

Breaking News at Machine Speed: The Rise of AI in Real-Time Journalism

Richa Mahajan¹, Shipra Dua Piplani², Urvashi Sharma³, Rajshree Chatterjee⁴, Neha Jain⁵, Ajay Sudhir Bale^{6*} and Mamta B Savadatti⁷

¹ Assistant Professor, Jagannath University, Delhi NCR; mahajanricha1@gmail.com

² Assistant Professor, Jagannath University, Delhi NCR; dua.shipra@gmail.com

³ Associate Professor, Jagannath University, Delhi NCR; drurvashisharma1983@gmail.com

⁴ Associate Professor, Jagannath University, Delhi NCR; drrajshreechatterjee@gmail.com

⁵ Dean- School of Humanities, K.R.Mangalam University, Gurugram, Haryana; nehaj787@gmail.com

⁶ Department of ECE, New Horizon College of Engineering, Bengaluru, India; ajaysudhirbale@gmail.com

⁷ Department of ECE, New Horizon College of Engineering, Bengaluru, India; mamtabsavadatti@gmail.com

How to cite this article: Richa Mahajan, Shipra Dua Piplani, Urvashi Sharma, Rajshree Chatterjee, Neha Jain, Ajay Sudhir Bale, Mamta B Savadatti (2024) Breaking News at Machine Speed: The Rise of AI in Real-Time Journalism, 44(3), 1060-1069

ABSTRACT

This paper focuses on the impact of growing Artificial intelligence (AI) on real time news delivery in the field of journalism. The authors have explored how AI can revolutionize the production of news by automating the tasks thereby improving the efficiency and facilitating in depth investigations. The ethical and practical challenges associated with AI adoption in newsrooms are also discussed in this paper. The idea concludes with emphasis on the need for a balanced approach that helps to strengthen AI and ensure the integrity and credibility of journalism, while reducing the risks involved.

Keywords: AI, Journalism, ethical, risks, creditability.

INTRODUCTION

Artificial intelligence (AI) encompasses a wide array of methods which mostly concentrate on machine learning (ML) including its subdivision, deep learning, along with many manifestations of natural language processing (NLP). Such tools frequently rely on machine learning approaches, where an electronic software or systems assimilates information gathered from instances, information, and methods trained for extensive datasets. This iterative process enhances efficiency when used on a specific job [1]. AI programs and systems are not comprehensive in their capabilities. Their inherent architecture imposes limitations on their capabilities. AI, refers to a collection of ideas, techniques, and resources that enable automated systems to do tasks that usually require human intelligence. AI in practical use encompasses a diverse array of tools and techniques that tackle many specialised tasks and challenges at different levels of intricacy, independence, and complexity [2-3]. AI, in the context of journalism, pertains to the extensive use of analytics and automated by media companies, usually aimed at enhancing the productivity of reporters or delivering more pertinent information to customers [4-5]. The use of AI in newsrooms might range from basic transcription of audio conversations into text to intricate identification of counterfeit movies or images. Examples of advanced applications of AI in newsrooms include the Associated Press' use of AI to produce computerised revenue reports, which greatly enhanced its reporting capabilities; and Reuters' employ of Lynx Insights [6-7], a sophisticated tool that can analyse vast quantities of data, including reports on finances and social networking patterns, to identify patterns and new developments that may have newsworthy significance but might not become readily apparent. AI was already visible for a long time. However, recent debates about its application in newsrooms have intensified because of its ability to revolutionise the way viewers consume media and the potential it offers for journalism [8-9]. Such possibilities include enhancing the

efficiency of news manufacturing and distribution, streamlining reporting, improving audience satisfaction and comprehension of tastes, and enabling complicated verifying facts and inspection [10-11]. The worldwide journalism sector is now experiencing a significant and fundamental change propelled by the rapid progress in artificial intelligence development. With the increasing sophistication of AI methods, they are starting to have a substantial impact on many aspects of journalism, including material generation, distribution, and interaction with the public. This shift brings out both prospects and obstacles for journalists, media entities, and viewers alike. Traditionally, journalism was a human-focused pursuit, dependent on the investigation and storytelling abilities of skilled journalists. Yet, the incorporation of artificial intelligence has brought forth a new dynamic, allowing the mechanization of mundane activities like news composition, verification of facts, and analysis of trends. For example, algorithms driven by artificial intelligence can already produce news pieces for economic data, sporting activities, and forecasts with impressive expediency and precision. This technological advancement has the potential to liberate journalists from monotonous duties, therefore enabling them to concentrate on more comprehensive reporting and intricate enquiries. Notwithstanding the possible advantages, the use of AI in journalism additionally provides rise to significant moral and legal problems. An urgent and critical concern is the possible deterioration of the professionalism of journalists and the inherent human element in reporting. Artificial intelligence systems, while very effective, do not possess the sophisticated comprehension of background and ethical discernment which human reporters provide to their profession. If computers are not meticulously developed and controlled, this inadequacy might lead to the spread of prejudiced or false data. Furthermore, the reliance on AI technology presents substantial hazards for the confidentiality and protection of data. The substantial volumes of data necessary for training AI systems frequently involve critical identities, which gives rise to issues around the safeguarding of data and the consequences of breaches of data. Moreover, with the increasing integration of AI systems in newsrooms, there is a possible danger of excessive dependence on these technologies, which might result in loss of employment and a decrease in the variety of perspectives inside the publishing sector. Considering the significant influence of AI on journalism, it is crucial to undertake a thorough examination of how these technologies are transforming the practice. The study in [12] aims to provide significant insight into the changing field of journalism in the era of artificial intelligence by conducting a critical evaluation of current writing, empirical examination, and interviews with experts. By comprehending the intricacies of incorporating artificial intelligence (AI) into journalism, the parties involved may formulate tactics to use the advantages of these advances while minimising their potential drawbacks. The significance of the reported study extends beyond academic scholars to include journalists, politicians, and the general people who depend on journalism as a fundamental element of an educated society. Within the dynamic realm of digital technology, the convergence of AI and journalism presents a very productive domain for investigation and discussion. As we traverse this unfamiliar domain, it is imperative to preserve an equilibrium between technical advancement and the fundamental tenets of journalism that support veracity, openness, and confidence.

1. Related Works

Prior research on the influence of artificial intelligence (AI) on journalism has offered crucial understanding of the potential and difficulties that arise with the incorporation of these sophisticated advances into the media sector. This research provides a basis for comprehending how artificial intelligence is stimulating a revolution in journalism methods and restructuring the wider media environment. The many effects of AI for journalism were investigated with a focus on the capacity of AI-driven algorithms to enable content generation, personalise news distribution, and enhance user engagement. Their study suggests that artificial intelligence (AI) has the potential to significantly decrease the amount of time journalists allocate to repetitious and monotonous activities, such as verifying facts and data analysis, therefore improving the overall efficiency of newsrooms. Nevertheless, Marconi and Siegman expressed apprehensions about the possible displacement of human journalists, as artificial intelligence (AI) gains more expertise in jobs that have historically been carried out by humans. This paper presents a detailed examination of how artificial intelligence (AI) could improve the precision and efficiency of news reporting. By using the remarkable computing capabilities of artificial intelligence, news organisations may efficiently analyse extensive datasets with more accuracy, therefore enhancing the promptness and dependability of their news reporting.

Carlson's research included an array of case studies, including the automatic dissemination of results from elections and sporting descriptions [13], therefore illustrating the tangible implementations and advantages of

artificial intelligence in modern newsrooms. Many studies have explored the ethical issues related to the use of artificial intelligence (AI) in journalism. They proposed that while AI has the capacity to alleviate human prejudices and mistakes, it also presents novel ethical dilemmas, including the requirement for computational openness and responsibility. Their research underscored the need of developing strong norms and moral guidelines to guarantee that AI applications in journalism maintain public confidence and honesty. The work in [14] conducted a groundbreaking study that specifically examined the consequences of artificial intelligence (AI) on investigative reporting. Through his study, he demonstrated how artificial intelligence systems may aid journalists in data mining, pattern recognition, and knowledge confirmation, thus broadening the range and depth of reporting on investigations [13-14]

Nevertheless, the work in [14] warned against an excessive dependence on AI, emphasising the requirement of human supervision to properly evaluate and provide meaning to data. Effective cooperation between humans and AI is crucial for preserving the integrity and trustworthiness of journalistic inquiry. Many research examined audience impressions of AI-generated material, uncovering a range of responses. Certain populations value the effectiveness and advanced technology of artificial intelligence, while others have doubts about the genuineness and emotional complexity of narratives produced by machines. This research emphasises the need of correlating the uses of AI with the values and norms of their target demographic in order to guarantee legitimacy and adoption. Many studies reported so far have conducted a comparative study of news articles produced by artificial intelligence versus news content created by humans. The results of his study indicated that while viewers often struggled to differentiate between the two, they placed importance on distinct characteristics: precision and neutrality for information created by artificial intelligence, and the style and background of narratives for pieces authored by humans. Research conducted suggests that a hybrid method, which combines the advantages of artificial intelligence and human journalists, might be the most efficient technique for the future. The use of AI technology has the potential to streamline resource-intensive activities, resulting in reduced operating expenses and enabling smaller organisations to provide journalism of superior quality. Dörr's research indicates that artificial intelligence (AI) has the potential to enhance the diversity and competitiveness of the media industry, as long as conditions related to accessibility and moral questions are properly resolved.

2. Comparative Study:

Journalistic Knowledge Platforms (JKPs) are a class of smart computers that combine information bases, AI to help journalists and enhance the news generation process. Although JKPs have a chance to completely transform the journalism industry, their acceptance remains sluggish. Both major news organisations and academics have contributed to the creation of JKPs. The technological demands of JKPs, which forced news organisations to depend on several separate, job-specific production systems, may be blamed for the delayed adoption. In addition to raising the possibility of supplier lock-in situations and a loss of data control, this scenario may result in increased resources and collaboration footprints and expenses. Since there is currently no effective system framework that could render it easier to realise and integrate JKPs over time in a cogent way, the technological difficulties continue to be a significant barrier. This PhD Thesis examines and develops an application standard design to aid in the implementation of concrete options and the acceptance of knowledge-graph based JKPs, therefore contributing to the conceptualisation and execution of JKPs. This PhD Thesis's [15] initial contribution offers a comprehensive and understandable history of the concept of JKPs, as well as an overview of their present condition. This research outlines the main obstacles and future paths for JKPs and offers an initial examination of the variables that have led to the delayed acceptance, emphasising the intricate nature of their social as well as technological components. The application standard design, which offers a general blueprint for creating actual JKPs, is presented in the second contributions. In addition, the suggested reference design specifies two brand-new categories of parts meant to preserve and improve scientific depictions and AI models. In the third, a method for enhancing the effectiveness of knowledge harvest streams is described along with an implementation instance of the application reference design. This framework makes it easier to integrate AI tools and NLP methods in a flexible, simultaneous and parallel manner. It also addresses the ethical concerns of employing JKPs and the consequences of current AI advancements on JKPs. In general, from concept to practical layout, it offers a thorough and thorough examination of JKPs. The purpose of this study is to promote the use of JKPs and further this area of study.

Numerous advancements have been made possible by new technologies in this era of disruptive technology. This

upending of established markets, sectors, and procedures has an impact on the PR sector. The quick uptake of new PR tools requires employees to be more flexible. Artificial intelligence makes its way into PR. PR is quickly moving from conventional to digital and AI-powered. PR and AI may work together on projects. Indonesian relations professionals use Media Monitoring in light of the increasing usage of AI in everyday life. Automatic monitoring of the media is a tool used by professionals in public relations to get more accurate and timely information. International private firms in Indonesia try AI (Media Monitoring) PR approaches for customer service. For empirical studies, survey responses that have frameworks are used. The findings indicate that although AI software is complicated and can alter different positions, it is unable to replace the main duties of humanity, particularly among PR work. The employ of AI instruments, such as media sources evaluating, boosts productivity and effectiveness. The shifting landscape of PR in Indonesia additionally impacted PR practices [16].

False reporting grows via the internet due to the quick growth of big data and information distribution technologies, endangering the capacity of society to grow sustainably. In addition to undermining public confidence and upsetting the balance of power, deception also causes antagonism, societal dividing, and deceptive decision-making, all of these impede the capacity of society to advance and function normally. False or inflated news stories, like Figure 1, are particularly referred to as fake news. It is possible that these reports are purposefully written to deceive people or forward a certain goal. More so than false news regarding terrorist activity, catastrophes in research, rumours, or financial data, fake news about politics has a greater online effect [17]. Rumours tend to go further, quicker, and broader than the real story, which suggests that false news is more inventive than actual news. Counterfeit information, still frequently inspires individuals to feel anxious, interferes with societal regular operations, and jeopardises its capacity to grow sustainably.

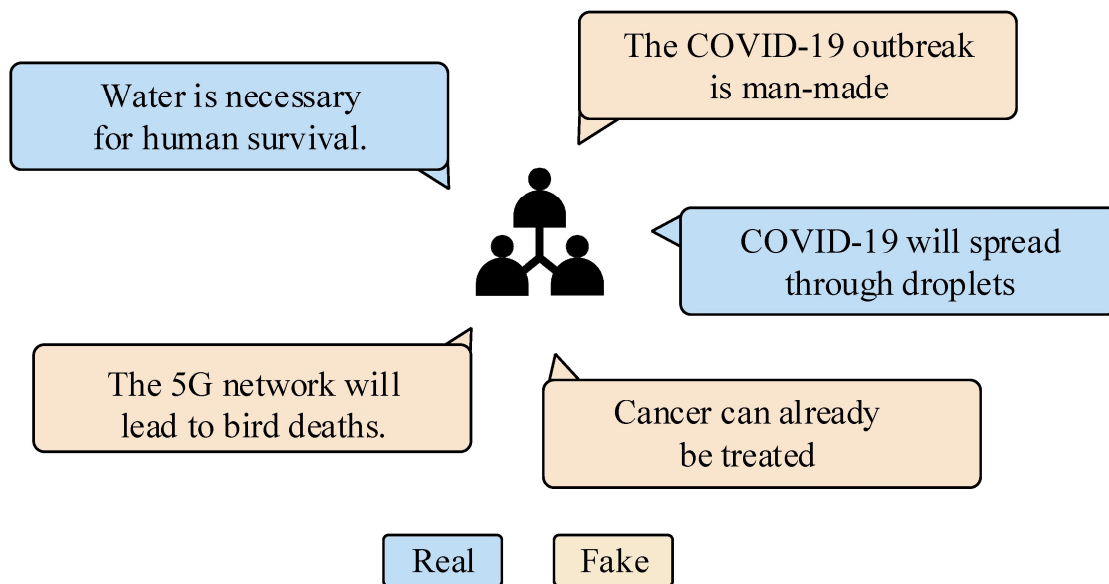


Figure 1: Information shared on online platforms [17]

In particular, the spread of information demonstrates a number of traits, such as data overload, swiftness of spread, generality of material, indistinguishable of genuineness, detrimental effect, transregional accessibility, prejudice, social skills of the media, and so forth. The data pandemic arises from the massive deluge of deceptive data on social media and other popular media channels. The display of the complex structure of combining of several communications processes, including broadcasting, networking, and smart communication, versus the backdrop of modern gadgets, is the core of the knowledge pandemic. As a result, in today's world, identifying false information urgently requires the use of recognition of fake news technologies. A few studies have utilized techniques for detecting false news in recent years. Four factors were examined in studies: expertise, style of writing, manner of speaking, and resource trustworthiness. Many works outlined the detrimental effects of false news found online and provided an overview of the most recent detecting methods at the time. The explainable, utilized detection of fake news systems still have several shortcomings, and these assessments fail to take interdisciplinary factors into account. Based on the foregoing study, the work in [16-

17] will provide a thorough review of the state of the research on false news identification in order to design a focused-on individuals, understandable technology coupled with interdisciplinary knowledge of theory as shown in Table 1

Table 1: Categorisation and elucidation of false information [17]

Taxonomy of fake news	Main points
False and misleading news	a fabrication meant to trick and misled the viewer. More dishonest false news is meant to purposefully mislead viewers or have negative consequences.
Deceptive data pertaining to rumours	Rumours that haven't been verified, anonymous remarks, etc.
false remarks	A false or deceptive statement made on online platforms, an internet forum, or another participatory website.
Fake news fit for a headline event	Modify fictitious headlines striking, the news's real substance but lacks any historical significance
Recombining erroneous information according to facts	to rearrange actual data in a way that conveys a false or deceptive picture.
Deceptive fake news	a fabrication meant to trick and misled the viewer. More dishonest false news is meant to purposefully mislead readers or have negative consequences.

The goal of the text-based fake news identification approach is to identify the news's validity by extracting different semantic elements from the headlines. The linguistic styles of texts containing real and false news may be used to identify fake news since they vary in certain ways from authentic news. Real news is objective; bogus information is emotional. According to the study, legitimate information frequently uses particular (like numbers), goal (like third person), and favourable phrases, whereas fake news frequently uses both first and second person as well as phrases that may be 1064tilized to exaggerate (like topic, transfinite phrases, and modality adverbs). Fake news writers tend to be more radical. According to many studies, research that compares the journalistic style of left- and right-wing news organisations, they all exhibit extreme, partisan, and hateful inclinations. But not every language characteristic is equally significant, and various lexical traits have varying degrees of relevance. A comprehensive collection of content elements, such as the entire number of words used in the news, its length, the quantity of capital letters, unique symbols, phrases at the start of the number, inflammatory words, etc., were retrieved from both genuine and false news. Tests are used to evaluate the traits according to significance, and the results show that the quantity of capital letters, article length, and overall word count have a stronger influence on the ability to distinguish between fake and authentic news. Prejudice regarding bogus news is more influenced by acronyms and word count overall.

It can identify false news using a combination of characteristics, as opposed to the identification technique that 1064tilized a single feature resource. Textual data is no longer the only kind of data 1064tilized in fake news identification; visual characteristics have also received more attention in the past few years. Using a variety of data kinds (text, picture, etc.) to assess if a news item includes inaccurate or deceptive data is known as multimodal fake news detection as shown in Figure 2.



Figure 2: Illustrations of fake news in multimodal settings [17-19]

An explainable and interactive AI architecture for human-machine interaction is shown in Figure 3. Interpretation audience and commentators are among the system's principal players. The viewer pays attention to the clarification provided by interpreters, who are typically impacted by those who participate in an assignment as well as the managers and programmers. Translators are artificial intelligence drivers with numerous explainable algorithms which may arrive at choice based on specific duties. In response, the interpreter raises enquiries of the interpreter in order to make modifications and optimisations. The interpreter delivers various interpretation outcomes to the interpreting audiences based on various work circumstances. An interpreter is going to be more conversant and provide interpretations that are more compelling in this manner.

The technique known as "generative artificial intelligence" (GAI) uses models, algorithms, and other building blocks to produce text, audio, pictures, videos, and code [20]. Content evaluation, sentiment evaluation, event removal, summary creation, personalised suggestions revision, and visualisation are just a few of the capabilities that GAI platforms provide via a variety of APIs designed specifically for the content creation industry. Within this human-machine cooperation approach, journalists mainly provide written information, with robots taking care of responsibilities related to content development and display. The media acts as a bridge between end users and GAI in the constantly changing relationship among devices, media organisations, and end users. Particularly, the media provides user interfaces, while GAI oversees technological execution. An end-user-accessible GAI system is the final product.

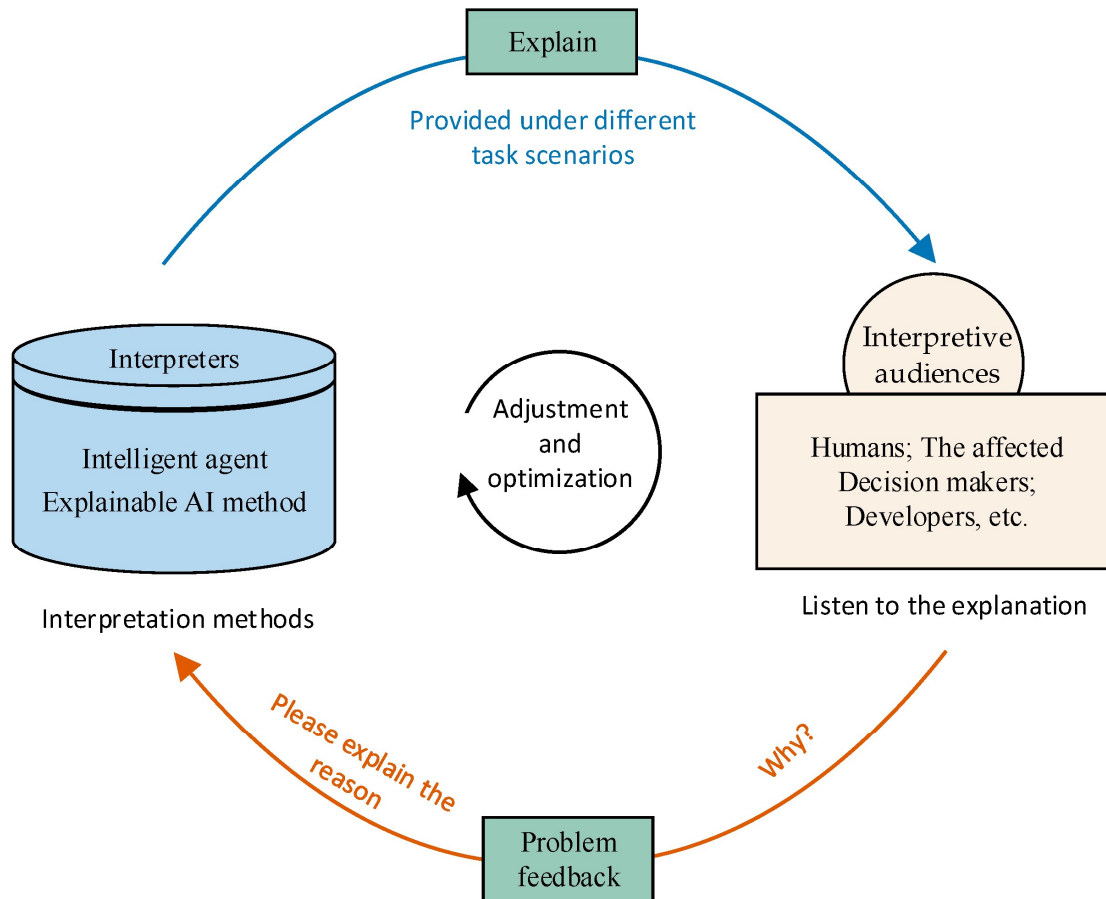


Figure 3: Schematic of an explainable AI architecture for interactions between humans and machines. [17]

The foundation of reporting is gathering data, in which reporters evaluate the importance and significance of different issues in light of the facts at hand. The knowledge collecting environment has expanded, expenses have come down, and old approaches have changed with the inclusion of GAI. More precisely, GAI makes use of advanced algorithms to sort through large datasets, identify relevant data points for it, and provide insightful analysis. GAI improves the breadth and efficiency of data-gathering operations by revealing previously hidden layers of information via automatic processing of information, visualisation tools, and interpretative skills. In addition, GAI can estimate patterns for intricate occurrences, study historical data, and educate journalists for unanticipated situations. For instance, Google's Bard can estimate event patterns using this data since it was developed on an enormous collection of text and code covering a variety of themes, including technologies, science, the ages, and politics. In general, there are three primary components to using GAI throughout the collecting data phase. First, GAI takes over labour-intensive and repetitious fundamental activities performed by journalists, such gathering background information. One such instance is Reuters News Tracer. To locate new developments, it applies ML techniques to a portion of the 700 million tweets sent on Twitter every day. These computer algorithms search for groups of tweets discussing an identical event. Based on these groups, the tool creates a relevance score that asks if the occurrence warrants publishing and confirms the accuracy of any information. Before publication, Reuters journalists carefully confirm the content via their own networks and sources (Reuters 2017) [21]. Second, GAI addresses the constraints placed on news reporters by their profession. Time and space limitations are common for journalists, which might make it difficult for them to swiftly catch up on the most recent events. In situations like these, GAI intervenes to find accurate data, keep an eye on events as they happen, and provide fresh viewpoints for news reports. Despite limitations, journalists may keep current on events that are developing and still be relevant in their reporting thanks to this technology help. Third, in order to improve GAI systems' ability to assess interesting and bring them into compliance with news organisations' editing

norms, journalists are essential trainers. There is a catch to this method, nevertheless. As GAI becomes more adept in determining what constitutes newsworthy content, what data it gathers might start to reflect the goals and principles of the media organisation. As a result, there is a chance that by depending only on a limited number of sources, minor occurrences may be missed. Reporters, developers, and news organisations must continue to work together to reduce this danger. The primary goal of this partnership should be to continually improve GAI's mental and educational capacities so that it can adjust to changing news situations and occurrences. Even as the news sector has benefited somewhat from GAI, inclusion also calls for introspection. The Canadian researcher Geoffrey Winthrop Young once considered how digital devices impact people's subjectivity and societal institutions, as well as how machines change the limits among people and science. Media practitioners need to negotiate the changing environment wherein AI sharing the authority of news creation as GAI becomes more prevalent in journalism. This change calls into question long-held beliefs about the profession of journalism and calls for the creation of new moral guidelines. One major concern is that under this changing model, the core values of journalism ethics—truth, reliability, impartiality, and accountability—may encounter hitherto unseen difficulties. In the activity of producing and disseminating news, a collection of moral principles, academic standards, and behavioural rules are referred to as "journalistic ethics." The standards and bounds of journalistic activities are established by the ethics of journalism, which also prescribes the moral principles and ethical concerns of news reporting. In order to aid comprehension of the research, this image illustrates the use of GAI in news creation along with the moral dilemmas that come with it as shown in Figure 4.



Figure 4: The use of GAI in news creation and the moral issues that arise. [20]

The media landscape has been significantly impacted by the enormous technical breakthroughs of the modern era where we inhabit. More precisely, advancements over the last 20 years have resulted in the communication landscape swiftly changing as a consequence of the entertainment sector's end-to-end digitalisation. Apart from the digitisation of news, User-Generated Content (UGC) has grown prevalent in this new setting, driven by social networking, which is now ubiquitous for news authoring, sharing, consuming, and engagement. However, there are now pressing demands and issues that need careful attention due to the exponential rise in material generated and delivered as well as the multiplicity of persons participating in the processes. In order to satisfy the expectations of the contemporary digital age, the Semantic Web vision, also known as Web 3.0, incorporates cognitive thinking and robotics that aims to provide advanced handling of data, search, and documenting services. In particular, solutions that inspire and engage audiences—both experts and end users—as well as concerns about content creation and evaluation are developed especially for the delicate media and news sectors [22-23].

3. Discussions and Future Scope:

The development in AI is revolutionizing real-time journalism and enhancing the reporting capabilities, hence offering unprecedented opportunities for news organizations. Various AI driven tools are in picture which are helping the journalists to automate the daily tasks, analyse the datasets and even generate content with good speed and accuracy. This integration not only improves the efficiency of newsrooms but also enables more in depth and data driven reporting, helping audiences with timely, accurate and elaborative coverage of news. But there are

also challenges with use of AI in journalism which have few ethical concerns like bias for usage of certain AI algorithms and the need to maintain the integrity of human oversight in the production of news. AI continues to evolve as it is a crucial part in media organizations in maintaining the tasks and the benefits of using these technologies, properly implying ethics to uphold the core values of journalism.

The future of AI in the field of journalism is huge and challenging having good scope for improvement in the way news is gathered, produced and distributed. With advancements in AI, we can expect sophisticated tools that not only assist in automation but also help in investigative journalism with use of advanced data analytics, NLP and ML algorithms. These technologies help to personalize the news experiences tailoring the content as per individual preferences and easy of delivery through various platforms in real-time. There are range of applications trending in the field of AI facilitating creation of immersive storytelling experiences using AR and VR, providing the audiences deeper engagement with latest new content. There are various bottlenecks for AI in this field of journalism like algorithmic transparency, ethical AI usage, preservation of journalistic integrity without compromising the principles and ethics of journalism.

References:

1. Adjin-Tettey, T.D.; Muringa, T.; Danso, S.; Zondi, S. The Role of Artificial Intelligence in Contemporary Journalism Practice in Two African Countries. *Journal. Media* 2024, 5, 846-860. <https://doi.org/10.3390/journalmedia5030054>
2. Butt, Muhammad Junaid, et al. "A survey on COVID-19 data analysis using AI, IoT, and social media." *Sensors* 23.12 (2023): 5543.
3. Harcup, Tony. "The struggle for news value in the digital era." *Journalism and Media* 4.3 (2023): 902-917.
4. Lozano, Alba, and Carolina Blanco Fontao. "Is the education system prepared for the irruption of artificial intelligence? A study on the perceptions of students of primary education degree from a dual perspective: Current pupils and future teachers." *Education Sciences* 13.7 (2023): 733.
5. Fteiha, Bara, et al. "Revolutionizing Video Production: An AI-Powered Cameraman Robot for Quality Content." *Engineering Proceedings* 60.1 (2024): 19.
6. J. Aditya Khatokar et al., "Carbon nanodots: Chemiluminescence, fluorescence and photoluminescence properties," *Mater. Today*, vol. 43, pp. 3928–3931, 2021
7. Sudhir A. ., Dhumale, R. B. ., Beri, N. ., Lourens, M. ., Varma, R. A. ., Kumar, V. . ., Sanamdikar, S. ., & Savadatti, M. B. . (2023). The Impact of Generative Content on Individuals Privacy and Ethical Concerns. *International Journal of Intelligent Systems and Applications in Engineering*, 12(1s), 697–703. Retrieved from <https://ijisae.org/index.php/IJISAE/article/view/3503>
8. Bale, A. S., Aditya Khatokar, J., Singh, S., Bharath, G., Kiran Mohan, M. S., Reddy, S. V., Huddar, S. A. (2021). Nanosciences fostering cross domain engineering applications. *Materials Today: Proceedings*, 43, 3428–3431. doi:10.1016/j.matpr.2020.09.076
9. A. S. B et al., "Mobile Cloud Computing - Enabling Technologies and Applications," 2021 6th International Conference on Signal Processing, Computing and Control (ISPCC), Solan, India, 2021, pp. 491-496, doi: 10.1109/ISPCC53510.2021.9609344.
10. S. Joy, R. et al., "A Comparative Study on Recent Trends in Iris Recognition Techniques," 2022 International Conference on Electronics and Renewable Systems (ICEARS), Tuticorin, India, 2022, pp. 1521-1525, doi: 10.1109/ICEARS53579.2022.9752355.
11. S. S. Kumar, et al., "Conceptual Study of Artificial Intelligence in Smart Cities with Industry 4.0," 2021 International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), Greater Noida, India, 2021, pp. 575-577, doi: 10.1109/ICACITE51222.2021.9404607.
12. Almaty, S. The Impact of Artificial Intelligence on Global Journalism Industry: An Analytical Study. Preprints 2024, 2024081014. <https://doi.org/10.20944/preprints202408.1014.v1>
13. Carlson, Matt. "The Robotic Reporter: Automated Journalism and the Redefinition of Labor, Composition, and Consumption." *Digital Journalism* 3, no. 3 (2015): 416-431.
14. Diakopoulos, Nicholas. *Automating the News: How Algorithms Are Rewriting the Media*. Cambridge, MA: Harvard University Press, 2019.
15. Gallofré Ocaña, Marc. "Journalistic Knowledge Platforms: from Idea to Realisation." (2023).

16. Mardhika, H. (2023). How the Introduction of AI (Media Monitoring) Tools Affects the Field of Public Relations. *Jurnal Manajemen Bisnis*, 10(2), 555–569. <https://doi.org/10.33096/jmb.v10i2.624>
17. Yuan, L.; Jiang, H.; Shen, H.; Shi, L.; Cheng, N. Sustainable Development of Information Dissemination: A Review of Current Fake News Detection Research and Practice. *Systems* 2023, 11, 458. <https://doi.org/10.3390/systems11090458>
18. "How much fake news did you fall for? Take our quiz and find out!," *The Quint*, 01-Jul-2023. [Online]. Available: <https://www.thequint.com/news/webqoof/webqoof-quiz-25-to-30-june-pm-narendra-modi-hindu-priests-nitish-kumar-russia>. [Accessed: 03-Sep-2024].
19. Watch: Israelis celebrate near Western Wall while tree burns in Al-Aqsa mosque compound in Jerusalem. *Scroll.in*, 2021.
20. Shi, Y.; Sun, L. How Generative AI Is Transforming Journalism: Development, Application and Ethics. *Journal. Media* 2024, 5, 582-594. <https://doi.org/10.3390/journalmedia5020039>
21. Reuters. 2017. May 15. Available online: <https://www.reutersagency.com/en/reuters-community/reuters-news-tracer-filtering-through-the-noise-of-social-media/> (accessed on 19 June 2024).
22. Dimoulas, C.A.; Veglis, A. Theory and Applications of Web 3.0 in the Media Sector. *Future Internet* 2023, 15, 165. <https://doi.org/10.3390/fi15050165>
23. Bale, A. S. ., Tiwari, S. ., Khatokar, A. ., N, V. ., & Mohan M S, K. . (2021). Bio-Inspired Computing- A Dive into Critical Problems, Potential Architecture and Techniques. *Trends in Sciences*, 18(23), 703. <https://doi.org/10.48048/tis.2021.703>
24. A. S.B, M. Patil, M. G. Prathima, S. V. Telgane, N. Ghorpade and B. Anish, "Augmenting Knowledge Management with Immersive Technologies: Exploring Transformative Use Cases for AR and VR," 2024 International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI), Chennai, India, 2024, pp. 1-6, doi: 10.1109/ACCAI61061.2024.10602348.
25. N. Ghorpade, et al., "Acute Lymphoblastic Leukemia Detection Employing Deep Learning and Transfer Learning Techniques," 2024 International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI), Chennai, India, 2024, pp. 1-6, doi: 10.1109/ACCAI61061.2024.10602062.
26. A. S. B, S. C. Reddy, H. Chandramouli, S. Ponnuru, S. Saranya and K. Lal, "Review on Intelligent Social Networking Algorithms and Their Effects on Predicting the Adequacy of Renewable Energy Sources via Social Media," 2024 Second International Conference on Smart Technologies for Power and Renewable Energy (SPECon), Ernakulam, India, 2024, pp. 1-6, doi: 10.1109/SPECon61254.2024.10537390.
27. M. Rajani, N. Taj, S. A. S, G. Amala and K. Lal, "Connecting Autonomous Engineering Domains with the Shared Language of Deep Neural Networks," 2024 2nd International Conference on Artificial Intelligence and Machine Learning Applications Theme: Healthcare and Internet of Things (AIMLA), Namakkal, India, 2024, pp. 1-6, doi: 10.1109/AIMLA59606.2024.10531318.
28. A. Biswas, S. Malik, E. Uchoi, S. U. Soni and A. Soni, "IoT Applications in Blockchain Technology," 2023 International Conference on Computer Science and Emerging Technologies (CSET), Bangalore, India, 2023, pp. 1-6, doi: 10.1109/CSET58993.2023.10346695.
29. H. R, B. Prakash, P. S. Babu, R. Gupta and S. Malik, "Recent Scientific Achievements and Developments in Software Defined Networking: A Survey," 2023 1st International Conference on Circuits, Power and Intelligent Systems (CCPIS), Bhubaneswar, India, 2023, pp. 1-6, doi: 10.1109/CCPIS59145.2023.10291262.