

Evaluating the Implementation of AI in the Creation of Journalistic Content: A Case Study of the Aden Algad Journal

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Received: 20/03/2024

Revised: 30/07/2024

Accepted: 17/08/2024

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Abstract— In light of technological advancements and the evolving landscape of electronic media, Artificial Intelligence (AI) has transitioned from the realm of science fiction to a tangible tool with significant potential for addressing societal challenges, particularly within the news industry. AI stands as a promising innovation framework, capable of reshaping our interactions with technology. This study delves into the realm of journalism, exploring how artificial intelligence techniques can elevate the efficiency and precision of news production. Through a comprehensive survey, we sought the perspectives of participants, providing an avenue for their personal opinions beyond the predetermined questions. Our investigation reveals a notable application of artificial intelligence in various facets, such as scrutinizing and rectifying newspaper articles, ultimately streamlining the writing process. Despite these benefits, ethical considerations loom large, necessitating a delicate balance between leveraging AI capabilities and upholding journalistic integrity, a concern emphasized by some contributors, particularly regarding workforce implications.

Keywords- Media, Journalism, Content writing, Ethics, News production.

I. INTRODUCTION

Artificial intelligence (AI) technologies have been increasing in recent years until it has become an integral part of our lives and have revolutionized many industries, including journalism and media. As artificial intelligence continues to evolve and its ability to process huge amounts of data and make smart decisions, solve complex problems and improve efficiency in many areas raises questions about the future of media and journalistic work [1].

AI in news media can certainly make journalism easier for overburdened resources without replacing journalists' unique skills. Furthermore, AI can enhance new forms of participation and leverage new products that could increase news media consumption [2, 3].

It is well known that working in journalism and the media needs innovation and creativity; but there are many roles that

journalists perform now that do not require much innovation or creativity, such as some types of writing, reviewing texts, or even reading news bulletins, all roles are easy for a "robot" to perform without human intervention. While some claim that artificial intelligence will replace human workers, others believe that it will enhance their capabilities. Although this list is not exhaustive, it highlights the level of the development of AI in news and related areas.

During the last two decades, using artificial intelligence tools increased in different newsroom worldwide including Arabic speaking news media outlets, while different newsroom started using automated artificial intelligence tools to help in editing process [3, 5]

To make a theoretical contribution to this field, this study draws upon literature on artificial intelligence to sketch an outline of the field and understand where the journalism industry is positioning itself [6, 7, 8]. Thus, this article poses the following questions:

- RQ1. In your opinion, do you think that artificial intelligence will have a positive impact on developing and writing media and journalistic content and providing better quality of content?
- RQ2. Can artificial intelligence develop media content that will improve production speed and productivity?
- RQ3. Do you think that using artificial intelligence in developing media content can solve the problem of a shortage of qualified journalists or lead to loss of job opportunities in the media industry??
- RQ4. Do you think that intelligence Artificial intelligence can help analyze big data and generate accurate and comprehensive informational reports?
- RQ5. In your opinion, can the use of artificial intelligence in writing media content lead to violations in the field of privacy or ethics in the content?
- RQ6. Do you think that the use of artificial intelligence in writing media content will affect the literary and creative quality of the content?

The paper is organized as follows: Section 2 explains the methodology used, the data collection process and the Participant Selection. Section 3 illustrate the findings and their analysis. The discussion of the findings is given in Section 4.

The conclusions, summary of the paper, its contributions, and the future work is given in the Section 5.

II. METHODOLOGY

With regard to research tools, we have conducted a preliminary exploratory study in general on the subject of artificial intelligence the aim is to identify the nature of its work to reach the research sample, which is the media in some Arab media and the work of the questionnaire related to the questions of the study, "the questionnaire is one of the most common methods of collecting information and data in research and media studies, this is due to its diversity and multiplicity, which makes it serve the purposes of the scientific research process. [6, 8]

A. DATA COLLECTION

The primary source of data for this research was questionnaires sent to journalists via Google Forms. The questionnaires were carefully designed to capture relevant information about the journalists' experiences and perspectives on AI in journalism. The questionnaires consisted of six questions, covering topics such as AI adoption, impact on journalism practices, and concerns related to AI integration.

B. PARTICIPANT SELECTION

The questionnaires were distributed to a diverse group of journalists, including those working for newspapers, online media platforms, and broadcast outlets. The aim was to gather a representative sample of journalists from different backgrounds and experiences to ensure a comprehensive analysis.

The collected data from the completed questionnaires were analyzed using qualitative analysis techniques. Thematic analysis was employed to identify recurring themes and patterns in the responses. The open-ended questions allowed for in-depth exploration of journalists' perceptions, providing rich qualitative data for analysis

III. RESULTS AND ANALYSIS

A total of 16 questionnaires were received and analyzed. The responses predominantly indicated agreement with the integration of AI in journalism. The findings revealed a strong consensus among journalists regarding the potential benefits and opportunities associated with AI adoption in the field. Common themes emerged, highlighting the positive impact of AI on news production, such as increased efficiency, improved accuracy, and enhanced data analysis capabilities.

The majority of journalists expressed positive sentiments regarding the use of AI tools and technologies. They acknowledged the potential for AI to automate repetitive tasks, allowing them to focus on more complex and value-added aspects of journalism. Journalists also recognized the potential

for AI to assist in data analysis, fact-checking, and generating insights from large volumes of information.

While the responses were generally positive, some concerns were raised regarding the ethical implications and potential job displacement associated with AI integration. Journalists emphasized the importance of maintaining editorial integrity and ensuring responsible use of AI-generated content. Job security was also a consideration, with some expressing concerns about the potential for AI to replace certain roles or tasks within the field.

This is a great approval toward using the artificial intelligence in producing news and information, where such systems can provide automated routines and repetitive tasks environment which will free up human journalists for more creative and strategic work. (Figure 1). Similar response with the role of AI in the content-driven production of high-quality articles, blog posts, and even poetry (Figure 2).

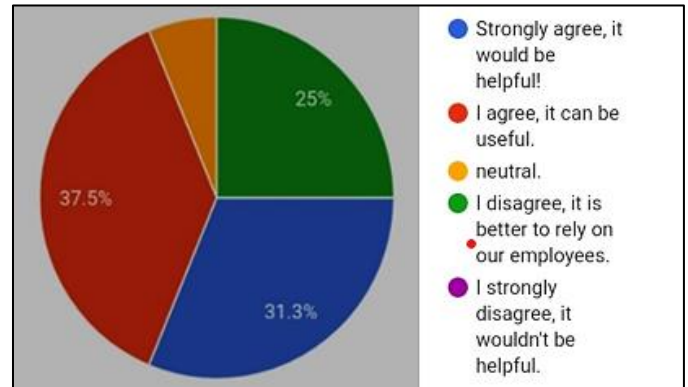


Fig. 1: Positive impact of AI in developing and writing journalistic content.

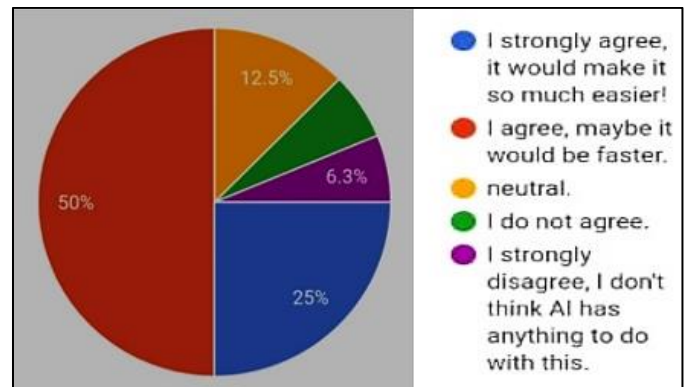


Fig. 2: Impact of AI in content-driven production of high-quality media.

Implementing the artificial intelligence systems can solve the main media business issue, which is the shortage of qualified journalists. It can enhance the accuracy, efficiency, and overall

quality of news reporting, see Figure 3. Figure 4 illustrate the answer to the question RQ4.

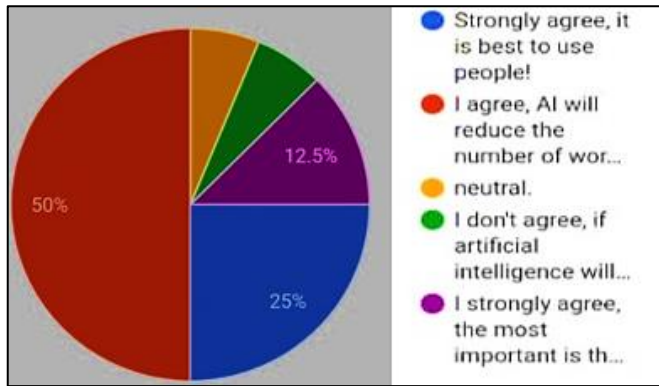


Fig.3. AI can handle the Shortage of qualified journalists

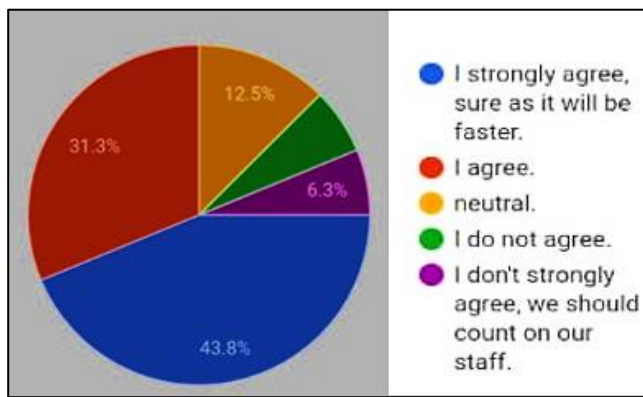


Fig.4. AI Deals with Big Data.

Figure 5 illustrate the responses to the privacy and the ethics issues. A valuable percentage toward the negative impact of the AI with these issues. There is a confusing about the quality and the creativity of the content (see Figure 6). AI algorithms can make suggestions for improvements, help streamline the writing process, and provide insight into audience preferences. However, the creativity and originality of the content still comes from the human writer.

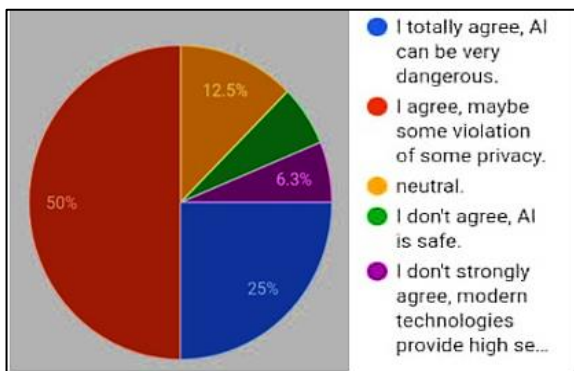


Fig.5. AI may violate the privacy.

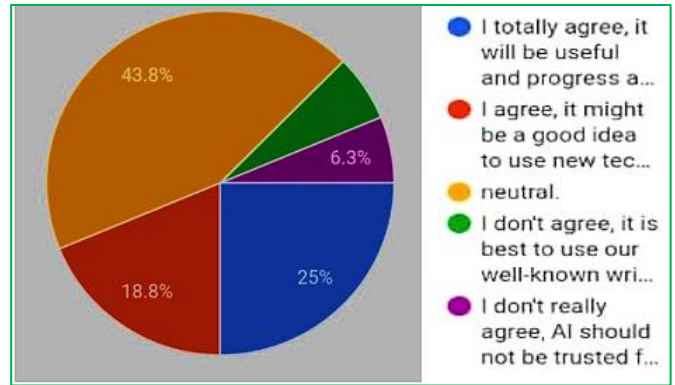


Fig.6. Responses to the creativity of the contents.

IV. DISCUSSIONS

The overwhelmingly positive responses from journalists regarding the integration of AI in journalism reflect the growing acceptance and recognition of AI's potential in the industry. The findings align with the broader trend of AI adoption across various sectors, highlighting its potential to transform journalism and improve news production processes (see Figure 7).

The positive perceptions expressed by journalists regarding the benefits of AI, such as increased efficiency and improved accuracy, indicate a readiness to embrace AI technologies as valuable tools in their work. However, the concerns raised regarding ethical considerations and job displacement highlight the need for ongoing dialogue and careful implementation of AI in journal.

They emphasize that taking some software courses such as coding and AI will be important for their future in the media. Addressing the diversity of AI elaborating on this, we should recall that it is part of a journalists' general vocation to assess what human rights may be harmed. In the case of AI, rather than be blinded by the promises of progress, it is key to consider especially the rights to dignity, privacy, equality and justice. [9, 10]

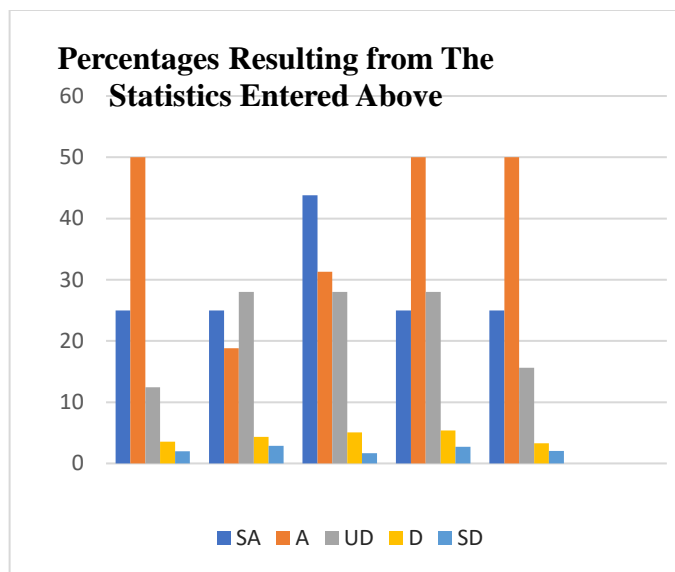


Fig.7. Percentages resulting from the statistics Entered Above.

V. CONCLUSION

The findings from this research study demonstrate the widespread agreement among journalists regarding the potential benefits of integrating AI in journalism. The positive sentiments expressed by journalists highlight the opportunities AI presents for improving news production processes. However, it is crucial for industry stakeholders to address the ethical concerns raised by journalists and ensure that AI technologies are implemented responsibly.

In sum, artificial intelligence does not pose a threat to professional journalism. In other words, artificial intelligence technologies considered as the added value of journalism in the digital age, which cannot completely replace journalists, implying that these technologies will enhance rather.

VI. REFERENCES

[1] M. Santos and W. Ceron, "Artificial Intelligence in News Media: Current Perceptions and Future Outlook," *Journalism and Media*, vol. 3, no. 1, pp. 13-26, Dec. 2021.

[2] J. T  n  z-L  pez, C. Fieiras-Ceide, and M. Vaz-  lvarez, "Impact of Artificial Intelligence on Journalism: Transformations in the Company, Products, Contents and Professional Profile," *Studies in Communication & Society*, vol. 34, no. 1, pp. 177-193, 2021.

[3] S. Calvo and P. Fumas, "Exo Journalism: A Conceptual Approach to a Hybrid Formula between Journalism and Artificial Intelligence," *Journalism and Media*, vol. 2, no. 4, pp. 830-840, Dec. 2021.

[4] W. Ali and M. Hassoun, "Artificial Intelligence and Automated Journalism: Contemporary Challenges and New Opportunities," *International Journal of Media, Journalism and Mass Communications*, vol. 5, no. 1, pp. 40-49, 2019.

[5] M. Abdulmajeed and N. Fahmy, "Meta-analysis of AI Research in Journalism: Challenges, Opportunities and Future Research Agenda for Arab Journalism," vol. 557, pp. 213-255, 2022.

[6] D. Al-Mimar, M. Qamar, and A. Mir, "The Use of Artificial Intelligence Techniques in the Arab Media: An Exploratory Study," *Migration Letters*, vol. 20, no. S6, pp. 729-741, Nov. 2023.

[7] H. Ibrahim and H. Y. Al-Hiti, "Challenges of Employing Artificial Intelligence Technologies in Iraqi Media Institutions (A Field Study)," *Migration Letters*, vol. 20, no. S2, pp. 144-164, Jul. 2023.

[8] E. Mohammed, "The Challenges of Integrating Artificial Intelligence Applications and Algorithms in the Production of Journalistic Content," *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, vol. 12, no. 14, pp. 4307-4314, Oct. 2021.

[9]  .  elik, "Artificial Intelligence Journalism and The Problems It May Bring," *Mecmua*, no. 13, pp. 143-158, Mar. 2022.

[10] J. Maarit, *Reporting on Artificial Intelligence: A Handbook for Journalism Educators*, UNESCO, 2023.