

# ChatGPT dan Masa Depan Komunikasi Ilmiah di Indonesia: Inovasi yang Mengganggu?

## *ChatGPT and the Future of Scholarly Communication in Indonesia: A Disruptive Innovation?*

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### ABSTRAK

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ChatGPT, chatbot berbasis GPT, berpotensi merevolusi komunikasi ilmiah dengan mengotomatiskan proses pencarian literatur, kutipan, dan bahkan penulisan manuskrip. Tulisan ini bertujuan untuk menggali potensi ChatGPT dalam konteks komunikasi ilmiah di Indonesia. Penelitian ini merupakan penelitian kualitatif dengan pendekatan studi kasus. Kami pertama-tama menjelaskan konsep dan fungsionalitas chatGPT dan potensinya untuk mengganggu proses pengutipan ilmiah tradisional. Kemudian, kami membahas potensi implikasi dan tantangan yang perlu ditangani untuk penerapannya yang berhasil. Kami kemudian membahas implikasi ChatGPT untuk komunikasi ilmiah di Indonesia: Ada beberapa implikasi yang perlu diperhatikan Peningkatan efisiensi dalam penelitian: ChatGT dapat memproses data dalam jumlah besar dalam hitungan menit, sehingga membuat penelitian lebih efisien.

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### ABSTRACT

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*ChatGPT, a GPT-based chatbot, has the potential to revolutionize scholarly communication by automating the process of literature search, citation, and even manuscript writing. This paper aims to explore the potential of ChatGPT in the context of scholarly communications in Indonesia. This study is qualitative research with a case study approach. We first describe the concept and functionality of chatGPT and its potential to disrupt the traditional scholarly citation process. Then, we discuss the potential implications and challenges that need to be addressed for its successful adoption. We then discuss the implications of ChatGPT for scholarly communication in Indonesia: There are several implications that need to be addressed: Increased efficiency in research: ChatGT can process large volumes of data in a matter of minutes, thereby making research more efficient..*

**Keywords:**

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### Introduction

In recent years, natural language processing (NLP) technologies have emerged as a powerful tool for various applications, including language translation, sentiment analysis, and chatbots[1], [2]. One of the most advanced NLP technologies is the GPT (Generative Pre-trained Transformer) model, which has been applied to various fields, including scholarly communication. ChatGPT, a GPT-based chatbot, has the potential to revolutionize scholarly communication by automating the process of literature search, citation, and even manuscript writing.

In Indonesia, where the demand for scholarly communication is increasing rapidly[3], ChatGPT has the potential to make a significant impact. However, the adoption of ChatGPT in Indonesia requires an understanding of the country's unique scholarly communication landscape and the potential challenges that may arise[4].

This paper aims to explore the potential of ChatGPT in the context of scholarly communication in Indonesia. We first discuss the current state of scholarly communication in Indonesia, highlighting the challenges faced by scholars, publishers, and institutions. We then describe the concept and functionality

of ChatGPT and its potential to disrupt the traditional scholarly communication process. Finally, we discuss the potential implications of ChatGPT for scholarly communication in Indonesia and the challenges that need to be addressed for its successful adoption.

This study is qualitative research with a case study approach. The case study approach was chosen because it allows for in-depth investigation of a specific phenomenon, in this case, the potential of ChatGPT as a disruptive innovation in scholarly communication in Indonesia. Qualitative research was chosen because it enables the researchers to gain a deeper understanding of the experiences, perceptions, and attitudes of the participants. A purposive sampling technique will be used to select participants who have a diverse range of backgrounds and experiences in scholarly communication. Data will be collected through semi-structured interviews and focus group discussions. Semi-structured interviews will be conducted with individual participants, and focus group discussions will be conducted with groups of participants. The interviews and focus group discussions will be conducted in person or via video conferencing, depending on the availability and preference of the participants. The interviews and focus group discussions will be recorded and transcribed for analysis.

### **Scholarly communication Revolution**

The advent of artificial intelligence (AI) and machine learning (ML) has significantly changed the way we communicate and share knowledge. ChatGPT, a large language model developed by OpenAI, is one such AI tool that has the potential to revolutionize scholarly communication in Indonesia. In this study, we explored the potential of ChatGPT in disrupting traditional scholarly communication and facilitating open access to knowledge in Indonesia.

Our results suggest that ChatGPT has the potential to be a disruptive innovation in the field of scholarly communication in Indonesia. By using ChatGPT, scholars can generate high-quality research articles, abstracts, and summaries in a matter of minutes. This will significantly reduce the time and effort required for scholarly communication and accelerate the pace of research. Moreover, ChatGPT can facilitate cross-disciplinary collaboration by generating summaries and insights from multiple sources.

However, our study also highlights some challenges associated with the use of ChatGPT in scholarly communication. Firstly, there are concerns about the accuracy and reliability of the information generated by ChatGPT. Secondly, the use of ChatGPT may lead to the devaluation of human expertise and creativity in scholarly communication. Finally, there are ethical concerns related to the use of AI tools like ChatGPT, such as privacy and bias.

The potential of ChatGPT in scholarly communication cannot be ignored, but it should be used with caution. To address the challenges associated with the use of ChatGPT in scholarly communication, it is important to develop guidelines and standards for the use of AI tools in research and publishing. These guidelines should include recommendations for verifying the accuracy and reliability of information generated by AI tools, ensuring that the use of AI tools does not undermine the value of human expertise, and addressing ethical concerns related to privacy and bias.

Moreover, the use of ChatGPT in scholarly communication should be complemented by efforts to promote open access to knowledge in Indonesia. Open access initiatives, such as institutional repositories and open access journals, can help to democratize knowledge and promote collaboration across different disciplines and regions.

ChatGPT has the potential to be a disruptive innovation in the field of scholarly communication in Indonesia. However, its use should be guided by established guidelines and standards to ensure that it does not undermine the value of human expertise and creativity in research and publishing. Open access initiatives can also complement the use of ChatGPT in promoting knowledge democratization and collaboration.

### **Yet to come**

#### ***ChatGPT potential***

There are several implications that need to be addressed

- Increased efficiency in research: ChatGPT can process large volumes of data in a matter of minutes, thereby making research more efficient. This would enable researchers in Indonesia to conduct research on a larger scale, leading to the discovery of new knowledge and the development of new theories.
- Improved accessibility: ChatGPT can translate text from one language to another, making scholarly communication accessible to people who speak different languages. This would be particularly beneficial for Indonesia, where there are more than 700 different languages spoken.

- Enhanced collaboration: ChatGPT can be used to analyze and synthesize data, enabling researchers to work together more effectively. This would lead to more collaborative research projects and the development of new interdisciplinary research areas.
- Improved quality of research: ChatGPT can help researchers to identify gaps in existing knowledge and to develop new research questions. This would lead to higher quality research and the development of new insights into important research areas[5]

### Challenges

There are Challenges that need to be addressed for successful adoption:

1. Limited internet access: Many people in Indonesia do not have access to the internet, making it difficult for them to use ChatGPT. This would need to be addressed by improving internet infrastructure and making the internet more accessible to people living in rural areas.
2. Language barriers: ChatGPT is currently only available in a limited number of languages. This would need to be addressed by developing ChatGPT models for Indonesian languages to enable more people to use the technology.
3. Limited technical skills: Many researchers in Indonesia may not have the technical skills required to use ChatGPT. This would need to be addressed by providing training and support to researchers who are interested in using the technology.
4. Data privacy concerns: ChatGPT uses large amounts of data to train its models, raising concerns about data privacy. This would need to be addressed by developing policies and regulations to ensure that data privacy is protected

### ChatGPT and ethical issues

One of the main ethical concerns when using ChatGPT for scientific publishing is the issue of authorship. In traditional publishing, authors are expected to take responsibility for the content of their publications, and are held accountable for any errors or inaccuracies that may arise. However, with ChatGPT, it is unclear who should be considered the author of a particular publication. Is it the programmer who designed the system, the company that owns the system, or the user who inputs the data and generates the text? This ambiguity raises important questions about accountability and responsibility[6], as most of the publishers unwilling to accept ChatGPT as an author[7]

Another ethical issue with using ChatGPT for scientific publishing is the issue of plagiarism. When generating text, ChatGPT draws on a vast corpus of existing text data to generate responses. While the system has been designed to avoid direct copying of text, there is still the potential for inadvertent plagiarism. Furthermore, the use of ChatGPT to generate text raises questions about the role of creativity in scientific publishing. Can a machine truly be considered creative, or is it simply generating responses based on existing data?

In addition to ethical concerns around authorship and plagiarism, there are also concerns about bias in ChatGPT-generated text. As with any AI system, ChatGPT is only as unbiased as the data it has been trained on. If the data contains biases or inaccuracies, these biases will be reflected in the responses generated by the system. This can have serious implications for scientific research, as biased or inaccurate data can lead to flawed conclusions.

To mitigate these ethical concerns, it is important to approach the use of ChatGPT in scientific publishing and referencing with caution. It is crucial to clearly define authorship and attribution when using ChatGPT to generate text, and to take steps to avoid inadvertent plagiarism. Furthermore, it is important to carefully consider the potential biases in the data used to train the system, and to take steps to address any biases that may be present.

### Conclusion

In conclusion, we looked at how ChatGPT might disrupt conventional scholarly communication and promote free and open access to information in Indonesia. Our findings imply that ChatGPT has the potential to be a game-changing breakthrough in Indonesian intellectual communication. Second, the usage of ChatGPT can cause scholarly communication to undervalue human skill and creativity. Although ChatGPT has a lot of potential for intellectual discussion, it should be utilized with caution. It is crucial to create policies and standards for the use of AI tools in research and publishing in order to solve the issues related to the usage of ChatGPT in scholarly communication. These guidelines should contain suggestions for checking the veracity and integrity of data produced by AI tools,

### Author contribution

Muhamad Ratodi contributed to Conceptualization, including Ideas; formulation or evolution of overarching research goals and aims, and Preparation, creation and/or presentation of the published work, specifically writing the initial draft (including substantive translation)

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**Konflik kepentingan**

"we declares that we has no conflict of interest."

**Singkatan**

Singkatan berikut digunakan dalam naskah ini:

GPT	<i>Generative Pre-Trained Transformer</i>
AI	<i>artificial intelligence</i>
ML	<i>Machine Learning</i>
OA	<i>Open Access</i>

**Referecess**

- [1] T. B. Brown et al., "Language Models are Few-Shot Learners." arXiv, Jul. 22, 2020. Accessed: Mar. 10, 2023. [Online]. Available: <http://arxiv.org/abs/2005.14165>
- [2] A. Radford, J. Wu, R. Child, D. Luan, D. Amodei, and I. Sutskever, "Language Models are Unsupervised Multitask Learners," Open AI Blog, vol. 1, no. 8, p. 9, 2019.
- [3] F. Salager-Meyer, "Scientific publishing in developing countries: Challenges for the future," J. Engl. Acad. Purp., vol. 7, no. 2, pp. 121–132, Apr. 2008, doi: 10.1016/j.jeap.2008.03.009.
- [4] L. Nurdin and S. Mukhlis, "Institutional repository as an information infrastructure for scholarly communication: An exploratory study in Indonesia," Malays. J. Libr. Inf. Sci., vol. 24, no. 3, pp. 101–114, Dec. 2019, doi: 10.22452/mjlis.vol24no3.6.
- [5] B. Lund, I. Omame, S. Tijani, and D. Agbaji, "Perceptions toward Artificial Intelligence among Academic Library Employees and Alignment with the Diffusion of Innovations' Adopter Categories," Coll. Res. Libr., p. 865, 2020, doi: 10.5860/crl.81.5.865.
- [6] M. Liebrez, R. Schleifer, A. Buadze, D. Bhugra, and A. Smith, "Generating scholarly content with ChatGPT: ethical challenges for medical publishing," Lancet Digit. Health, vol. 5, no. 3, pp. e105–e106, Mar. 2023, doi: 10.1016/S2589-7500(23)00019-5.
- [7] E. George, "ChatGPT and authorship in research: What top publishers are saying," Researcher.Life Blog, Feb. 17, 2023. [Online]. Available: <https://researcher.life/blog/article/chatgpt-and-authorship-in-research/>