to as "microstructures." We have grouped these concepts under the headings mentioned above, which can be referred to as "semantic micro-concepts." Macro-information is a specific "macro-event (selection, abstraction, and utilization) that is noted, summarized, and conceptualized in a macro-event structure, which facilitates the acquisition of information."

At the beginning, 230 articles were published on the relationship between journalism and artificial intelligence using Google News. These articles were analyzed, and 30 materials were selected.

The articles consist of 5,000 words and are divided into categories. During the research, the opinions of the authors and the opinions of the readers were taken into account. The opinions are divided into the following categories:

1. The nature of the attitude of the professional community to the implementation of artificial intelligence programs (positive, negative, neutral).

2. Current Opportunities for the use of programs in editorial activities, limitations of these programs, prospects for their use (existing and possible technical capabilities and limitations).

3. The impact of programs on changing the status of a journalist and his functional responsibilities, including the displacement of the profession from the labor market (impact on editorial, editorial, and creative activities).

Under the influence of artificial intelligence programs, a total of 280 statements have been identified that summarize trends and express ideas about changes in some journalistic activities or changes in their role.

Results

It is gradually challenging and even replacing the views of human journalists. In Kazakhstan news industry and academia, in addition to the impact and changes at the technological and industrial levels, the application of artificial intelligence algorithms in news production has also caused consequences at the news concept and socio-political levels. The rapid withdrawal of professional media, which once played a huge role in China's social transformation, and the rapid occupation of the core position of the industry and representational order dominated by commercialism and nationalism in the field of news communication, have led to the trend of technological worship with commercialization and capitalization as the core logic and the colonization of public discourse by the pan-entertainment of social media platforms. Faced with this complex situation, people either try to analyze the institutional and technological roots of the dilemma of traditional media from the perspective of operational logic and actively explore the strategic and tactical paths for traditional media to break through; or they start from the dilemma faced by the professional practice of traditional news media, explore the political significance behind the transformation of the news production mode and technological logic, especially the critical concern about the erosion of the social outlook and public construction mission undertaken by the news industry, and propose a vision to reconstruct the value position of the news profession (Ali, Hassoun, 2019)

However, regardless of whether we respond from a purely technical perspective or a socio-political one, a fundamental question we cannot avoid is: to what extent have the emergence, development, and application of artificial intelligence algorithms altered traditional news concepts, and the technological and social conditions governing news production and consumption? Undeniably, with the rise of platform media and the development of artificial intelligence, the embedded relationship between the performance of new information dissemination technologies and the practical processes, social structures, and human thought processes of social actors has deepened. This indeed poses a challenge to the survival of traditional institutional journalism globally. Big data and algorithmic mechanisms have already replaced traditional information production, distribution, and consumption models in many fields. But in terms of news production, to what extent will intelligent information production models replace human-centered information production models? Specifically, in journalism, will intelligent technologies such as robot writing, big data computing, and integrated information production platforms, to some extent, replace traditional production subjects such as news gatherers, editors, and gatekeepers, thereby changing the value system and practical logic upon which traditional journalism relies? Faced with the ever-expanding landscape of big data and artificial intelligence technologies, these questions constitute urgent issues that journalism practitioners and researchers must confront. To address this core issue, this paper aims to use an interdisciplinary technological perspective to discuss the relationship between artificial intelligence and news production from both technological and cultural dimensions, starting from the inherent logic of news as a unique human cultural practice. This will provide a critical analysis of the technological logic behind the transformation of news practitioners and the news industry.

In the contemporary Kazakh context, journalism is more often positioned as a propaganda work with political attributes. Technological elements in news practice, especially new communication technologies related to knowledge and information production, are not the

focus of practitioners and researchers. Although, as early as 1984, some people mentioned the challenge of "new technological revolution" in journalism (Amponsah, Atianashie, 2024).

What has truly had a disruptive impact on traditional journalism is the new communication technology revolution that has occurred in the past ten years, especially the new media revolution in recent years, with artificial intelligence and mobile Internet as its main content, which has forced traditional journalism to face enormous pressure to transform. Against this background, the research community has made different theoretical responses to the series of technological changes brought about by the rise of artificial intelligence, especially the challenge to the professional role and functional positioning of journalists who are at the core of mass communication, and even the disruptive impact on the entire traditional news production model. Since 2010, domestic journalism and communication researchers have begun to introduce interdisciplinary education models developed by Western journalism education institutions to adapt to the challenges of new technologies such as artificial intelligence. The focus has been on exploring how to cultivate new types of journalism talent who are proficient in both computer technology and news reporting methods under the new circumstances, thereby preparing them professionally for the positive integration of robot-generated news reporting and human journalists in the context of digital and intelligent media. At the same time, people are deeply concerned about the potential adverse effects of these technologies, especially the challenge to humanity's dominant position as the sole intelligent force. There are concerns that many existing human professions and divisions of labor will be replaced by intelligent robots, potentially leading to large-scale unemployment or the abandonment of many existing groups by the new intelligent technology-supported labor system. Reflecting this concern in the journalism industry, people have begun to focus on a series of technical and ethical issues arising from the intervention of artificial intelligence in journalism, and the fate of the modern journalistic group formed during the era of mass newspapers and the news value system they represent in the age of artificial intelligence (Biswal, Gouda, 2019).

Despite the potential for a series of challenges and problems, the emergence of news writing robots based on intelligent algorithm technology.

However, it is regarded as "a phenomenal application of artificial intelligence technology in the field of news dissemination." This intelligent news production technology has far surpassed human journalists in several aspects, including standardized news writing, intelligent customization, and long-tail effect based on corpus-based language style, intelligent processing of massive information through labeling and clustering, and construction of structured analytical conclusions and a global perspective. However, under the current conditions of weak artificial intelligence, although the professional role of traditional journalists will inevitably change accordingly, intelligent news production robots cannot completely replace human journalists in the short term, because "human intelligence and intervention are indispensable in the handling and judgment of complex variables with a large span, in the handling and expression of subtle emotional relationships, and especially in the formulation of value rules and the selection of reference frames" (Deuze, Beckett, 2022)

In terms of the specific production and presentation of news products, data journalism has become a hot topic in the current news industry. As one of the trends of increasingly intelligent news production, the logic of data journalism is to perform big data calculations on massive amounts of data on networked platforms and deduce relationships, trends, and structures from complex phenomena, thereby transcending the fragmented, personalized, and experiential

descriptions of traditional news. News writing robots can cooperate with human journalists in this process, playing a role in information organization, labeling, and contextualization. However, some believe that the current complementary relationship between news writing robots and human journalists may undergo significant changes within a few decades. For example, the developers of the automated news writing software "Narrative Science" believe that with the continuous advancement of artificial intelligence technology, this software will gradually shift from its current low-end state of news writing to "the upper end of the news industry chain – from commodity news to explanatory news, and even detailed long-form reports." At that time, "there will no longer be an area where Narrative Science cannot write reports."(Hassan, Albayari, 2022)

Essentially, automated news or robot news is "an algorithmic process that transforms data into narrative news text with limited or no human intervention, aside from initial program settings." Based on big data algorithms, artificial intelligence, and natural language generation technology, the emergence of automated news has profoundly changed the production and consumption patterns of traditional journalism, thereby significantly impacting news consumers' information decisions, the setting of political and social agendas, traditional news value elements including objectivity and credibility, the legal and ethical responsibilities of news organizations, and the professional status of traditional journalists. Technically, algorithms, as a series of data computation rules that transform data input into specific outputs for specific problems through specific computational programs, are dynamic. Algorithm-based news production is a quasi-automated process achieved through natural language generation technology, comprising three stages: input based on big data, filtering and analyzing data based on relevant features to transform it into semantic structures, and finally presenting it on a specific output platform. The combination of natural language generation and big data technology has enabled artificial intelligence-based news production technology to touch the creative and expressive domains of humans, affecting the division of labor and role allocation in news production. This has led to the gradual departure of human journalists from direct information screening, processing, and writing activities, and their role has become an indirect role in setting and managing algorithm and data program rules. This inevitably requires the news industry and its practitioners, who are undergoing transformation, to incorporate algorithm and programming skills into the scope of basic professional skills in journalism. Although algorithmic journalism still relies heavily on structured data and cannot effectively process highly differentiated or inherently conflicting data in combination with complex contexts, from the perspective of the institutional and professional functions of the news industry, a large part of the work traditionally undertaken by human journalists will gradually be replaced by artificial intelligence. This is an inevitable basic trend (Kothari, Cruikshank, 2022). Domestic scholars have a clear understanding of the trend of technological development driving the transformation of the news industry, and have summarized it in three key aspects: First, "the automatic generation mode based on the breakpoint of Internet data capture will gradually be transformed into an automatic generation mode based on the continuous data capture of the Internet of Things." "By continuously acquiring various data in the Internet of Things, more extensive and in-depth data mining and refinement will be carried out, and there will be a significant improvement in the breadth and depth of news reporting" (Mahony, Chen, 2025). "The truly meaningful news writing robot that integrates writing, editing, and analysis (commentary) will eventually become the backbone of the news industry." Second, by fully undertaking routine and procedural work, the professional

connotation of journalists will undergo a qualitative change. "In addition to possessing traditional humanistic qualities and skills in text expression and visual presentation, the requirements for journalists in terms of technical literacy, such as software development and mathematical logic analysis, will also be correspondingly increased." Finally, the development and application of intelligent news production technology will become an important area of international communication competition (Moravec, Hynek, Skare, Gavurova, Kubak, 2024).

In conclusion, data journalism or automated journalism based on artificial intelligence algorithms has indeed posed a significant challenge to the information production, distribution, and management mechanisms of traditional journalism, as well as to the professional roles and functional positioning of journalists, and has placed new demands on the work attributes and skill requirements of journalists. Traditional mass communication-era journalism, with its focus on journalists and editors following specific.

In contrast to the traditional, primarily manual news gathering and editing processes that prioritize news value, the scientific and technological components of journalism in the era of intelligent media have significantly increased (Noain, 2022).

News interviewing, editing, and writing are no longer simply case-by-case inquiries and recording; they are now based on in-depth mining and trend analysis of big data. This has greatly improved the timeliness, cost-benefit ratio, accuracy, and personalized delivery and matching of news products, especially in specialized fields. It can be said that news production supported by artificial intelligence algorithms has significantly reduced the costs for news organizations in producing informational news, contributing to improved quality in both quantity and quality. On the other hand, this also places new demands on journalists, especially human journalists who are the traditional core of the news industry. Facing the challenges of new technologies, simply succumbing to anxiety or resistance is not the right approach. Instead, it is essential to actively adjust one's knowledge structure and adapt quickly to the production models, organizational environments, and technological requirements of intelligent media work to ensure that human journalists can leverage their advantages in the new environment of human-machine coexistence and human-machine writing.

The profound changes brought about by the large-scale application of artificial intelligence (AI) algorithms in journalism have indeed challenged the status of human journalists. With the continuous development and advancement of AI technology, will human journalists gradually become less influential, or even face eventual elimination? The answer to this question inevitably returns to a fundamental question related to the essence of AI technology: can intelligent information machines truly mimic human thinking, work like the human brain, and possess human intuition, emotions, and subconscious thinking abilities? Undeniably, the rapid development of AI technology has already had a tremendous impact on human society, an impact even considered comparable to the Industrial Revolution, thus being dubbed the Fourth Industrial Revolution. However, from the current technological perspective, although scientists' ultimate goal since the emergence of AI concepts and related technologies has been to achieve the ideal of machines imitating or even surpassing the human brain, the process of achieving this goal has not been smooth so far. This is directly related to the inherent technological logic of AI. To understand the essence of artificial intelligence (AI) technology, it is essential to grasp its historical development. In principle, the development of AI technology follows two paths: one is symbolic processing and logical operation systems; the other is neural network operation systems. The former primarily transforms phenomena into symbols and uses logical systems

to perform calculations. The latter, a recent and noteworthy technology, does not rely on a comprehensive human design but instead provides a general neural network system that learns through training with a database. Both technologies are called AI because they precisely reflect two aspects of human information production practices: firstly, humans process information at the microscopic level through neural networks; secondly, our language system is built on a logical foundation. Historically, these two paths have had a potential competitive relationship. In the early stages of AI development, neural networks lagged significantly behind symbolic logic systems. However, in the current third wave of AI development, neural network systems have emerged as the dominant force.

The development of neural network systems technology has experienced three waves of development. The first wave of artificial intelligence originated in the 1950s with the Perceptron learning algorithm, suitable for simple pattern classification. This processing system had a very simple three-layer structure (input layer, intermediate layer, and output layer). This learning-capable system attracted attention at the time, sparking the first wave of interest in neural network systems. However, by the late 1960s, the limitations of this technology in principle were widely recognized, ending the first wave of interest. The second wave occurred in the 1980s, when the application of "hidden layers" in neural network AI solved some previously unsolvable complex problems, regaining attention. However, due to the increasing computation time caused by the increase in computation points, the second wave also ended in the 1990s. The third wave since the 21st century has seen the emergence of multi-layered neural network systems with ten or more layers, the so-called deep learning technology. These systems can learn autonomously and have demonstrated capabilities surpassing human abilities in areas such as pattern recognition and sound recognition, such as AlphaGo, which defeated human Go players (Opdahl et al., 2023). Unlike traditional neural network systems, deep learning technology does not rely on human-provided correct answers as feedback when learning to process large amounts of information. Instead, it constructs concepts through layers of abstraction and improves the constructed conceptual system during the processing of the dataset. In contrast to the traditional, primarily manual news gathering and editing processes that prioritize news value, the scientific and technological components of journalism in the era of intelligent media have significantly increased. News interviewing, editing, and writing are no longer simply case-by-case inquiries and recording; they are now based on in-depth mining and trend analysis of big data. This has greatly improved the timeliness, cost-benefit ratio, accuracy, and personalized delivery and matching of news products, especially in specialized fields. It can be said that news production supported by artificial intelligence algorithms has significantly reduced the costs for news organizations in producing informational news, contributing to improved quality in both quantity and quality. On the other hand, this also places new demands on journalists, especially human journalists who are the traditional core of the news industry. Facing the challenges of new technologies, simply succumbing to anxiety or resistance is not the right approach. Instead, it is essential to actively adjust one's knowledge structure and adapt quickly to the production models, organizational environments, and technological requirements of intelligent media work to ensure that human journalists can leverage their advantages in the new environment of human-machine coexistence and human-machine writing.

III. Inherent Limitations of Artificial Intelligence Algorithm Technology

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the continuous development and advancement of AI technology, will human journalists gradually become less influential, or even face eventual elimination? The answer to this question inevitably returns to a fundamental question related to the essence of AI technology: can intelligent information machines truly mimic human thinking, work like the human brain, and possess human intuition, emotions, and subconscious thinking abilities? Undeniably, the rapid development of AI technology has already had a tremendous impact on human society, an impact even considered comparable to the Industrial Revolution, thus being dubbed the Fourth Industrial Revolution. However, from the current technological perspective, although scientists' ultimate goal since the emergence of AI concepts and related technologies has been to achieve the ideal of machines imitating or even surpassing the human brain, the process of achieving this goal has not been smooth so far. This is directly related to the inherent technological logic of AI.

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Judging from the current development trend of artificial intelligence technology, the editorial workers who have dominated news production since modern times.

Conclusion

AI significantly reduces processing time, making AI-powered production faster. "If an interview lasts an hour, do you know how long it would take me to write it? But if I use this app, it only takes a little time. So we just insert the audio, and then the text appears."[12]. Robotic journalism allows for the creation of mass news content. AI uses big data to generate relevant information, speeding up the analysis process. It would take a significant amount of time for people to do this, especially considering the initial relevance of the news. "In AI journalism, an AI robot can write 50-100 news stories per day, or even more, while traditional journalists are limited to 7-10 news stories per day" (Eco Sumardi). "This AI is used to search for various information, such as data; an AI that processes data from various sources in big data, turning it into information" (Saeno). All sources agreed that the use of AI simplifies and speeds up tasks such as initial data analysis, subtitle creation, and image illustration. However, traditional journalism, although based on human factors, has the advantage of being able to empathize with its sources. On the other hand, AI journalism is robotic, meaning it is a system driven by digital technology, so there is little to no empathy. Consequently, the depth of news produced by traditional journalism is higher than that of AI journalism.

The contribution of the authors.

Akseit G. – refinement of the hypothesis, structuring and formatting of research components, generation of textual content and analytical processing, analysis of the source database.

Alkozhayeva A. – author of the idea, development of the concept, definition of the research goals and objectives, selection of methodology, collection of materials and analysis of scientific data, interpretation of research results, writing of the article.

Alimbekova S. – data analysis and visualization, generation of textual content and analytical processing, coordination of the research trajectory, and content analysis of scientific and media materials.

References

1. Aljazairi, S. (2016) Robot Journalism: Threat Or an Opportunity. Örebro: Örebro University School of Humanities Education and Social Sciences.

2. Apriliyanti, R., Atika Sari, A.N. and Noor, R.A. (2024) 'Literature Review: Adoption of Artificial Intelligence (AI) in Journalism', Ideas: Journal of Education, Social, and Culture, 10(1), p. 123. doi: 10.32884/ideas.v10i1.1658.

3. Aurelya, F. (2024) The AI Revolution: What is the Role of AI in the World of Journalism? Available at: https://student-activity.binus.ac.id/panorama/2024/05/09/revolusi-ai-bagaimana-peran-ai-di-dunia-jurnalistik/ (Accessed: 14 April 2026).

4. Ali, W. and Hassoun, M. (2019) 'Artificial intelligence and automated journalism: Contemporary challenges and new opportunities', International Journal of Media, Journalism and Mass Communications, 5(1), pp. 40-49.

5. Amponsah, P.N. and Atianashie, A.M. (2024) 'Navigating the new frontier: A comprehensive review of AI in journalism', Advances in Journalism and Communication, 12(1), pp. 1–17.

6. Biswal, S.K. and Gouda, N.K. (2019) 'Artificial intelligence in journalism: A boon or bane?', in Optimization in Machine Learning and Applications. Singapore: Springer, pp. 155–167.

7. Deuze, M. and Beckett, C. (2022) 'Imagination, algorithms and news: Developing AI literacy for journalism', Digital Journalism, 10(10), pp. 1913–1918.

8. Hassan, A. and Albayari, A. (2022) 'The usage of artificial intelligence in journalism', in Future of Organizations and Work after the 4th Industrial Revolution. Cham: Springer, pp. 175–197.

9. Kothari, A. and Cruikshank, S.A. (2022) 'Artificial intelligence and journalism: An agenda for journalism research in Africa', African Journalism Studies, 43(1), pp. 17–33.

10. Mahony, S. and Chen, Q. (2025) 'Concerns about the role of artificial intelligence in journalism, and media manipulation', Journalism, 26(9), pp. 1859–1877.

11. Moravec, V., Hynek, N., Skare, M., Gavurova, B. and 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, p. 123162.

12. Noain Sánchez, A. (2022) Addressing the impact of artificial intelligence on journalism: The perception of experts, journalists and academics. [Self-published/Research Report].

13. Opdahl, A.L., Tessem, B., Dang-Nguyen, D. T., Motta, E., Setty, V., Throndsen, E. and Trattner, C. (2023) 'Trustworthy journalism through AI', Data & Knowledge Engineering, 146, p. 102182.

14. Parratt-Fernández, S., Mayoral-Sánchez, J. and Mera-Fernández, M. (2021) 'The application of artificial intelligence to journalism: An analysis of academic production', Profesional de la Información, 30(3). doi: 10.3145/epi.2021.may.02.

15. Pavlik, J.V. (2023) 'Collaborating with ChatGPT: Considering the implications of generative artificial intelligence for journalism and media education', Journalism & Mass Communication Educator, 78(1), pp. 84-93.

16. Quinonez, C. and Meij, E. (2024) 'A new era of AI-assisted journalism at Bloomberg', AI Magazine, 45(2), pp. 187-199.

17. Verma, D. (2024) 'Impact of artificial intelligence on journalism: A comprehensive review of AI in journalism', Journal Journal of Communication and Management, 3(2), pp. 150–156.

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Қазіргі журналистикадағы жасанды интеллект технологияларының трансформациялық рөлі

Аңдатпа. Журналистика – көпқабатты әрі динамикалық ақпарат ағындарын аудиторияға тиімді түрде жеткізуді қамтамасыз ететін күрделі коммуникативтік жүйе. Соңғы жылдары жасанды интеллект технологияларының қарқынды дамуы «роботтық журналистика» деп аталатын жаңа бағыттың қалыптасуына негіз болды. Жасанды интеллект жаңалықтарды тарату жылдамдығын арттырып қана қоймай, үлкен деректерді өңдеу мен талдауды айтарлықтай оңтайландырады. Дегенмен, бұл үдеріс ақпараттың сенімділігі мен журналистік этика тұрғысынан бірқатар өзекті мәселелерді туындатады. Аталған зерттеу жұмысы журналистика саласында жасанды интеллектіні қолданудың теориялық және практикалық қырларын кешенді түрде қарастыруға бағытталған. Сонымен қатар, заманауи технологиялық шешімдер ақпараттың тұтастығын сақтау тетіктерін жетілдірудің алғышарттары ретінде талданады. Зерттеу сапалық әдіснамаға негізделген сипаттамалық талдау үлгісінде жүргізіліп, технологиялық құбылыстар жүйелі түрде сарапталады. Зерттеу нәтижелері көрсеткендей, жасанды интеллект сұхбаттарды автоматты

түрде транскрипциялау, деректерді терең талдау және ауқымды контент өндіру үдерістерінде жоғары тиімділік танытады, сонымен қатар редакциялық қызметтің операциялық өнімділігін едәуір арттырады. Бұл технология ақпаратты жедел тарату мүмкіндігін кеңейтіп, цифрлық дәуір талаптарына толық жауап береді. Сонымен қатар, алгоритмдік бейтараптылықтың бұзылуы мен жасанды интеллектке шамадан тыс тәуелділік салдарынан жаңалықтардың сапасының төмендеу қаупі байқалады. Бұған қоса, журналистикада жасанды интеллектіні қолдануға қатысты әмбебап этикалық стандарттардың жеткілікті деңгейде қалыптаспағаны анықталды. Осыған байланысты бұқаралық ақпарат құралдары, саясаткерлер және технология әзірлеушілер арасындағы институционалдық ынтымақтастықтың маңызы арта түседі. Қорытындылай келе, жасанды интеллект журналистиканы түбегейлі трансформациялауға әлеуетті. Алайда оны тиімді енгізу жауапкершілік, адам тарапынан тұрақты бақылау және жүйелі реттеу қағидаттарын сақтауды талап етеді.

Түйін сөздер: жасанды интеллект, роботтық журналистика, алгоритмдік бейімділік, ақпарат сенімділігі, цифрлық коммуникация.

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Трансформационная роль технологий искусственного интеллекта в современной журналистике

Аннотация. Журналистика представляет собой сложную коммуникативную систему, обеспечивающую эффективную трансляцию многослойных информационных потоков аудитории. Стремительное развитие технологий искусственного интеллекта способствовало формированию нового направления – «роботизированной журналистики». Искусственный интеллект не только ускоряет распространение новостей, но и значительно оптимизирует процессы анализа больших данных. Однако данный процесс сопровождается рядом этических и доверительных вызовов. Настоящее исследование направлено на комплексное рассмотрение теоретических и практических аспектов применения искусственного интеллекта в журналистике. Особое внимание уделяется технологическим разработкам как основе для сохранения целостности новостного контента. Работа выполнена в рамках качественного описательного подхода, предусматривающего системный анализ соответствующих технологических явлений. Результаты исследования показывают, что искусственный интеллект демонстрирует высокую эффективность в автоматической транскрипции интервью, аналитической обработке данных и генерации масштабного контента, существенно повышая операционную продуктивность редакционных процессов. В то же время выявлены риски снижения качества новостного контента, обусловленные алгоритмической предвзятостью и чрезмерной зависимостью от технологий искусственного интеллекта. Кроме того, отмечается недостаточная разработанность универсальных этических стандартов их применения в журналистике. В этой связи возрастает значимость институционального взаимодействия между средствами массовой информации, политическими структурами и разработчиками технологий. Искусственный интеллект обладает значительным потенциалом трансформации журналистики, однако его внедрение требует ответственного подхода, постоянного человеческого контроля и системного регулирования.

Ключевые слова: искусственный интеллект, роботизированная журналистика, алгоритмическая предвзятость, доверие к новостям, информационные потоки.

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