

THE IMPORTANCE OF COMMUNICATION LITERACY IN THE DIGITAL WORLD: PREPARING THE PUBLIC TO FACE TECHNOLOGICAL CHALLENGES IN INDONESIA

Widiastuti Furbani

Prodi Perpustakaan dan Sains Informasi, Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Muhammadiyah Mataram

Inputed : October 12, 2025
Accepted : November 18, 2025

Revised : October 09, 2025
Published : November 29, 2025

Abstract

The rapid expansion of digital communication technologies has reshaped how individuals access, interpret, and engage with information in everyday life. In Indonesia, communication literacy emerges as a core competency for navigating algorithm-driven, user-generated, and AI-mediated environments. This study conducts a Systematic Literature Review (SLR) of 43 peer-reviewed and reputable sources (2019–2024) to synthesize conceptual and empirical evidence on the cultural, cognitive, emotional, and ethical dimensions of digital communication literacy. Searches (Scopus, Web of Science, SINTA, Google Scholar) and thematic coding reveal uneven literacy across the population, shaped by generational disparities, educational gaps, platform logics, and socio-cultural norms. Findings also highlight heightened risks introduced by AI requiring competencies that extend beyond technical skills to include multimodal interpretation, metacognitive reflection, and algorithmic awareness. The review formulates a holistic framework integrating critical thinking, multimodal reading/production, ethical reasoning, and socio-emotional capacities, and translates it into practice areas for education, civic participation, and the digital economy. Strengthening communication literacy in Indonesia is therefore essential not only for healthier democratic discourse and social cohesion, but also for sustained competitiveness in a datafied, AI-intensive economy.

Keywords : *algorithmic culture, communication literacy, digital society, digital communication ethics*

Citation :

Furbani. W. 2025. The Importance of Communication Literacy in The Digital World: Preparing the Public to Face Technological Challenges in Indonesia. *MSJ: Majority Science Journal*, 3(4), 163-176.

Corresponding Author:

Author name* Widiastuti Furbani

Email* widiagey@gmail.com

1. Introduction

The development of digital technology has brought about fundamental changes in the way humans communicate, interact, and build knowledge. Communication, which used to be linear, centralized, and institutionally structured, has now shifted to networked communication that is fluid, decentralized, and occurs at an unprecedented speed. This transformation is marked by the emergence of digital platforms, social media, artificial intelligence, and algorithms that regulate the distribution of information, thereby shaping new patterns of communication in global society. A report by DataReportal (2024) shows that the number of internet users worldwide has exceeded 5.16 billion, with 4.95 billion of them being active social media users. Indonesia is among the countries with the fastest digital growth, recording more than 221 million internet users and around 191 million social media users, or equivalent to 68% of the national population. These figures confirm that digital life has become the main arena for social, cultural, and economic activities in Indonesian society.

However, the high penetration of digital technology has not automatically been accompanied by adequate communication skills. Survey data from the Indonesian Internet Service Providers Association (Susanti Et Al., 2023) shows an increase in internet access across Indonesia, but this increase has not been fully matched by the public's capacity to understand, process, and produce information critically and ethically. The 2023 national



Creative Commons Attribution-ShareAlike 4.0 International License:

<https://creativecommons.org/licenses/by-sa/4.0/>

digital literacy index released by the Ministry of Communication and Information Technology in collaboration with Katadata Insight Center stands at 3.54 out of 5, still in the “moderate” category and indicating the need to improve the digital communication skills of the community.

This condition shows a gap between technological sophistication and the socio-cultural readiness of users in dealing with the complexity of the digital communication space, where information flows in the form of short narratives, quick visuals, and content generated by artificial intelligence. Communication in the digital context is no longer just an exchange of messages, but a process of interaction that involves the construction of identity, emotion, authority, and social meaning.

Rahman et al. (2021) explain that today's society lives in a participatory culture where each individual is both a producer and consumer of content. The role of society as a subject of communication has become increasingly dominant with the advent of short video platforms, virtual discussion rooms, digital forums, and interactive technologies such as chatbots and artificial intelligence-based applications. However, the ability to be part of a participatory culture requires more than just access to devices and the internet; it requires communication literacy skills to understand how messages are formed, received, and have an impact in a broader social space. Without a strong foundation in communication literacy, people can easily fall into patterns of passive information consumption, biased perceptions, and emotional dependence on digital validation.

This reality becomes even more complex when social media algorithms use user behavior data to determine the information that appears on their screens. Wahjusaputri & Nastiti (2022) refers to this phenomenon as the algorithmic curation of public life, where algorithms are not only a medium but also shape knowledge priorities in society. In Indonesia, digital platform algorithms often reinforce preferences for popular, emotional, and sensational content, thereby encouraging a communication culture that is more oriented towards speed, impulsivity, and performativity rather than accuracy and critical reflection. This phenomenon poses a major challenge to strengthening communication literacy because people no longer simply receive messages but are also influenced by invisible algorithmic structures that determine their information experience. This condition requires communication skills that are not only technical but also epistemic, namely the ability to understand how truth is formed, circulated, and negotiated in the digital ecosystem.

In the context of Indonesian culture, digital media has also become a powerful space for the formation of social identity. Harmoko (2021) describes this phenomenon as a phase in which individuals construct themselves through digital representations, create personas, and manage impressions through posts, comments, and online interactions. For the younger generation, digitalization is not only a medium of communication but also a habitat for psychosocial development. Research by Pratama and Widodo (2023) shows that digital identity expression is closely related to emotional dynamics, social acceptance, and performative pressure that can influence the way we communicate. In such situations, communication literacy needs to be seen as the ability to manage self-expression, maintain digital integrity, and build healthy interpersonal relationships in virtual spaces.

Meanwhile, the emergence of artificial intelligence technology further enriches and complicates the digital communication experience. Technologies such as generative AI, deepfakes, and large language models are capable of creating content that resembles human production, thereby influencing public perceptions of the authenticity and meaning of messages. Lestari & Santoso (2019) warns that AI's ability to synthesize information can be a threat to public trust if it is not accompanied by the public's ability to recognize the structure of digital information production. In Indonesia, the use of AI technology in entertainment, marketing, education, and political communication content is on the rise, but not all segments of society are prepared to assess the validity and ethics of using this technology. Communication literacy in the AI era is not only about the ability to read, but also to interpret, evaluate, and participate responsibly in an algorithm-based information ecosystem.



At the same time, the digital economy in Indonesia continues to grow rapidly and create new opportunities. The Google–Temasek–Bain report estimates that the value of Indonesia's digital economy will reach US\$360 billion by 2030, supported by the e-commerce, creative economy, and digital content sectors. However, research by Hafifah & Sulisty, (2020) found that many digital economy players struggle to develop effective messages, consistent digital identities, and credible communication strategies due to limited communication literacy. This situation indicates that communication literacy is not only an educational or social issue, but also an important factor in economic competitiveness and national human resource development.

Thus, there is a growing awareness that digital communication literacy must be viewed as a strategic socio-cultural capacity that determines the quality of an individual's participation in modern life. The digital world opens up vast space for creativity, self-expression, collaboration, and innovation, but this space is only meaningful if people have the communicative ability to navigate it critically, ethically, and reflectively. Communication literacy is not merely the technical ability to use media, but the ability to understand and manage meaning, power, identity, and interaction in the context of ever-evolving technology.

In the contemporary social context, the ability of society to participate meaningfully in the digital public sphere requires a comprehensive understanding of communication practices involving language, symbols, narratives, and power dynamics. Digital spaces are not only a medium for distributing information, but also an arena where ideologies, economic interests, identity constructions, and social conflicts are negotiated. Nambiar et al., (2019) asserts that digital communication shapes a new information ecology that influences how individuals view social reality. In Indonesia, the phenomenon of viral content, instant comment culture, and a culture of instant gratification causes cognitive and emotional pressure that affects the way people process information. Dependence on quick impressions, rather than in-depth evaluation, can erode critical reflection skills, which are the foundation of communication literacy.

The digital environment also encourages changes in intergenerational relationships in interpreting information. The younger generation, who grew up with technology, tends to interpret communication multimodally, including a combination of text, visuals, audio, and digital symbols, while the older generation still places linear communication as the main reference. This gap not only creates differences in communication styles but also the potential for miscommunication in the family, school, and social institutions. Firdausih & Aslan (2024) found that low cross-generational communication literacy often triggers distortions in meaning and minor to major conflicts in the digital space. Thus, digital communication literacy needs to be understood as a cross-age competency that supports the community's ability to build intergenerational dialogue, understand differences in symbolic language, and appreciate diversity of perspectives.

The emotional dimension of digital communication is an important issue that is often overlooked in discussions of literacy. Digital platforms encourage instant emotional expression, quick appreciation, and social validation through metrics such as likes, comments, and followers. Psychological attachment to mechanisms that reinforce digital behavior can cloud the ability to objectively assess the quality of communication (Supratman & Wahyudin, 2017). Society needs to understand that communication is not merely the delivery of messages, but a social process that requires empathy, patience, and emotional awareness. Strong communication literacy helps individuals not only control their emotions in digital conversations, but also develop digital empathy as a capacity that helps build healthy online communities.

In addition, communication literacy plays an important role in maintaining the integrity of public dialogue. When each individual has the space to voice their opinions, the quality of public discourse depends heavily on the ability of users to construct rational arguments, provide adequate supporting evidence, and respect the value of diversity. UNESCO (2023) emphasizes that communication literacy is at the core of responsible digital citizenship, where users not only have the right to express their opinions, but also the obligation to



maintain an inclusive public space. In the Indonesian context, strengthening communication literacy can support the creation of a healthier discussion space, free from emotional polarization, personalization of debates, and practices that undermine social dignity.

Furthermore, the development of artificial intelligence technology is transforming the communication landscape into an increasingly mediative environment. Recommendation systems, machine learning, and natural language processing now help determine the quality of human interaction with information. When systems are able to predict preferences, compile personal narratives, and generate content that resembles human production, society is required to develop epistemic sensitivity: the ability to understand the source, intent of information production, and consequences of its dissemination. For Indonesians, this challenge is even more important because technology adoption often moves faster than the readiness of a mature communication culture (Kominfo, 2023). Communication literacy is no longer just the ability to read and write messages, but the ability to test the validity of information, manage digital identity, and use technology with ethical awareness.

From an economic perspective, strong communication skills determine competitiveness in the digital economy era. Creative economy actors, MSMEs, media professionals, and technology workers need communication literacy to compose effective messages, build a digital image, and understand audience dynamics in the digital ecosystem (Google–Temasek–Bain, 2023). Successful digital content is not only produced by technical creativity but also by a deep understanding of narrative structure, audience psychology, and social meaning construction. Hafifah & Sulisty, (2020) show that MSMEs with better digital communication competencies are able to strengthen their brand presence and build more consistent customer relationships. This means that modern communication literacy education has implications not only for the quality of social interaction but also for national economic capacity.

However, even though various initiatives to strengthen digital literacy have been carried out, many approaches still focus on the technical aspects of media use or merely respond to the threat of misinformation. Communication literacy is too often reduced to “check the facts before sharing” campaigns, when in fact the realm of communication covers much more: identity construction, social dynamics, cultural practices, interaction ethics, and reflective abilities regarding technological structures. This condition indicates that efforts to improve community capabilities have not fully touched on the strategic dimension of communication literacy as a critical competency rooted in the formation of self-awareness, systemic thinking skills, and social sensitivity.

Considering the spectrum of the role of communication literacy, this study views that improving communication literacy in Indonesia is an important foundation for the quality of national life in the digital era. Communication literacy plays a role in building a society that is capable of clear thinking, critically assessing messages, behaving ethically in digital interactions, and utilizing technology as a constructive rather than destructive medium. Improving this capacity is a prerequisite for the formation of a healthy digital public space, an inclusive digital economy, and a modern democracy based on dialogue, rather than domination or narrative manipulation.

At this point, a comprehensive academic approach is needed to understand the position of communication literacy in the development of Indonesia's digital society. A deep understanding of the complexity of digital communication provides the basis for developing communication literacy education strategies based on reflection, critical awareness, and cultural sensitivity. With such an approach, communication literacy does not stop at being a slogan or technical skill, but develops into social capital that strengthens the character of society and the quality of public life.

Although digital literacy has been widely studied in Indonesia, research that specifically discusses communication literacy as an epistemic, cultural, and ethical competency in the digital ecosystem is still limited. Most studies emphasize the technical aspects of media use or information verification skills. For example, Putri & Syah (2022) emphasize the importance of digital literacy based on technical training in platform use, but do not discuss the



dimensions of critical awareness and meaning construction in digital communication. Furthermore, Setiadi et al., (2023) research focuses on the community's ability to identify political misinformation, but does not discuss communication literacy as a process of reflection on identity, ethics, and the role of emotions in digital interactions. The research by Firdausih & Aslan (2024) highlights intergenerational digital literacy, but the discussion is still limited to the gap in technological understanding and does not explore how communication literacy can overcome cultural, symbolic, and interpretive miscommunication in the digital space.

These findings indicate a gap in research related to a more comprehensive approach to communication literacy, which not only addresses the protective aspects of misinformation but also places communication literacy within the framework of self-awareness, reflective capacity, algorithmic understanding, the ability to interpret cross-modal messages, and the ability to participate ethically in the digital public sphere. Therefore, this study fills this gap through an approach that combines critical communication, digital culture, and identity dynamics perspectives in Indonesian society.

This study offers an approach that positions digital communication literacy as the foundation of critical awareness and social competence in the digital age, rather than merely a technical skill or instrument of protection against misinformation. This study positions communication literacy as a cultural process that involves the ability to think, construct meaning, manage oneself, and participate ethically in a complex digital information ecosystem.

The objectives of this research are to analyze the urgency of communication literacy in Indonesia's digital society, identify the dimensions of communication literacy as epistemic and cultural competencies, and develop concepts for strengthening communication literacy that are relevant to the development of a reflective, adaptive, and responsible society in facing technological challenges.

In light of these dynamics, communication literacy must be understood not merely as a set of technical skills, but as a comprehensive cultural, cognitive, emotional, and ethical capacity required to engage meaningfully in the digital public sphere. Although numerous initiatives and studies on digital literacy exist in Indonesia, most remain focused on platform operation, information verification, or protection from misinformation, leaving a conceptual gap in understanding communication literacy as a multidimensional social and epistemic competency. Therefore, this study aims to systematically review recent scholarly literature to analyze the urgency and scope of communication literacy in Indonesia's digital ecosystem, identify its core dimensions spanning cognitive, cultural, emotional, algorithmic, and ethical competencies, and formulate a conceptual framework to strengthen communication literacy for building a reflective, adaptive, and responsible digital society.

2. Method

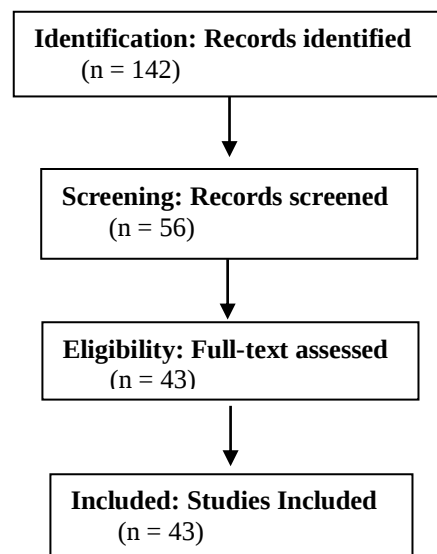
This study uses the Systematic Literature Review (SLR) method to analyze the urgency of communication literacy in facing the challenges of digital technology in Indonesia. This method was chosen because communication literacy is a multidimensional concept that requires a comprehensive synthesis of scientific findings, theoretical perspectives, and the latest empirical evidence. The SLR approach enables the systematic identification, selection, and evaluation of relevant research, resulting in an in-depth and valid evidence-based analysis (Snyder, 2019; Creswell, 2021). The literature reviewed includes studies published between 2019 and 2024 in reputable international journals, SINTA-indexed national journals, international organization reports, and national survey results related to the use of technology and the dynamics of digital communication in Indonesian society.

The literature search was conducted using the Scopus, Web of Science, Google Scholar, and SINTA databases with keywords such as communication literacy, digital communication competence, media literacy, algorithmic culture, digital society Indonesia, and AI-mediated communication. The selection process followed the SLR stages: identification, screening of titles and abstracts, full evaluation of selected articles, and



information extraction. The inclusion criteria included studies that examined digital communication practices, community literacy, and the impact of technology on communication behavior. Meanwhile, opinion publications, blog articles, and non-academic sources were excluded. A total of 164 initial documents were identified, then filtered into 43 articles that met the criteria of relevance and scientific quality.

Data analysis was conducted using a thematic analysis approach to identify conceptual patterns related to communication literacy, digital culture, and social phenomena in online media spaces (Miles, Huberman, & Saldaña, 2020). The validity of the results was enhanced through source triangulation, namely the comparison of academic findings with empirical data from official reports of international institutions such as UNESCO (2023) and ITU (2023), as well as national surveys by APJII (2023) and Kominfo (2023). Thus, this study produces a holistic and evidence-based understanding of the urgency of digital communication literacy as a strategic competency in the development of Indonesian society in the era of artificial intelligence and information algorithms.



3. Results and Discussion

The Concept of Communication Literacy in the Modern Digital Ecosystem

Communication literacy in the digital age has evolved beyond the traditional definition, which was originally understood as the ability to convey messages clearly and understand others' messages in face-to-face interactions. Digital transformation has changed the communication landscape into a multimodal, globally connected, algorithm-mediated space of interaction that involves more complex cognitive, emotional, and ethical abilities than in previous eras. Hobbs (2021) explains that modern communication literacy encompasses not only the skills of accessing and understanding information, but also the ability to evaluate the credibility of sources, produce responsible messages, navigate digital social dynamics, and understand power relations in the information ecosystem. In this context, communication literacy is not merely a technical competency, but rather the capacity of digital citizens to think critically, participate constructively, and use technology as a tool for shaping knowledge and social identity.

The paradigm of modern communication literacy is rooted in the development of critical communication theory and media culture studies, which place users not only as passive recipients but also as active subjects in the process of meaning production. Rahman et al. (2021) refer to this phase as participatory culture, in which digital users become actors who contribute to the flow of information through participation, cultural remixing, and online collaboration. Within this framework, communication literacy cannot be separated from digital culture because the ability to understand messages is also related to the social context, cultural norms of the platform, and the technological structures that govern the user



experience. This context is particularly relevant for Indonesia, which is a country with a high level of social media participation and strong characteristics of collective communication culture (Susanti et al., 2023).

The patterns of digital interaction among Indonesians show expressive, emotional, and communal tendencies, so communication literacy must be linked to psychosocial understanding and local cultural values. The multimodal dimension of communication is a core aspect of digital communication literacy. No longer limited to text, digital communication includes a combination of visual symbols, audio, linguistic codes, icons, and emotional expressions conveyed simultaneously.

According to Haidu & Micle (2025), the ability to read and interpret multimodality is a prerequisite for understanding digital messages in their entirety, especially when users are exposed to short videos, infographics, memes, and interactive content that dominate platforms such as TikTok, Instagram, and YouTube. In Indonesia, visual media consumption is increasingly dominant, especially among the younger generation, so communication literacy must include visual literacy, emotional literacy, and algorithmic literacy so that people are able to interpret visual representations while understanding how algorithms influence their exposure to information (Suwana & Lily, 2022).

Mastery of digital technology does not automatically result in mature communication skills. Many studies show that widespread access to technology tends to create an illusion of competence, where users feel capable of understanding information simply because they can access it quickly (Nemer, 2022). This phenomenon becomes even more problematic when combined with a culture of rapid information consumption and the urge to respond quickly in digital public spaces. In this context, communication literacy becomes an instrument that inhibits impulsivity and a cognitive mechanism that encourages critical reflection before participating in digital discourse. According to Firdausih & Aslan (2024), digital communication literacy skills must include metacognitive awareness, which is the ability to understand how the thinking process works in assessing messages and constructing interpretations.

This is important to prevent the spread of hasty judgments, cognitive biases, and fallacies that often occur in digital interactions. Digital communication cannot be separated from the algorithmic structures that shape the user experience. Wahjusaputri & Nastiti (2022) states that algorithms function not only as a mechanism for filtering information, but also as an instrument for shaping culture and public opinion.

This is relevant in the Indonesian context, where social media algorithms often reinforce emotional, viral, and populist content over deep and rational discourse. Without critical communication literacy, users can easily get caught in filter bubbles and echo chambers that hinder diversity of perspective and reflective thinking (Rahman et al., 2021). Digital communication literacy in this case must be linked to a systemic understanding of how algorithms work, how data is used to predict behavior, and how this shapes public opinion at large.

Another important aspect of modern communication literacy is the ability to manage digital identities and social relationships in networked spaces. Harmoko (2021) explains that digital identity is a strategically constructed representation of oneself in the online space, which often does not fully reflect one's real self. This dynamic can form a pattern of performative communication, where individuals focus more on image than substance. In Indonesian society, this phenomenon can be seen in the intense use of aesthetic content, self-branding, and influencer culture, which influence communication norms and social existence. Pratama & Widodo (2023) emphasize that digital identities that are not managed healthily can trigger social pressure, insecurity, and aggressive or passive communicative behavior. Therefore, communication literacy must include the dimensions of self-regulation and digital emotional intelligence, not just the ability to access or compose messages.

The emergence of artificial intelligence has also changed the paradigm of communication literacy. Technologies such as generative AI, chatbots, and deepfake media present new challenges in distinguishing the authenticity of messages and information



sources. Lestari & Santoso (2019) highlights the social risks of AI content that resembles human production, both in the context of public communication and personal privacy. Indonesia has begun to experience this phenomenon through the spread of synthetic content on social media and the use of AI in commercial content production. People who lack technology-based communication literacy will find it difficult to assess information and make responsible communication decisions. Therefore, digital communication literacy in the AI era must include mechanisms for evaluating sources, detecting media manipulation, and understanding the ethics of technology use (UNESCO, 2023).

Furthermore, digital communication literacy is closely related to the responsibility of building a democratic digital public space. Healthy digital communication is not only about the ability to speak, but also about the capacity to listen actively, understand different arguments, and build a dialogical attitude. According to Nambiar et al., (2019), the quality of digital democracy greatly depends on the community's ability to manage differences, construct evidence-based arguments, and reject the logic of emotional domination and polarization. Indonesia, as a democratic country with intensive use of social media, needs to strengthen communication literacy that fosters collective awareness, not just individual skills. This is important to prevent the degradation of public space into an arena of symbolic conflict that is destructive to social cohesion.

Thus, communication literacy in the digital ecosystem is a multidimensional competency that includes cognitive understanding, emotional awareness, multimodal literacy, understanding of algorithms, digital identity skills, and ethical orientation. This literacy serves as an instrument for shaping a reflective, dialogical, and adaptive society in the face of contemporary technological and cultural dynamics. For Indonesia, the development of communication literacy must be positioned as a strategic agenda for education, public policy, and national character building so that society is able to live a digital life with high communicative intelligence and integrity.

Communication Literacy as Indonesia's Social & Cultural Capacity in the Digital Age

Communication literacy in Indonesian society cannot be understood linearly as the technical ability to operate digital media, but must be seen as a socio-cultural construct that influences how individuals and groups interact in the digital space. Indonesia has strong cultural characteristics in the context of communality, social hierarchy, and emotional expression tied to collective values (collectivist culture) (Machmud & Fakhri, 2021). Communication traditions rooted in politeness, social harmony, and respect for seniority often clash with digital communication practices that are fast-paced, open, and egalitarian. The encounter between these two paradigms produces a unique dynamic of digital communication, in which society must integrate local cultural values with the demands of global communication literacy. Without this adaptive ability, digital interactions have the potential to create cultural friction, miscommunication, or even conflict between generational identities.

These social conditions explain why communication literacy must be treated as a fundamental element of digital society development. Research by Durriyah & Zuhdi (2018) shows that the communication gap in Indonesia is not only determined by access to technology, but also by differences in communication patterns and the interpretation of messages across age groups and social backgrounds. The tendency of the younger generation to use concise language, visual expressions, and digital symbols is often not understood by the older generation, who are accustomed to formal language structures. On the other hand, the younger generation can experience emotional and social pressure when faced with communication authority from the older generation, especially in digital spaces where social hierarchies are often implicitly re-enacted. Therefore, communication literacy must facilitate the ability to harmonize communication styles across generations while maintaining message integrity and interaction ethics.

In the context of democracy, communication literacy also affects the quality of public participation in public discourse. Nambiar et al., (2019) asserts that digital spaces are not



only a medium for expression but also an arena for narrative competition and social legitimacy. Indonesians who are active in digital media need to have the capacity for dialogue to appreciate different perspectives, understand argument structures, and distinguish between the expression of opinion and the compilation of evidence-based information. The phenomenon of digital polarization that occurred during the national political momentum shows that communication literacy has not fully functioned as the foundation of deliberative democracy. A study by Setiawan and Rahardjo (2023) reveals that people with higher communication literacy show a tendency toward more rational and data-based political participation compared to those who rely on emotional perceptions or group biases.

Not only in the political sphere, communication literacy has a strategic role in strengthening the education ecosystem and shaping the character of the younger generation. In recent years, the education curriculum in Indonesia has been geared towards strengthening critical, collaborative, and creative thinking skills through the Merdeka Belajar (Freedom of Learning) policy. However, research by Astuti and Wibowo (2022) emphasizes that the realization of digital education transformation can only be achieved if students and educators have adequate communication literacy to manage digital interactions in a healthy manner, produce ideas clearly, and reflect on the use of learning technology. Thus, communication literacy is not only a technical skill, but also part of digital character education that shapes intellectual honesty, empathy, and integrity in the use of technology.

In the economic and creative culture sphere, communication literacy determines the success of the digital transformation of Indonesian businesses and digital creators. Google–Temasek–Bain (2023) notes that Indonesia's largest digital economic growth is driven by the digital content sector, online marketing, and social media-based MSMEs. However, Hafifah & Sulisty, (2020) explain that many MSMEs are not yet able to build credible digital marketing messages due to limitations in communication strategy, audience understanding, and persuasive narrative writing. Without good communication literacy, businesses are vulnerable to a culture of imitation, aggressive communication strategies that undermine consumer trust, or failure to build brand differentiation. Strong communication literacy in the context of the creative economy requires narrative competence, digital aesthetics, and the ability to build authentic and value-based communication.

At the same time, communication literacy is also closely related to the social health and psychological well-being of society. Digital platforms are increasingly becoming an arena for emotional expression, the search for social validation, and the formation of self-image, especially for teenagers and young adults. Research by Pratama & Widodo (2023) shows that low emotional communication literacy in the digital space can increase tendencies toward social anxiety, destructive self-comparison, and verbal aggression. Therefore, the understanding of communication literacy must include the dimension of digital emotional intelligence, which is the ability to read digital emotions, communicate without harming oneself and others, and maintain the integrity of psychological well-being in the digital space. This ability is important for building an empathetic and resilient digital society.

To clarify the understanding of the dimensions of digital communication literacy that are relevant to the Indonesian social context, the following is a conceptual table in English.

Table 1. Dimensions of Digital Communication Literacy in Modern Society

Dimension	Description	Key Competencies	Example Context
Cognitive Literacy	Ability to analyze, evaluate, and interpret digital messages	Critical thinking, fact checking, sources analysis	Assessing information credibility
Cultural & Social Literacy	Understanding social norms, identity, and values in digital interaction	Social awareness, empathy, inclusive communication	Interacting across generational/cultural groups
Emotional Digital	Capacity to manage	Self-regulation,	Handling conflict or



Literacy	emotions and interpret emotional signals online	emotional resilience, empathy	feedback online
Algorithmic Awareness	Understanding how platform filter and shape information	Platform logic comprehension, bias awareness	Identifying echo chambers and algorithm bias
Ethical & Civic Literacy	Practicing responsible and ethical communication	Ethical decision making, respect for privacy, civility	Participating in public digital discourse
Creative & Narrative Skills	Ability to construct persuasive and meaningful messages	Storytelling, media design, persuasive writing	Branding, content creation, public advocacy

The table shows that digital communication literacy is not merely a technical skill, but a set of social, cognitive, emotional, and ethical competencies. Indonesian society needs a comprehensive approach to communication literacy learning, ranging from formal education and community training to the cultivation of reflective communication values in the family and community. In this way, communication literacy becomes an important social capital in the development of a strong, cohesive, and globally competitive digital society.

Challenges and Strategies for Strengthening Communication Literacy in Indonesia in the Digital and AI Ecosystem

The challenges of strengthening digital communication literacy in Indonesia are multidimensional and closely related to the structural, cultural, economic, and psychological aspects of society. This complexity shows that communication literacy cannot only be improved through technical training or socialization campaigns, as is often done in digital literacy movements that focus on platform usage instructions or warnings against misinformation. The structure of the existing challenges requires a pedagogical approach and creative, reflective, and adaptive public policies based on Indonesia's socio-cultural characteristics, global technological developments, and the role of artificial intelligence in everyday life (UNESCO, 2023). Therefore, steps to strengthen digital communication literacy must be viewed as a long-term social transformation project.

The first challenge stems from the disparity in the quality of digital communication education between regions and generations. Although internet penetration in Indonesia has reached more than 79% of the population, the quality of technology utilization and digital communication skills is still uneven (Susanti et al., 2023). Differences in infrastructure, quality of education, and social environment affect people's ability to learn and apply digital communication skills. In urban areas, internet access and digital education resources are more abundant, while people in rural areas still face obstacles in connectivity and quality learning resources (Nugroho & Sani, 2023). This inequality is exacerbated by the generational gap. Generation Z is more accustomed to visual and multimodal communication, while older generations tend to maintain linear communication patterns. When this gap is not addressed with an intergenerational approach, the potential for miscommunication and social tension increases (Machmud & Fakhri, 2021).

The second challenge is the dominance of a culture of quick responses and digital impulsivity. Digital platforms are often designed to maximize instant interaction, trigger quick emotional responses, and provide dopamine through notification systems, likes, and comments. A study by Pratama & Widodo (2023) shows that the intensity of emotional digital interactions without the ability to reflect increases the risk of anxiety, aggression, and interpersonal conflict. This indicates that digital communication literacy must include the pedagogical dimensions of self-control, emotional intelligence, and active listening skills, not just cognitive analysis of messages. Thus, strategies to improve communication literacy need



to strengthen mindfulness communication, emotional regulation, and empathetic discourse so that people do not get caught up in a culture of defensive or aggressive communication that is unproductive.

The third challenge relates to the structure of algorithms and digital platforms that influence public perception of information. Social media algorithms are designed to maintain user attention by presenting content that matches their preferences and prioritizing viral content over quality content (Wahjusaputri & Nastiti, 2022). This creates filter bubbles and echo chambers, which narrow the range of perspectives and inhibit critical thinking skills (Rahman et al., 2021).

In Indonesia, this phenomenon often triggers polarization of opinion and a superficial or emotional interpretation of public issues. Communication literacy in this context must develop an understanding of platform logic, awareness of algorithmic bias, and the ability to build an information evaluation process that goes beyond the popularity of content or the social authority of the uploader. The fourth challenge is the lack of integration of communication literacy in the formal education system.

Although the Merdeka Belajar (Freedom of Learning) policy has provided space for creative and critical learning, the school curriculum still focuses more on technical literacy and STEM than on critical communication literacy and digital ethics (Astuti & Wibowo, 2022). Communication education is often only placed as part of language subjects, even though modern communication literacy involves cross-disciplinary competencies: linguistics, technology, ethics, philosophy, psychology, and sociology. Without a holistic curriculum design, communication education tends to be fragmented and unable to build sensitivity to the complexity of the digital ecosystem. Therefore, strengthening communication literacy must be done through a multidisciplinary curriculum approach that integrates critical communication, visual representation, digital culture, and moral literacy within the framework of character education.

The fifth challenge is the lack of strategic communication capacity in the digital economy sector, especially MSMEs and content creators. Indonesia's digital economy is growing rapidly, but the narrative and strategic communication skills of business actors are still weak (Lestari & Santoso, 2019). Many small businesses fail to take advantage of digital media because their messaging strategies are unclear, inconsistent, or trapped in aesthetic imagination without substance. Effective digital marketing strategies require a combination of audience understanding, storytelling skills, responsiveness to digital culture, and communication integrity. Therefore, communication literacy strengthening programs need to be directed at building capacity in branding communication, ethical marketing, and digital consumer psychology for digital economy actors.

In addition to challenges, strengthening communication literacy requires a systemic and sustainable transformational strategy. The first strategy is the development of a comprehensive digital communication literacy curriculum for all levels of education. This curriculum should not only focus on the ability to read digital information, but also on narrative construction, multimodal analysis, algorithm understanding, critical thinking, digital ethics, and emotional intelligence. Communicative literacy models such as Hobbs' framework (2021) and UNESCO's approach (2023) can be used as references for developing communication literacy education that integrates analytical, empathetic, creative, and collaborative skills. Formal education needs to create democratic communication practice spaces, based on social projects and involving self-reflection, so that students understand the social consequences of every communicative action.

The second strategy is to build a public training ecosystem and digital communication community. Strengthening communication literacy cannot be left solely to educational institutions; communities, local governments, research institutions, the media, and technology companies need to collaborate to build public communication learning spaces. Local creative communities, digital literacy study centers, and community-based training platforms can be catalysts for the development of a reflective communication culture. A community approach is important so that learning is not normative-instructional, but



participatory and contextual in accordance with the social character of the community (Suwana & Lily, 2022). Thus, communication literacy becomes a cultural movement, not just a formal policy.

The third strategy is to strengthen public policies based on communication literacy and digital ethics. The government needs to develop digital communication policies that not only emphasize the regulation of problematic content but also encourage the growth of critical communication capacity in society. A punitive approach to digital communication behavior must be balanced with educational policies, for example through platform literacy incentives, algorithm transparency regulations, and public communication ethics standards. Technology ethics education must run parallel to AI innovation so that public awareness of communication responsibility is instilled from the outset of technology use (Citron, 2022).

The final strategy is to develop a communication literacy model based on empathy and social sustainability. Communication literacy cannot only emphasize logical abilities; it must also develop emotional abilities. The digital space requires civil sensitivity, moral awareness, and respect for human dignity. An empathy-based communication literacy education model will encourage the community to manage conflicts peacefully, understand diverse perspectives, and create an inclusive digital space. This approach is in line with UNESCO's (2023) vision that technology should strengthen humanity, not replace it.

Thus, strengthening digital communication literacy in Indonesia is a strategic agenda that requires a collaborative approach between education, public policy, communities, the technology industry, and the creative economy ecosystem. Communication literacy is an instrument for navigating digital complexity, maintaining psychosocial health, strengthening democracy, and increasing national competitiveness. If implemented comprehensively and sustainably, these efforts will shape a society that is not only proficient in using technology, but also capable of critical thinking, ethical communication, and actively participating as responsible digital citizens

4. Conclusions and Suggestions

This study concludes that communication literacy in the digital era must be understood as a multidimensional competency that integrates cognitive skills, socio-cultural awareness, emotional regulation, ethical judgment, and algorithmic understanding. In Indonesia, digital participation continues to grow rapidly, yet literacy remains uneven due to generational differences, socio-cultural communication norms, and limited pedagogical integration. Strengthening communication literacy therefore requires not only technical proficiency but also reflective, ethical, and empathetic engagement with digital environments that essential for democratic participation, social cohesion, and competitiveness in the digital economy.

Theoretically, this study contributes by positioning communication literacy as a holistic construct that extends beyond media access and information verification, emphasizing multimodal interpretation, digital identity awareness, and algorithmic sensitivity. Practically, it offers a conceptual foundation for education programs, community initiatives, and policy efforts aimed at fostering critical and ethical digital citizens. This review is limited to published scholarly sources from 2019–2024; future research should apply mixed-method or intervention-based approaches to test this framework in real settings such as schools, universities, and MSME ecosystems, particularly as AI continues to reshape communication practices.

Bibliography

Alfarizi, M., Widiastuti, T., & Ngatindriatun. (2024). Exploration of technological challenges and public economic trends phenomenon in the sustainable performance of Indonesian digital MSMEs on industrial era 4.0. *Journal of Industrial Integration and Management*, 9(01), 65–96.



- Bachtiar, B. (2025). Preparing citizens for the future of digital literacy and AI: With a focus on Indonesian EFL teachers. In *Digital citizenship and the future of AI engagement, ethics, and privacy* (pp. 405–440). IGI Global Scientific Publishing.
- Durriyah, T. L., & Zuhdi, M. (2018). Digital literacy with EFL student teachers: Exploring Indonesian student teachers' initial perception about integrating digital technologies into a teaching unit. *International Journal of Education and Literacy Studies*, 6(3), 53–60.
- Firdausih, F., & Aslan, A. (2024). Literature review: The effect of project-based learning on student motivation and achievement in science. *Indonesian Journal of Education (INJOE)*, 4(3), 1011–1022.
- Hafifah, G. N., & Sulistyo, G. H. (2020). Teachers' ICT literacy and ICT integration in ELT in the Indonesian higher education setting. *Turkish Online Journal of Distance Education*, 21(3), 186–198.
- Haidu, C., & Micle, M. (2025). Digital society: Intergenerational conflict between myth and reality. *Romanian Journal of Library & Information Science*, 21(1).
- Harisanty, D., Srirahayu, D. P., Anna, N. E. V., Mannan, E. F., Anugrah, E. P., & Dina, N. Z. (2021). Digital literacy for COVID-19 information in Indonesian society. *Library Philosophy and Practice*, 1–14.
- Harmoko, D. D. (2021). Digital literacy as a solution to improve the quality of Indonesia's human resources. *Research and Development Journal of Education*, 7(2), 413–423.
- Hidayat, M. N. F., Baharun, H., Aisyah, E. N., Zaini, A. W., Sanjani, M. A. F., & Hasanah, R. (2024, October). Bridging the digital divide: The role of public relations in enhancing digital inclusivity. In *2024 10th International Conference on Education and Technology (ICET)* (pp. 59–66). IEEE.
- Hikmat, H. (2022). The readiness of education in Indonesia in facing the society era 5.0. *Jurnal Basicedu*, 6(2), 2953–2961.
- Lee, J. J., & Meng, J. (2021). Digital competencies in communication management: A conceptual framework of readiness for Industry 4.0 for communication professionals. *Journal of Communication Management*, 25(4), 417–436.
- Lestari, S., & Santoso, A. (2019). The roles of digital literacy, technology literacy, and human literacy to encourage work readiness of accounting education students in the fourth industrial revolution era. *KnE Social Sciences*, 513–527.
- Luthfia, A., Wibowo, D., Widyakusumastuti, M. A., & Angeline, M. (2021). The role of digital literacy on online opportunity and online risk in Indonesian youth. *Asian Journal for Public Opinion Research*, 9(2), 142–160.
- Machmud, M. T., & Fakhri, M. M. (2021). Indonesian teacher competencies in integrating information and communications technology for education. *Athens Journal of Technology & Engineering*, 331.
- Mujtahid, I. M., Berlian, M., Vebrianto, R., Thahir, M., & Irawan, D. (2021). The development of digital age literacy: A case study in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(2), 1169–1179.
- Nambiar, D., Karki, S., Rahardiani, D., Putri, M., & Singh, K. (2019). Study on skills for the future in Indonesia. *Study on Skills of the Future*, July.
- Rahman, T., Amalia, A., & Aziz, Z. (2021, January). From digital literacy to digital intelligence. In *4th International Conference on Sustainable Innovation 2020–Social, Humanity, and Education (ICoSIHESS 2020)* (pp. 154–159). Atlantis Press.



Setiadi, D., Nurhayati, S., Ansori, A., Zubaidi, M., & Amir, R. (2023). Youth's digital literacy in the context of community empowerment in an emerging society 5.0. *Society*, 11(1), 1–12.

Sh: (This is separate)

Supratman, L. P., & Wahyudin, A. (2017). Digital media literacy to higher education students in Indonesia. *International Journal of English Literature and Social Sciences*, 2(5), 51–58.

Susanti, T., Anom, E., & Iswadi, I. (2023). Optimizing public communication in the digital era: A case study of the Ministry of Communication and Information Technology in Indonesia. *CHANNEL: Jurnal Komunikasi*, 11(2), 144–149.

Wahjusaputri, S., & Nastiti, T. I. (2022). Digital literacy competency indicator for Indonesian high vocational education needs. *Journal of Education and Learning (EduLearn)*, 16(1), 85–91.

Zuhri, S., & Arif, R. (2024). Digital literacy as a media guide amid digital disruption. *Jurnal Indonesia Sosial Teknologi*, 5(1).

