

Systematic Literature Review: Public Understanding of Artificial Intelligence Amid the Development of Digital Technology

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Keywords	Abstract
Artificial Intelligence; AI Literacy; Public Perception; Systematic Literature Review; Ethics and Data Privacy; Digital Transformation	The rapid development of Artificial Intelligence (AI) in the era of digital transformation has driven increased use of AI-based technologies in various aspects of life. The presence of AI on social media platforms, in the education sector, the workplace, and digital services has made public interaction with this technology increasingly intense. However, the level of public understanding of AI varies and is influenced by social and psychological factors, as well as digital literacy levels. This research aims to analyze public understanding of AI based on previous studies and to identify public perceptions regarding the benefits and risks of AI amidst the dynamics of digital development. The method used was a Systematic Literature Review (SLR) with a qualitative approach through the collection and analysis of national and international journals published between 2020 and 2026. Literature selection was based on topic relevance, publication quality, and alignment with the research focus. The findings indicate that the public generally views AI positively, as it is perceived to enhance efficiency, productivity, and ease of access to information. However, there are also concerns regarding ethical issues, data privacy, reliance on technology, and the potential displacement of human labor. This study confirms that AI literacy and an understanding of digital technology are key factors in shaping public acceptance of AI developments in the digital age.

INTRODUCTION

The development of digital technology has changed many aspects of life, especially through the advancement of Artificial Intelligence (AI) (Almufareh et al., 2024; Hirsch-Kreinsen, 2024; Kosasi et al., 2023; Kumar et al., 2024; Raj & Kos, 2023; Shanmugasundaram & Tamilarasu, 2023; Vinothkumar & Karunamurthy, 2023). AI is now able to mimic human cognitive functions such as learning, analyzing data, recognizing patterns, and making automated decisions. In recent years, advances in computing, the availability of big data, and increasing internet connectivity have driven the rapid acceleration of AI development. This technology is starting to be applied in various sectors, including education, healthcare, industry, transportation, digital economy, and entertainment. The presence of AI is one of the main indicators of global digital transformation that is changing the way humans interact with technology (Selwyn & Cordoba, 2022).

The application of AI in daily life is increasingly evident through virtual assistants, recommendation systems on social media and streaming platforms, customer service chatbots, facial recognition technology, automatic translators, and Internet of Things (IoT)-based smart devices. In the realm of digital entertainment such as movies, games, and social media AI has helped shape public perception of this technology. The study of Nader et al. (2022) shows that

entertainment media plays a significant role in shaping people's understanding of AI, both in the form of positive expectations and concerns about future impacts. The exposure of AI through digital media has made the term more familiar, although the level of public understanding still varies.

Public understanding of AI is important because its impacts are not only technical, but also social, economic, psychological, and ethical. Some people see AI as an innovation that improves work efficiency and quality of life, while others are concerned about data privacy, information security, and potential job losses. According to Wang (2025), public perception is influenced by individual factors and social factors on a national scale, such as education level, access to technology, and cultural conditions. Brauner et al. (2025) add that public acceptance of AI depends on an assessment of perceived benefits and risks.

Psychological factors also play an important role in shaping attitudes towards AI. De Freitas et al. (2023) found that trust, sense of security, and perception of AI capabilities influence individual attitudes. In addition, the resemblance of AI to human characters affects the public's perception; Research Cheng et al. (2026) show that digital media encourages a representation of AI that feels warmer and "human-like." This indicates that the relationship between humans and AI is becoming increasingly complex as technology develops.

Although there is a lot of research on public perception of AI, there is still a research gap. Most studies have focused on perceptions in specific regions, individual psychological factors, or the representation of AI in entertainment, but there are still few studies that comprehensively integrate these findings. In addition, the rapid pace of AI development makes public perception change dynamically, so a recent literature review is needed that identifies the dominant patterns, trends, and factors influencing public understanding.

Based on these conditions, the study of public understanding of AI is of great importance. This kind of study is useful for understanding how society views AI, the factors that influence acceptance, and its potential social impact. The results of the research are expected to be the basis for the development of digital literacy, technology policies, and educational strategies so that the use of AI is wise, effective, and responsible.

This research aims to analyze the results of previous research on public understanding of Artificial Intelligence with the Systematic Literature Review (SLR) approach. Through this study, it is hoped that a comprehensive picture will be obtained related to perceptions, attitudes, determinants, and developments in research trends regarding AI in the context of rapid digital transformation

METHOD

This research used a qualitative approach by applying Systematic Literature Review (SLR) to find, analyze, and synthesize research findings related to public understanding of artificial intelligence (AI) in the context of digital technology development. The selection of the SLR method is motivated by its ability to present a systematic, transparent, and structured research picture based on relevant previous studies. This approach is used to examine perception patterns, attitudes, literacy levels, acceptance, and factors that affect people's understanding of AI in various social, educational, governmental, and digital media contexts. The literature review refers to previous research on public perception of AI published in national and international journals (e.g. Nader et al., 2022; Wang, 2025; Brauner et al., 2025).

The research data sources consist of scientific articles drawn from databases such as Google Scholar, ScienceDirect, Springer, Taylor & Francis, as well as accredited national journals. The articles analyzed include studies on public perception, AI literacy, public acceptance of AI, and the influence of AI on public communication. The literature studied includes international and national publications published in 2022–2026 to be relevant to the latest digital developments. Some of the studies that have become references include research on public understanding of AI through entertainment media (Nader et al., 2022), global perception of AI (Gillespie et al., 2025), psychological factors in the use of AI (De Freitas et al., 2023), and AI literacy in non-technical groups (Ding et al., 2024).

Article selection is carried out through systematic stages. First, the identification of literature using keywords such as "public perception of artificial intelligence", "AI literacy", "public understanding of AI", "public perception of AI", and "public understanding of artificial intelligence" was found as many as 287 related articles. Second, screening based on the relevance of the title, abstract, and suitability of the research topic. At this stage, inclusion and exclusion criteria are set to ensure the quality of the sources used, namely 40 articles. Inclusion criteria include articles that address public perception, understanding, attitudes, acceptance, or literacy of AI; published between 2022–2026; available in full text; and derived from relevant academic journals or proceedings. Exclusion criteria include articles that do not focus on the social/public aspects of AI, duplicate publications, non-scientific opinions, and research without a clear methodology.

Data analysis uses content analysis, thematic grouping, and synthesis of findings. The content analysis identifies the key concepts of each article regarding public perception of AI, such as trust levels, the role of digital media, AI literacy, technology acceptance, and social impact. Furthermore, the articles are classified according to themes in order to produce a more structured study mapping. The synthesis stage compares results between articles to find similarities, differences, and research trends regarding public understanding of AI in different countries and social contexts (Selwyn & Cordoba, 2022; Yigitcanlar et al., 2022; Horvath et al., 2023).

From the selection and quality assessment process, this study identifies four main journals as the final source because of their relevance to the context of public perception of AI in Indonesia and the current development of digital communication. The four journals discuss the virality of AI news and public perception in Indonesia (Indriani et al., 2026), the influence of AI algorithms on public communication (Nurfajri et al., 2025), lecturers' perceptions of the use of ChatGPT in the academic environment (Kusumaningrum et al., 2023), and students' attitudes and perceptions of the use of AI (Manuel et al., 2025). The selection of these journals aims to represent the dynamics of Indonesian people's understanding of AI from the perspective of education, media, and public communication comprehensively.

RESULTS AND DISCUSSION

Table 1. Journal research table

No	Researcher	Year	Journal/Article	Research Results
1	Putri Indriani, Sadam Rahmat Putra, Akbar Kurnia, Suci Permata Nadia Pasaribu	2026	<i>The Impact of Artificial Intelligence (AI) News Virality on Public Perception in Indonesia in 2025</i>	Research shows a positive and significant correlation between the virality of news about AI and public perception in Indonesia. The more often people are exposed to viral news about AI, the greater its influence in shaping their views. The study also emphasizes the importance of digital literacy as well as the responsibility of the media to present information about AI in a balanced and accurate manner.
2	Ilham Nurfajri, Erlangga Teguh Hadi Pratama, Gilang Septian Tupamahu, Ridwan Saputra, Yusi Erwina	2025	The Impact of AI Algorithms on Public Communication: Understanding Information Manipulation and Reality	Artificial intelligence algorithms have a huge influence on the way people communicate on social media and search engines. Such algorithms can form "information bubbles" and deepen social polarization because they serve content filtered based on user preferences. In addition, the study points to ethical issues such as information manipulation, bias in algorithms, and the need for transparent and fair AI regulation in the public domain.
3	Rina Herawati, Dwi Ratmonawati, Ratih Larasati	2023	LECTURERS' PERCEPTION IN INDONESIA OF THE USE OF CHATGPT IN THE ACADEMIC SPHERE	Research reveals that the majority of lecturers in Indonesia (73.6%) have used ChatGPT in an academic context. They consider this tool useful for independent learning, finding information, developing ideas, writing academic papers, and compiling teaching materials. However, the main challenge identified is the risk of plagiarism and potential abuse in the academic environment.
4	Kurniahtunnisa, Maria Yasinta Manuel, Mellyatul Aini, Tika Putri Agustina	2025	Students' Perceptions and Attitudes to the Use of Artificial Intelligence	The results of the study show that 88.9% of students use AI such as ChatGPT to support academic assignments and essay writing. The majority of participants considered AI to help the learning process, but there were still concerns about dependence on technology, decreased critical thinking skills, and the potential for plagiarism. The study also highlights the importance of improving AI literacy and implementing ethical school policies in the use of the technology.

Source: Literature synthesis from Indriani et al. (2026), Nurfajri et al. (2025), Kusumaningrum et al. (2023), and Kurniahtunnisa et al. (2025)

The development of Artificial Intelligence (AI), especially the use of ChatGPT and AI-based algorithms, has influenced people's views on digital technology in various aspects of life, especially in the fields of education and public communication. In general, the studies analyzed

show that people tend to view AI positively because the ability of AI to increase efficiency, facilitate access to information, and help academic and communication activities. However, there are also concerns about the negative effects of AI, such as the risk of plagiarism, information manipulation, dependence on technology, and decreased critical thinking skills.

Research by Kusumaningrum et al. (2023) found that the majority of lecturers in Indonesia are already familiar with and utilizing ChatGPT in an academic context. Lecturers see AI as a useful tool for finding information, generating ideas, compiling learning materials, and supporting academic writing, so that AI is beginning to be accepted as a means that can increase the effectiveness of learning in universities. On the other hand, lecturers are also concerned about the potential for plagiarism and abuse by students, which shows the need for regulations and ethical guidelines in the use of AI in the academic realm.

Kurniahtunnisa et al. (2025) reported findings in line at the student level: many learners use AI such as ChatGPT to help with essay writing and completing schoolwork. Students assessed that AI can improve learning efficiency, clarify material understanding, and make writing easier. However, excessive use risks reducing critical thinking and creativity skills, as well as fostering dependency so that self-understanding is reduced. This research emphasizes the importance of AI literacy and institutional oversight so that the use of AI remains ethical and responsible.

In the realm of public communication, Indriani et al. (2026) show that the virality of news about AI has also shaped public perception in Indonesia. The more often people are exposed to viral news about AI, the stronger its influence on their views. Social media plays a big role in the rapid spread of information about AI, but unbalanced or sensational news can lead to biased perceptions either in the form of over-optimism or excessive fear. Therefore, increasing digital literacy is important so that people can filter information critically.

Nurfajri et al. (2025) highlight how AI algorithms on social media platforms and search engines can create "information bubbles" and echo chambers that limit exposure to diverse viewpoints, potentially reinforcing social polarization. Algorithms can also influence public opinion through the dissemination of biased or manipulative information. This study emphasizes the need for regulation and transparency in the use of AI so that technology is not misused for certain interests that harm the public.

Overall, the four studies show that public perception of AI is influenced by user experience, media exposure, and digital literacy levels. People see AI as a technology that brings benefits in education, communication, and work efficiency, but also poses ethical challenges, information security, and the quality of social and academic interactions. Therefore, collaboration between the government, educational institutions, the media, and the community with the right digital literacy and regulatory approaches is needed to ensure that the use of AI has a positive long-term impact (Indriani et al., 2026).

CONCLUSION

The development of Artificial Intelligence (AI) has a major impact on the field of education and public communication according to the results of a systematic literature review of four journals. In general, the public tends to view the use of AI positively because it is considered to be able to increase efficiency, facilitate access to information, support the learning process, and help complete academic tasks and digital communication activities. AI

tools such as ChatGPT are considered useful for lecturers and students in finding information, developing ideas, compiling learning materials, and completing academic tasks more quickly and practically. Nevertheless, AI advancements also present important challenges. The excessive use of AI can cause technology dependence, reduce critical thinking skills, and increase the risk of plagiarism in the academic environment. In addition, algorithms on social media and digital platforms have the potential to create information bubbles, strengthen social polarization, and influence the formation of public opinion through the dissemination of biased or manipulative information. The virality of news about AI in digital media has also been shown to affect public perception, both triggering optimism and concern about this technology. Based on these findings, it is recommended that governments develop and enforce regulations on the ethical use of AI, particularly regarding data privacy, algorithmic transparency, and information manipulation, while also promoting national AI literacy programs to ensure balanced and accurate public understanding. Educational institutions should integrate AI literacy into the curriculum, provide training for educators on the ethical use of AI, and establish clear policies regarding academic integrity and plagiarism prevention in the use of AI tools such as ChatGPT. Media organizations should present balanced and accurate information about AI, avoid sensationalism that may cause biased perceptions, and promote critical digital literacy among the public. The public is encouraged to enhance their digital and AI literacy, critically evaluate information about AI, and use AI technology wisely and responsibly. For future researchers, it is recommended to conduct empirical studies on the effectiveness of AI literacy programs across different demographic groups, as well as comparative studies between countries to understand how cultural and social factors influence public perception of AI. Additionally, longitudinal studies are needed to track changes in public perception as AI technology continues to evolve rapidly.

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