

# The Social Construction Of Technology: Case Study Of The Use Of CHATGPT In Indonesia

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## Abstract

*This research highlights the new phenomenon of the existence of natural language models based on artificial intelligence (AI chatbots) developed by OpenAI, namely ChatGPT (“Chat Generative Pre-Trained Transformer”). This research tries to map current issues regarding the presence of ChatGPT framed by the media in use in various fields. This study seeks to understand the role of online media channels in mediating the understanding behind the use of ChatGPT. This is because the media also constructs how recent technology is used, so that the use of technology is not taken for granted. Mapping the information constructed by the media is important to locate in the context of the use of ChatGPT in Indonesia. Thus, this study tries to fill the knowledge gap over the use of ChatGPT through the social construction of technology (SCOT) approach. The main research question of this paper is how does the media construct the discourse related to how ChatGPT should be used? This study uses literature review as a method to understand the discourse about the use of ChatGPT through the existence of “relevant social groups”. The result shows that online media channels not only function as producers of information, but also function as groups that construct a discourse behind the presence of ChatGPT. From the results of this study, it can be concluded that the use of ChatGPT constructs a discourse that triggers concerns about its misuse as misleading technology if there is no regulation surrounding it. Therefore, strict laws, regulations, and supervision need to be implemented to ensure the optimal use of ChatGPT and in accordance with the desired goals in related fields.*

**Keywords:** *ChatGPT; relevant social group; online media channel; social construction of technology; literature review*

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## Kontruksi Sosial Teknologi: Studi Kasus Penggunaan CHATGPT Di Indonesia

### Abstract

Penelitian ini mengangkat fenomena baru lahirnya model bahasa alami berbasis kecerdasan buatan (AI chatbots) yang dikembangkan oleh OpenAI yaitu ChatGPT (“Chat Generative Pre-Trained Transformer”). Penelitian ini mencoba memetakan Isu baru mengenai kehadiran chatgpt yang dibingkai oleh media pada penggunaan di berbagai bidang. Penelitian ini berupaya memahami peran kanal media online dalam memediasi pemahaman di balik penggunaan ChatGPT di Indonesia.

Sebab, media juga turut mengkonstruksi bagaimana teknologi baru digunakan, sehingga penggunaan teknologi tidak netral atau diterima begitu saja sesuai keinginan penggunanya. Oleh karena itu, pemetaan informasi yang dikonstruksi oleh media penting untuk diteliti lebih lanjut dalam konteks penggunaan ChatGPT di Indonesia. Pertanyaan utama penelitian ini adalah bagaimana media mengkonstruksi wacana terkait penggunaan ChatGPT? Penelitian ini mencoba mengisi kesenjangan pengetahuan atas penggunaan ChatGPT melalui pendekatan konstruksi sosial teknologi (SCOT). Penelitian ini menggunakan tinjauan literatur sebagai metode untuk memahami wacana penggunaan ChatGPT melalui keberadaan “kelompok sosial yang relevan”. Hasilnya menunjukkan bahwa kanal media online tidak hanya berperan sebagai penghasil informasi, namun juga berperan sebagai kelompok yang mengkonstruksi wacana di balik kehadiran ChatGPT. Hasil penelitian menunjukkan bahwa saluran media online tidak hanya berperan sebagai penghasil informasi, namun juga berperan sebagai kelompok yang mengkonstruksi wacana di balik kehadiran ChatGPT. Dari hasil penelitian tersebut dapat disimpulkan bahwa penggunaan ChatGPT membangun wacana yang memicu kekhawatiran akan penyalahgunaannya sebagai teknologi yang menyesatkan jika tidak ada regulasi yang melingkupinya. Oleh karena itu, undang-undang, peraturan, dan pengawasan yang ketat perlu diterapkan untuk memastikan penggunaan ChatGPT secara optimal dan sesuai dengan tujuan yang diinginkan di bidang terkait.

**Kata Kunci:** *ChatGPT; kelompok sosial yang relevan; saluran media online; konstruksi sosial dari teknologi; Tinjauan Literatur*

## Introduction

In today’s increasingly advanced technological era, understanding how technology is created, used, and adopted by society is an important issue to be researched. Technology is not only a tool that is used but also influences a certain culture in people’s lives. As from McLuhan’s thinking about the medium is the extension of men, the medium or mass media is an extension of human ability to interact and communicate with their environment. The medium not only delivers messages or information, but also influences the way humans think, feel, and behave (McLuhan, 1964). McLuhan argues that we should pay attention to the way media affects the way we interact with the world and each other. Therefore, we must become critical of the media we use and how it affects people’s perceptions and behaviors. This includes how people use technology and how they

socially construct the use of a technology based on constructed information.

Technology is an important part of everyday life. It is a seamless and global means of communication in terms of location, time, and various age groups (Sakdulyatham et al., 2018). Moreover, information and news can now be accessed anytime and anywhere, unlike in the past where people could only get it when the paperboy came or when watching television or listening to the radio. Now we can access news and information anywhere, anytime, and in any situation (Wijaya et al., 2022) especially online media, has lately been receiving considerable attention due to the high numbers of hoaxes and twisted facts in news reporting, causing the credibility to be undermined. Online media are considered only to pursue clicks and shares to reap ads, disregarding aspects of news ethics and logic. News

ethics and logic are, in fact, constituents of media brand behaviour. In contrast, brand behaviour per se is a dimension of brand image, meaning that news ethics and logic have implications for the reputation and image of the reporting media. This research examines the following consequences: 1. Also, online education in Indonesia was seen as an alternative in learning activities (Mujiono & Susilo, 2021).

In the digital era, the need for easy and fast communication is fulfilled by technology that allows the use of gadgets as a basic communication medium (Nasrullah, 2014). The rapid development of information technology today has made it easy to get the latest information (Fauziyyah & Rina, 2020). Indonesian internet users tend to leave conventional media as their main source of information. Surveys show that the internet has become the first choice for finding information and entertainment, after television (Ambardi, 2014). The study of Wijaya et al. (2022) especially online media, has lately been receiving considerable attention due to the high numbers of hoaxes and twisted facts in news reporting, causing the credibility to be undermined. Online media are considered only to pursue clicks and shares to reap ads, disregarding aspects of news ethics and logic. News ethics and logic are, in fact, constituents of media brand behaviour. In contrast, brand behaviour per se is a dimension of brand image, meaning that news ethics and logic have implications for the reputation and image of the reporting media. This research examines the following consequences: 1 shows that based on the results of demographic and geographic analysis, it is revealed that the average age of 26-30 years, graduates of

undergraduate programs, working, and domiciled in Jabodetabek (Jakarta, Bogor, Depok, Tangerang, and Bekasi) shows that they access information through online media. Thus, people in the digital era use the internet as a means of exchanging information and communication that is so broad. The internet has become a basic need for every society because it has many benefits in modern human life (Fathiyyah & Rina, 2019). Indirectly, online media provides a construction about what it reports.

Furthermore, this research tries to see how online media plays a role in framing the use of AI. This research raises a new phenomenon about an artificial intelligence-based natural language model (AI chatbots) developed by OpenAI, namely ChatGPT ("Chat Generative Pre-Trained Transformer"). As AI tools continue to develop, the challenge of distinguishing what is created by humans and what is created by algorithms also increases. In educational contexts, ChatGPT's ability to write essays and generate assignment solutions has sparked intensive discussions about violations of academic integrity by students in schools and universities (Ibrahim et al., 2023).

ChatGPT is an AI chatbot designed to have conversations with people, using natural language processing to understand and respond to users' words and intentions. ChatGPT can be used in a variety of settings, such as customer service, where they can provide answers to common questions and help customers solve problems, or as personal assistants, where ChatGPT can help users manage student schedules and assignments (Somasundaram, 2023). ChatGPT is a highly advanced chatbot that can generate text that is almost indistinguishable from

text written by humans. It has generated much excitement and concern about its use in education (Rudolph et al., 2023). This research aims to explore the discourse behind the presence of ChatGPT, a large language model trained by OpenAI, in answering questions and providing useful information to its users. By using language processing technology, ChatGPT can answer questions asked by its users.

Furthermore, by explaining McLuhann's (1964) medium is the extension of men earlier, this study tries to explore how the media can construct the use of a technology. Simply put, the news about ChatGPT through the media, namely online media channels, can influence people in having perceptions, using, and assessing the presence of ChatGPT. Furthermore, researcher used a social construction of technology (SCOT) approach to understand if the media has the potential to construct information about the use of ChatGPT. Digital technology and the Internet have revolutionized the way news operates, thereby having an impact on society's social culture. This seeks to construct news through this technology (Laoera & Wibowo, 2023). Social construction of technology is an approach that sees technology influenced by the social, cultural, and political context in which it is used (Bakardjieva, 2005). This research using the social construction of technology (SCOT) approach can help researcher in understanding the role of technology in society, as well as how technology can shape and be influenced by the social factors around it.

The use of the SCOT approach is useful to see where technology should be interpreted flexibly by its users, but

this flexibility disappears due to the intermediary of different 'relevant social groups', so that these groups can influence different meanings of the technology itself. "Relevant social groups" are social groups, such as institutions and organizations that have a common understanding of certain artifacts (Bakardjieva, 2005). The presence of this group can be interpreted as diverse online media channels that have the capacity to define the understanding and use of ChatGPT through different narratives from each channel. This makes individuals have diverse perceptions of the technology portrayed by the media.

Furthermore, several previous studies (Kasneji et al., 2023; Taecharungroj, 2023; Tlili et al., 2023) suggest that if in the field of education using ChatGPT needs to meet strict privacy, security, environmental, regulatory, and ethical requirements, and be carried out with continuous human supervision, guidance, and critical thinking. Although ChatGPT sometimes makes hallucinations and spouts nonsense, major changes in higher education assessments such as essays and online exams are needed to deal with the increasingly powerful presence of artificial intelligence. Like calculator, tools like ChatGPT will become an integral part of the teaching and learning process in the future (Rudolph et al., 2023). Through Rudolph's writing ChatGPT is considered a technology that can disrupt the teaching and learning process but provides a great opportunity for learning innovators to use it to transform education. The presence of these online media channels as "relevant social groups" becomes an important agent in influencing the extent to which individuals will consider ChatGPT

in their daily lives, what it is perceived as, what it is used for, and why they use it.

Furthermore, the term “social construction” refers to the idea that technologies such as ChatGPT are far from neutral tools. They are shaped by the social, cultural, and political environments where they are used. Technologies are not built or adopted in isolation, they are so much more linked with the values, attitudes and behaviors of the communities using them. Utilizing a Social Construction of Technology (SCOT) perspective, this paper inquires into the social shaping of information about ChatGPT by the media. This study examines the social influences that affect an acceptance to adopt through an analysis of media discourse about ChatGPT in Indonesia.

## Literature Reviews

### The use of ChatGPT

In this section, the researcher tries to present several earlier studies on the use of ChatGPT in various fields around the world. This section is helpful for researcher in conceptually framing the problem behind the use of ChatGPT, thus providing a comprehensive path in examining the social construction of technology behind the news about ChatGPT through online media channels in Indonesia. The potential use of ChatGPT in education can be seen from several previous studies Tlili (2023), Taecharungroj (2023), and Kasneci et al. (2023). ChatGPT, like a double-edged blade, has both positive and negative impacts. The use of large language models in education has the potential to have a positive impact, such as

improving the quality of students’ written work and helping teachers plan lessons better. Specific and explicit instructions on artificial intelligence models increase the relevance and usefulness of lesson plans, making it important for teachers to design appropriate questions and specific tasks.

In addition, it is recommended that teachers carefully accept the initial lesson plans proposed by ChatGPT, evaluate them according to the specified criteria, student needs, and other requirements, and collaborate with ChatGPT through feedback to improve their accuracy and relevance (Hashem et al., 2023). However, in applying this technology, it needs to be done carefully and critically to evaluate its limitations and possible biases. While the negative impact is ChatGPT’s ability to write high school essays, homework assignments, and take-home exams) in the field of education. Investigation of user experience through ten educational scenarios identified a range of issues, including cheating, honesty, truthfulness, misleading privacy, and manipulation. Although ChatGPT is a powerful tool in education, it needs to be used with more caution and guidelines need to be created on how to use it safely in education.

Another used of ChatGPT, it was researched as a translation engine and showed competitive performance with common translation software. ChatGPT showed good results on spoken language and with the launch of the GPT-4 engine, ChatGPT’s translation performance improved significantly as a good translation engine (Jiao, 2023),. From a technical perspective, the paper by Bang et al. (2023) shows that ChatGPT has gaps in processing

the expected results. While ChatGPT performed well on most tasks, there were still several cases of failure on each task, such as on summarization and machine translation tasks. Although, ChatGPT can still be developed further, considering that this engine was just launched.

In the field of scientific publications, the journal *Cellular and Molecular Bioengineering* (King, 2023), the editorial board team published an editorial article written using ChatGPT in full without editing. In fact, ChatGPT was made by the second author. This shows that in the field of publication ChatGPT is given space and becomes the second author. This implies that ChatGPT has the potential to be used in the academic field, especially for publication in a journal. Furthermore, ChatGPT can be used to write essays, scientific articles, and can provide references, raising many questions about the ethics of AI-generated academic writing. ChatGPT demonstrates the need for strong AI author guidelines in scholarly publishing, given the concerns about copyright, attribution, plagiarism, and authorship when AI generates academic texts (Liebrenz et al., 2023). ChatGPT has the ability to generate copyrighted text, so it is important to comply with intellectual property laws and obtain permission from the copyright owner where necessary to maintain compliance (Lund & Ting, 2023). Much research has been conducted regarding the understanding of ChatGPT and its potential applications in various fields, including law (Bang et al., 2023).

The use of ChatGPT in writing scientific papers raises several ethical issues, including concerns about plagiarism due to the possible use of the same paragraph

structure in multiple works. The issue of plagiarism leads to steps that need to be taken to prevent integrity violations in academic work (Kaur et al., 2018). In addition, the references provided by ChatGPT are currently unreliable. While several scientific journals have banned co-authorship of ChatGPT, the question of whether ChatGPT should get co-authorship if it writes most of the article is still debated. However, it is important to acknowledge the use of ChatGPT and explain it appropriately in the resulting article (Macdonald et al., 2023).

In addition, Biswas' (2023b) paper discusses that ChatGPT has the potential to play a role in public health. ChatGPT can generate human-like text based on enormous amounts of data, so it can support individuals and communities in making informed decisions about their health, especially for people who lack access to healthcare. This suggests ChatGPT may contribute to such health disparities. However, the use of ChatGPT in public health needs to be done with caution and careful approval.

In the field of climate change, Biswas' (2023a) paper shows that ChatGPT has great potential in assisting research on climate change by processing and analyzing data, generating scenarios, and evaluating the performance of climate models. However, these technologies must be used with caution and the results must be interpreted carefully and integrated with traditional climate analysis and modeling methods. Nonetheless, the use of technologies such as ChatGPT has the potential to revolutionize the way we study and respond to climate change.

The various earlier studies in various fields that have been presented show

that ChatGPT has potential in various fields, which can generally assist users in answering all questions that users ask in a particular context. Earlier studies simultaneously recommend that the use of this technology needs to be done with caution to evaluate the limitations of use. It can be suggested that the use of ChatGPT needs to meet strict privacy, security, environmental, regulatory, and ethical requirements, and be done with continuous human supervision, guidance, and critical thinking. In the field of scientific publications, ChatGPT, which is given space and treated as a second author, shows its potential use in the academic field even with some restrictions and considerations. Although in practice, ChatGPT is still relatively new and could be further developed, this technology has potential to transform education and the world of scientific publications.

## Methods

This research uses descriptive qualitative research methods with literature reviews. Literature reviews are critical for understanding the landscape of a subject and making valuable contributions to a field. They require a range of skills to gather, sort, evaluate and summarize peer-reviewed published data into an unbiased narrative. A literature review should provide a balanced view that includes conflicting findings, as well as established and current thinking (Winchester & Salji, 2016). Literature review is necessary for academic research as it helps in understanding the existing body of work and identifying gaps for further exploration (Xiao & Watson, 2019). Wang et al. (2018)

outlined as five-step process for conducting a systematic literature review, which includes: (1) formulating and planning the topic, (2) conducting a literature search, (3) collecting and evaluating data, (4) analyzing and interpreting data, and (5) presenting findings and proposing research for future research.

In the first stage, the researcher extracted data through a review of existing research to understand the context of ChatGPT. The second stage was to collect several news reports about ChatGPT in Indonesia through online media from January 1, 2023, to March 28, 2023, as listed in Table 1. Researcher carried out the initial stages of searching for articles to be analyzed. These online news reports were obtained through Google search engine using the keyword "ChatGPT." This study uses ChatGPT as an analysis engine to help define certain terms about issue surrounding ChatGPT. Second, researcher uses ChatGPT as software in processing and reducing the data collected which are later classified by the researcher based on categories of context, imagination, and navigation. Furthermore, the researcher reviewed the data through data reduction by formulating major themes from the existing news. The data reduction is conducted by treating ChatGPT as an analysis engine. Researcher used ChatGPT to formulate the articles that have been collected in Table 1 to map general theme and category from online news. Then, the researcher classified the themes and interpreted them further in the analysis. Last, the researcher used the AI website at <https://whimsical.com/mind-maps> to create visualizations of the analysis data in the form of mind maps in Figure 4.

**Table 1.**  
**Online articles talk about ChatGPT**

No	Url Website	Author	Category
1	<a href="https://surabaya.tribunnews.com/2023/03/09/cara-menggunakan-chat-gpt-untuk-kembangkan-bisnis-login-chatopenacom-lalu-ketikkan-ini">https://surabaya.tribunnews.com/2023/03/09/cara-menggunakan-chat-gpt-untuk-kembangkan-bisnis-login-chatopenacom-lalu-ketikkan-ini</a>	Seta	Navigation
2	<a href="https://infobrand.id/manfaat-chat-gpt-chatbot-berbasis-ai-untuk-pelaku-pr.phtml">https://infobrand.id/manfaat-chat-gpt-chatbot-berbasis-ai-untuk-pelaku-pr.phtml</a>	Aryanto	Context
3	<a href="https://scaleocean.com/blog/berita-terkini/integrasi-sistem-erp-dan-chat-gpt">https://scaleocean.com/blog/berita-terkini/integrasi-sistem-erp-dan-chat-gpt</a>	ScaleOcean	Imagination
4	<a href="https://mediaindonesia.com/teknologi/564567/siapa-bisa-menysusul-chat-gpt">https://mediaindonesia.com/teknologi/564567/siapa-bisa-menysusul-chat-gpt</a>	Fajri	Imagination
5	<a href="https://news.republika.co.id/berita/rs28oq349/cips-pemerintah-tak-perlu-meregulasi-penggunaan-chat-gpt">https://news.republika.co.id/berita/rs28oq349/cips-pemerintah-tak-perlu-meregulasi-penggunaan-chat-gpt</a>	Alamsyah	Navigation
6	<a href="https://jatim.tribunnews.com/2023/03/28/chat-gpt-makin-berbahaya-ada-bug-yang-bocorkan-histori-percakapan-e-mail-dan-kartu-kredit-pengguna">https://jatim.tribunnews.com/2023/03/28/chat-gpt-makin-berbahaya-ada-bug-yang-bocorkan-histori-percakapan-e-mail-dan-kartu-kredit-pengguna</a>	Stevani	Imagination
7	<a href="https://tekno.tempo.co/read/1701831/ui-manfaatkan-chatgpt-untuk-tingkatkan-kompetensi-pustakawan">https://tekno.tempo.co/read/1701831/ui-manfaatkan-chatgpt-untuk-tingkatkan-kompetensi-pustakawan</a>	Ernis	Context
8	<a href="https://www.liputan6.com/tekno/read/5242013/bill-gates-chatgpt-berbasis-ai-sama-pentingnya-dengan-internet-dan-gadget">https://www.liputan6.com/tekno/read/5242013/bill-gates-chatgpt-berbasis-ai-sama-pentingnya-dengan-internet-dan-gadget</a>	Maharani	Context
9	<a href="https://voi.id/teknologi/253947/keren-chatgpt-hampir-lulus-ujian-perizinan-medis-tersulit-di-as">https://voi.id/teknologi/253947/keren-chatgpt-hampir-lulus-ujian-perizinan-medis-tersulit-di-as</a>	Voi	Imagination
10	<a href="https://www.pewarta.co.id/2023/02/meresahkan-para-dosen-ai-chatgpt-lulus-ujian-dengan-nilai-tinggi-di-universitas-as.html">https://www.pewarta.co.id/2023/02/meresahkan-para-dosen-ai-chatgpt-lulus-ujian-dengan-nilai-tinggi-di-universitas-as.html</a>	Sulistya	Imagination
11	<a href="https://uia.fisipol.ugm.ac.id/polemik-chatgpt-bagaimana-perguruan-tinggi-harus-bersikap/">https://uia.fisipol.ugm.ac.id/polemik-chatgpt-bagaimana-perguruan-tinggi-harus-bersikap/</a>	Rizky & Nandyatama	Navigation
12	<a href="https://makassar.tribunnews.com/2023/03/19/cara-menggunakan-chatgpt-atau-chat-gpt-bahasa-indonesia-tanpa-aplikasi?page=3">https://makassar.tribunnews.com/2023/03/19/cara-menggunakan-chatgpt-atau-chat-gpt-bahasa-indonesia-tanpa-aplikasi?page=3</a>	Sudin	Navigation
13	<a href="https://www.cnnindonesia.com/teknologi/20230124142030-185-904228/chatgpt-makin-nger-bisa-lulus-ujian-kuliah-kedokteran-dan-bisnis">https://www.cnnindonesia.com/teknologi/20230124142030-185-904228/chatgpt-makin-nger-bisa-lulus-ujian-kuliah-kedokteran-dan-bisnis</a>	Cnn Indonesia	Imagination
14	<a href="https://kumparan.com/kumparantech/chatgpt-lulus-ujian-sekolah-kedokteran-as-1zv4TgZADfp/full">https://kumparan.com/kumparantech/chatgpt-lulus-ujian-sekolah-kedokteran-as-1zv4TgZADfp/full</a>	Kumparan Tech	Imagination
15	<a href="https://infokomputer.grid.id/read/123671594/chatgpt-lulus-ujian-sekolah-hukum-kuasai-aturan-ilmu-hukum-dasar?page=all">https://infokomputer.grid.id/read/123671594/chatgpt-lulus-ujian-sekolah-hukum-kuasai-aturan-ilmu-hukum-dasar?page=all</a>	Rizal	Imagination
16	<a href="https://fin.co.id/read/125756/luar-biasa-chatgpt-open-ai-lulus-ujian-dokter-di-amerika-begini-cara-daftar-dan-gunakan-chat-gpt">https://fin.co.id/read/125756/luar-biasa-chatgpt-open-ai-lulus-ujian-dokter-di-amerika-begini-cara-daftar-dan-gunakan-chat-gpt</a>	Husen	Navigation
17	<a href="https://tekno.republika.co.id/berita/rp36tq328/chatgpt-lulus-ujian-sekolah-hukum-dengan-performa-b-saja">https://tekno.republika.co.id/berita/rp36tq328/chatgpt-lulus-ujian-sekolah-hukum-dengan-performa-b-saja</a>	Rezkisari	Imagination
18	<a href="https://inet.detik.com/cyberlife/d-6562952/nger-chatgpt-berhasil-lolos-ujian-dokter-super-sulit">https://inet.detik.com/cyberlife/d-6562952/nger-chatgpt-berhasil-lolos-ujian-dokter-super-sulit</a>	Putri	Imagination
19	<a href="https://www.merdeka.com/teknologi/cara-pakai-ai-seperti-chatgpt-di-microsoft-word-begini-langkah-langkahnya.html">https://www.merdeka.com/teknologi/cara-pakai-ai-seperti-chatgpt-di-microsoft-word-begini-langkah-langkahnya.html</a>	Merdeka	Navigation
20	<a href="https://www.cnbcindonesia.com/tech/20230130075842-37-409133/bisa-tulis-skripsi-lulus-s2-simak-cara-pakai-chatgpt-openai">https://www.cnbcindonesia.com/tech/20230130075842-37-409133/bisa-tulis-skripsi-lulus-s2-simak-cara-pakai-chatgpt-openai</a>	Bestari	Navigation
21	<a href="https://www.vice.com/id/article/akebwe/chatgpt-lulus-dalam-ujian-izin-praktik-dokter-usmle-dan-s2-program-mba-wharton-school">https://www.vice.com/id/article/akebwe/chatgpt-lulus-dalam-ujian-izin-praktik-dokter-usmle-dan-s2-program-mba-wharton-school</a>	Xiang	Imagination
22	<a href="https://www.beritasatu.com/news/1022875/meresahkan-dosen-ai-chatgpt-lulus-ujian-di-universitas-as">https://www.beritasatu.com/news/1022875/meresahkan-dosen-ai-chatgpt-lulus-ujian-di-universitas-as</a>	Baskoro	Imagination
23	<a href="https://m.kumparan.com/tovva-firdansyah/pemerintah-bakal-blokir-chatgpt-sebuah-langkah-maju-atau-malah-sebaliknya-202648AZGmh/3">https://m.kumparan.com/tovva-firdansyah/pemerintah-bakal-blokir-chatgpt-sebuah-langkah-maju-atau-malah-sebaliknya-202648AZGmh/3</a>	Firdansyah	Imagination

Source: Author (2023)



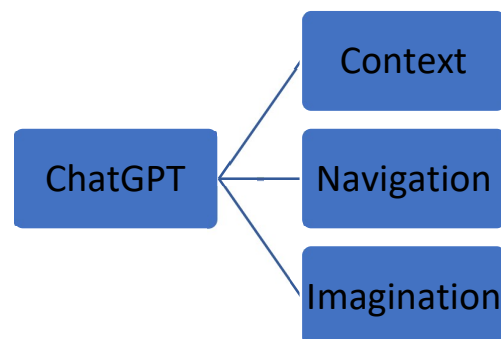
## Results

### Discussing ChatGPT Through Online Media Channels

This section provides more detail on the online media channels that report or provide information about ChatGPT. Since ChatGPT is still relatively new to the public, the image or news about ChatGPT also determines how people use and perceive ChatGPT. It should be emphasized that users are not single, but these users are fragmented into several adopters. Early adopters may have a better ability to find out and explore the usefulness of ChatGPT, but many adopters are not always able to access information directly, but through media intermediaries. Relevant social groups still play an important role in providing information about the use of new technology. Thus, the existence of online media channels also determines how the majority of adopters use, understand, and interpret the discourse about ChatGPT. Moreover, people today rely more on mobile devices in accessing information online.

Moreover, Table 1 contains a collection of online articles about ChatGPT from January to March in 2023. The articles were obtained through Google search engine using the keyword "ChatGPT". Based on Table 1, the researcher categorized the common themes of the online articles. We used three major themes in categorizing the analyzed data. The researcher used the analysis pattern from Hill & Lee's (2021) writing which uses three major themes that can be classified, namely context analysis, navigation and imagination. These three major themes are summarized in Figure 2. The context analysis covers

how the ChatGPT platform is used and accessed within a specific scope or field, such as education, business, or a particular profession. The navigation theme covers the technical and practical aspects of using a platform. Finally, the imagination theme is news that invites affective and emotional connections with ChatGPT in a particular case. The researcher categorized several news reports based on these three major themes, which are summarized in Figure 3.



**Figure 2**

#### **Categorization of ChatGPT's Information**

Source: author's analysis (2023)

The first part is the context analysis. This is a text analysis that states that ChatGPT is an artificial intelligence platform that can help in a variety of fields, including public relations and librarianship. The use of ChatGPT has benefits such as increased customer engagement and efficient media monitoring, however, the use of ChatGPT also needs to be cautious as chatbots are only as good as the information they have been trained on and can provide false or misleading information. In addition, the results of the analysis show that ChatGPT has great potential in many industries and can be a marker for businesses, an advantage for the Public Relations

profession, Librarian, and a positive impact on the industry. In fact, Bill Gates compared the development of ChatGPT to the emergence of personal computers that changed the way we work, learn, travel, communicate, and get health care.

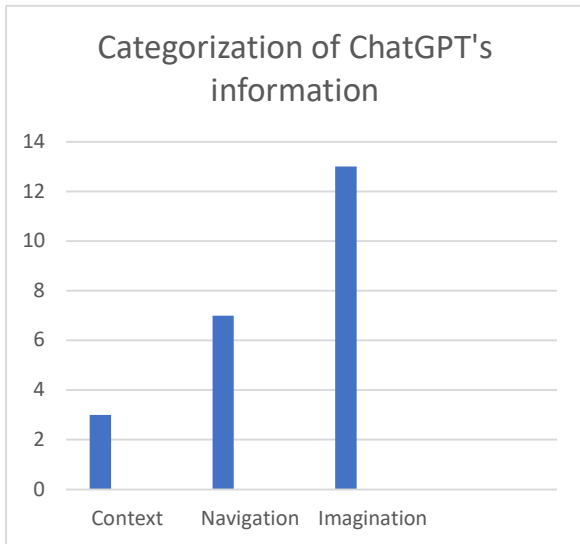


Figure 3

**Distribution of ChatGPT news themes**

Source: author's analysis (2023)

Next is navigation analysis. ChatGPT, an artificial intelligence-based chatbot that is useful in various ways in ERP (Enterprise Resource Planning), such as creating copywriting for products, creating blog content, writing product descriptions for online catalogs, managing marketing through content creation, providing customer service without an admin, and creating promotional content on social media. ChatGPT uses deep learning techniques to generate word patterns and has become popular for its ability as an artificial intelligence-based chatbot that can answer various questions very flexibly according to the context of the conversation.

ChatGPT can also help improve

one's English skills virtually. However, it still requires instruction from teachers and interacting with native English speakers in daily life to improve overall proficiency. Microsoft is developing ChatGPT integration into Word, Excel, and Outlook applications, and users can experience artificial intelligence through the Ghostwriter feature that uses the GPT-3 AI model. ChatGPT can also complete MBA final exams from instructors at one of the world's top business schools, Wharton, with a grade of B- to B, and can be accessed through a browser on a laptop or smartphone by going to <https://chat.openai.com> and logging in first. However, the use of ChatGPT in higher education has raised polemics regarding its ability to replace human work, despite its limitations in terms of risk of bias and inconsistency.



Figure 4

**Visualization Of Data Analysis in Mind Mapping**

Source: author's analysis (2023)

Last is imagination analysis. ChatGPT has the ability to answer questions and take exams in various fields, such as business, medical, and law, with a fairly high degree of accuracy. ChatGPT can help improve business efficiency and effectiveness by streamlining processes and minimizing errors. In addition, ChatGPT has the potential to be an interactive educational tool and help students understand the subject matter more easily. However, there are some concerns about the use of ChatGPT, including weaknesses in providing accurate and valid answers and competition from other chatbots such as Microsoft Bing and Google Bard. In addition, in online news OpenAI has found a bug in ChatGPT that could potentially leak sensitive user information, resulting in the platform having to be shut down and investigated for almost 10 hours to address the issue and prevent similar problems in the future.

The use of ChatGPT has also raised concerns about its misuse in cheating, especially in academia. Although research results show the ability of ChatGPT to provide accurate answers and clear explanations, as well as its potential use in education and decision-making in various fields, and there are safeguards in place by app developers to prevent its misuse, there are still difficulties with complex questions and logical and informational errors.

The Indonesian government also has plans to block ChatGPT because it has not done Electronic System Registration (PSE), although this may hinder the development of artificial intelligence and technology in Indonesia. The solution that can be taken is to impose strict regulations and supervision on the use of artificial

intelligence technology. This is done so that artificial intelligence technology can be utilized optimally and in accordance with the desired goals, without causing negative impacts on society.

### The Discourse behind the use of ChatGPT

It is possible to classify the discourse about ChatGPT using different media sources based on the elements of context, navigation, and imagination. This work attempts to present the data in such a way that it should be easy to comprehend through Figure 4. In the context theme, advantages of using ChatGPT in publicity and practice with various specializations are magnificent by enhancing customer interest and having higher efficiency in media monitor. But it also proves a threat of the use of ChatGPT because it can present false information. However, more advancements as well as further regulation must be made more to avoid the negative impacts and enhance the efficiency of the utilization of ChatGPT. This goes to show how necessary it is to appreciate the potential dangers as well as the potential gains in the leveraging of artificial intelligence specific technologies like ChatGPT across different industries and disciplines. Hence, it's possible to reach many advantages concerning the usage of ChatGPT if it will be used brought up, along with proper development. Moreover, the news' navigation analysis provides information about ChatGPT in multiple fields related to ERP like creating content, marketing, and customer support. ChatGPT is therefore much favored and is very popular due to the ability of applying deep learning in their development of a

chatbot that can answer questions flexibly depending on the user's context.

In the analysis of the imagination theme, ChatGPT has a high ability to answer questions and take exams in various fields such as business, medical field, and law. ChatGPT has inherent limitations that must be considered, such as the potential to generate false or incorrect information that could influence inappropriate medical decisions and threaten patient safety (Sorin et al., 2023). In addition, ChatGPT also has potential as a software that helps in the realm of interactive education and helps students understand the subject matter more easily. However, there are some concerns about the use of ChatGPT, such as weaknesses in providing accurate and valid answers. There are also concerns regarding the misuse of ChatGPT in cheating, especially in the academic field. In addition, the Indonesian government has plans to block ChatGPT because it has not yet conducted Electronic System Registration (PSE). The solution is to impose strict regulations and supervision on the use of artificial intelligence technology so that it can be utilized optimally and in accordance with the intended purpose, by reducing the negative impact on society. The difficulty in distinguishing answers produced by models from those produced by students is increasing. This poses an additional major challenge for teachers and educators, and now some educational institutions such as the New York City Department of Education are banning the use of ChatGPT on school devices and networks (Kasneji et al., 2023).

The findings of this study show that although the news from online media

channels has been analyzed based on three major themes, the researcher argues that the discourse has been constructed on the use of ChatGPT. Although at the beginning of each online article reported positive things related to the use of ChatGPT, most of the articles also constructed the concerns behind the use of ChatGPT. It can be shown from the results of the analysis if the articles included in the imagination category are very high with a total of 13 (see Figure 3). The imagination theme is news that invites affective and emotional relationships with ChatGPT in a particular case. Online media channels are more likely to report on cases abroad, where some students use ChatGPT to pass in certain academic fields. The student was able to pass the exam despite getting a not-so-satisfactory grade.

However, this is a sign that on the theme of imagination, the discourse about students who cheat by using ChatGPT for graduation can be a daily conversation in the academic sphere. Although the use of artificial intelligence technology such as ChatGPT has great potential in increasing efficiency and effectiveness in various fields, the use of this technology also needs to be considered for risks and negative impacts, such as misinformation, bias tendencies, and misuse in the academic world. Some professors are considering whether to include ChatGPT in their lessons or support banning its use, with 46% of students saying that their professor or institution has banned the tool in homework. That case has prompted calls for stricter regulations and sanctions regarding academic misconduct involving artificial intelligence (Chan, 2023). ChatGPT does not have a brain equipped with feelings,

meaning it must have gaps relating to ethics and feelings. Despite its advantages in processing natural language, ChatGPT also has some disadvantages, such as the ability to generate inaccurate or biased information. Therefore, the theoretical framework section outlines that the use of ChatGPT needs to be accompanied by some restrictions and considerations so as not to be too dependent on technology or refer to the term determinism of technology. Although ChatGPT can think and process questions, it cannot be treated like a human. This is because technology does not have the creativity that humans have.

Chan (2022) argues that a group would be very dangerous if it used ChatGPT to manipulate individuals or spread misinformation. Two crucial issues of concern are the potential misuse of language models such as GPT-3 and issues of bias, fairness, and representation in these models. Manipulation and bias are two issues of particular concern, which require solutions such as increasing digital literacy and public awareness of GPT-3, as well as increasing transparency and accountability from language model developers. Uncertain regulation could potentially lead to misuse or unintended consequences of GenAI, which could pose risks to individuals and society. Even some students who recognize the positive effects of GenAI also believe that policies are needed now, so that balanced usage guidelines need to be in place so that the benefits of this technology can be utilized properly, especially in university environments (Chan & Hu, 2023).

However, the utilization of ChatGPT technology should be impactful for research

without erasing the values of research, such as interest, creativity and invention (van Dis et al., 2023). Furthermore, ChatGPT and other AI language models are not perfect and can possibly make mistakes or provide incorrect information. Therefore, it is important to use these tools with caution and consider forming community guidelines and standards for their fair use. Moreover, it requires the ability to be judicious in seeking and evaluating information and resources as well as the ability to think holistically (Qadir, 2022). Nonetheless, the use of AI chatbots also carries the risk of plagiarism and the replacement of human creativity and critical thinking on an exam in Chan's lecture (Chan, 2022). This shows that AI still needs further development and cannot replace humans completely (Rudolph et al., 2023).

## Conclusion

It is important to mention that there are studies that show different results, which are useful in discussing the use of ChatGPT in online media channels. This study begins by revealing how unproductive using ChatGPT is. The framing of its use by online media undermines the use of ChatGPT. Cases where these things can be discussed socially or used socially make this an important medium. In addition, this study explores whether online media channels are not only producers of information but also groups that build discourse around them regarding the presence of ChatGPT in existing news.

Second, the literature review of earlier articles on ChatGPT shows that there is potential for the use of ChatGPT. However, there are things that need to be considered in its use. Then, this study expands by

analyzing the reporting or production of information about ChatGPT through online media channels in Indonesia. In other words, this study contextualizes the concept of ChatGPT from various earlier articles around the world and relates it to conditions in Indonesia. This study maps online news regarding the use of ChatGPT through the identification of three main themes, namely context, navigation and imagination. A practical implication of this study is to show the use of ChatGPT constructs more discourse over ChatGPT which triggers concerns regarding its misuse. Thus, strict regulations and supervision need to be implemented to ensure the optimal use of ChatGPT and in accordance with the desired goals in related fields.

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